

Globalization

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About the Authors

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Dr. Jay Rajasekera, has been teaching Management and Information Technology courses at GSIM (also called IUJ Business School) at International University of Japan (IUJ) since 1995. He started his career at AT&T Bell Laboratories in New Jersey, USA. While at Bell Laboratories he designed the computer algorithm for the construction of world's first undersea fiber optic cable TAT-8 between US and Europe. Good percentage of the world's Internet traffic today is carried over the optical cables built using his patented algorithm. He resigned from Bell Laboratories and joined IUJ in 1995. Since then, holding positions of Professor, Associate Dean (1996-1997), Dean (2000-2004), Director of Matsushita Library and Information Center, and Director of E-Business Program. He has previously co-authored three books and published more than 50 management and technical articles in academically rated journals. He has wide consulting experience on issues related to globalization strategies, management, and technology, including e-government. He has conducted executive training programs at a number of large corporations in Japan, including IBM-Japan, Fuji Xerox, Fujitsu-AMD, Hitachi, DHL-Japan, and Mizuho Bank. He had also conducted seminars for business and government leaders in Indonesia, Myanmar, Nepal, and Mongolia. His opinions have appeared in Wall Street Journal, Nihon Keizai Shimbun, Japan Times, and other leading publications.

Mr. Nyi Nyi Aung, has been working as a Deputy Director of Directorate of Trade under the Ministry of Commerce of the Republic of the Union of Myanmar. He started his career as an ICT officer in the Ministry of Commerce in 2004 after completing the Bachelor of Computer Science Degree from Mandalay Computer University in Myanmar. From 2006 to 2008, he was taking the role of secretary in the ICT Working Committee of his ministry, Ministry of Commerce, which is one of leading ministries in ICT projects implementation in Myanmar. In 2008, he was awarded a Japanese government scholarship to study MBA concentrated in the area of ICT and Management at the Graduate School of International Management (GSIM), International University of Japan (IUJ). He studied the diploma course in Advanced Trade Policy of World Trade Organization (WTO) in Geneva in 2013 and wrote a research paper titled: "The Importance of Rice Export Policy in Myanmar for National Export Strategy." At present, he is working as the deputy head of WTO and Other International Organizations Division under Directorate of Trade, Ministry of Commerce. He has wide consulting experience on the major projects of Ministry of Commerce related to National Trade Facilitation Implementation Plan, National Export Strategy, Myanmar's Trade Policy Review at WTO and Aids for Trade. He is taking the role of secretary of National Implementation Unit (NIU) of WTO Enhanced Integrated Framework (EIF) for Myanmar, which is core component of Aids for Trade agenda of WTO. He had also conducted as resource person at seminars and workshops on the trade, development and ICT related matters held in ASEAN since 2011.

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Ke Li

Dr. Li Ke is the Full Professor (tenured) of Graduate School of Business at Nihon University, and he was once the youngest full professor among top ten business schools in Japan. Besides, Prof. Li is also the Chairman and Director of Japan-China Management School, (JCMS), the Chairman of Japan Economic and Technology Internationalization Association (JETIA), the Lecturing Professor of Department of Economics at St. Joseph's University, the ex-editor of Pacific Economic Review, the Visiting and Adjunct Professor of City University of Hong Kong, People University and etc.. Moreover, Prof. Li is also the senior research associate or advisor of many local and international think-tanks, government agencies and business entities, such as Daiwa Securities, Asian Development Bank, Japan Solar Energy and Economy Association, World Bank, etc. The main research fields of Prof. Li are about Industrial Cluster and Networking, Corporate Governance, Global Management, Corporate Structures, Globalization and Regionalization and etc., which resulting in enormous publication at international leading journals within SSCI and SCI lists. Prof. Li has also published many articles at economic and business magazines and newspapers in Japan, China and global. Prof. Li received his Bachelor degree from Nanjing University in Econometrics, Master degree from Nanjing University and Johns Hopkins University, and Ph.D from Monash University. He also conducted his Post-Doctor research at Monash University and Australian National University.

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Shudi Zhu

Shudi Zhu is Professor and PH.D. Adviser at Fudan University Law School, and International Fox Fellow at Yale Law School. She has received Juris Doctor Degree in Law (in International Law direction). Prof. Zhu is also a researcher of 985 Program supported by Center for American Studies of Fudan University: On Legal System of Intellectual Property in United States (No. 07FCZDO26). Moreover, she directed the Fox International Fellowship Program at Yale University: International Trade Administrative Law under WTO Regime [(04) NY EDU (Social) Cert. No. 960] independently. Prof. Zhu has been involved in the consulting and feasibility studies of the making and amending of People's Republic of China Administrative Licensing Law, People's Republic of China Administrative Litigation Law, etc. She has issued the intellectual property administrative legal opinions for Microsoft Ltd. China. Concurrently, she is a director of China International Economic Law Institute, a director of China Law Society Administrative Law Research Association, an executive director of the China Law Society WTO Research Association. She has published dozens of academic papers in various domestic core journals, international

journals, and international conferences. Her papers and literary works mainly include Chinese Economic Administrative Law and Internationalization, EU Administrative Law in Economic Management, the Operation of International Economic Administrative Law, International Economic Administrative Law, Research on Judicial Review System in International Trade Remedies under WTO Regime, WTO and International Trade Administrative Litigation, Administrative Litigation over International Trade Disputes in the Context of Mix of Laws, etc.

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University of Tehran

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Anton Carpinski

Anton Carpinski is a professor of political philosophy, and currently Professor Emeritus of “Alexandru Ioan Cuza” University of Iași, Romania, Head of Department of Political Sciences at the same university (1990-2001). Prof. Carpinski is a chairman of the Political Science Committee of the National Council for Academic Evaluation and Accreditation (1993-2006) and visiting Professor at Toulouse University of Social Sciences, Institute of Social Sciences, The Hague, and the universities of Liège, Konstanz, Rovaniemi, Lille. He published the following books: Contemporary Political Doctrines. A Typological Synthesis (1991); Openness and Sense in Political Thought (1995); The Science of the Political Treatise, Volume I (in collaboration with C. Bocancea, 1998) Recognition Culture (2008); International Organizations (in collaboration with D. Mărgărit, 2011); The Culture of Recognition and Human Security (2012). He also cared edition and wrote introductory studies on Jean-Jacques Rousseau, Benjamin Constant, Nikolai Berdyaev, Michael Walzer, Jean-William Lapierre.

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James Campbell

Dr Campbell has two Phd's, one in political theory and the other in education. James has been involved in writing for the APEX Intellectual Discourse Series for the Universiti Sains Malaysia, and is also a regular columnist for the New Straits Times. James' interests cover politics educational theory and public philosophy. He has written on a range of topics in reform to higher education. James research interests can be accessed online at: <http://www.deakin.edu.au/arts-ed/research/profile/jamesca.php>

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Dr. Chun-Da Chen currently is an Associate Professor of Finance in Tennessee State University. He holds a Ph.D. degree from Tamkang University, Taiwan. He also serves as the editorial advisory board member and associate editor for the Open Economics Journal, Contemporary Management Research, etc. He has published numbers of papers in quality academic journals, including Journal of Economic Behavior and Organization,

International Review of Economics and Finance, International Review of Financial Analysis, and Emerging Markets Finance, and have made presentations to the annual meetings of the major Finance associations.

Chih-Yu Shen is an instructor in Da-Yeh University (Taiwan) and she received a MBA degree from the Department of International Business Management, Da-Yeh University in 2006.

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Stephen R. White

Dr. Stephen R. White is a professor at Appalachian State University (ASU) in Boone, North Carolina. He holds the Doctor of Arts Degree (D.Arts) with an integrative concentration in Foundations of American Government and interdisciplinary social sciences from Idaho State University. His doctoral research was the politics of educational socialization into globalization within the context of global education theory, social reconstructionism and constructivist learning. He was a recipient of the National Doctoral Fellowship for the Advancement of College Teaching sponsored by the Carnegie Foundation and PEW Charitable Trust. He received the Henry Luce Trust Scholarship for Preparing Future Faculty. ASU's Reich College of Education conferred upon him the Scholar of Distinction Award(2002-2003) and Friends of the Belk Library Outstanding Scholar Award (2012) for his research in global studies and higher education. ASU has recognized him as a Distinguished Graduate Faculty member and inducted him into the Hubbard Center for Faculty Development Teacher's Hall of Fame. Idaho State University's School of Graduate Studies has recognized him as an alumnus of distinction in recognition of his advancement of interdisciplinary scholarship and the theoretical art and empirical science of college teaching and learning.

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Dima Ioan Constantin

Ioan Constantin Dima is a graduate of the Faculty of Economic Science, University of Craiova, Romania. Obtained his doctorate in Economic Science, in 1988, from the University of Craiova. From 1994, he is Ph.D. Scientific Leader in Economics, field of Management at the Doctoral School of the "Lucian Blaga" University of Sibiu and "Valahia" University of Targoviste, visiting professor at Faculty of Management, University of Czesochowa, Poland, associate professor at Technical University of Kosice. Economist at CIMAE Craiova, TCI Craiova, university professor (assistant, lecturer, professor) University of Craiova, University of Petroșani, „Constantin Brâncuși” University of Târgu-Jiu, University of Pitești, „Lucian Blaga” University of Sibiu, ARTIFEX University of Bucharest, „Valahia” University of Târgoviște, Dean, Manager of Department, Head of Department at „Constantin Brâncuși” University of Târgu-Jiu, University of Petroșani, University of Pitești, ARTIFEX University, „Valahia” University of Târgoviște, Manager of the Territorial Branch of CRUFOC financed by a programme of the European Union, Manager at SC G.M.C. SRL Craiova, Expert Assessor at ARACIS, Assessor at CNCIS - MEDCTS, Member of CNATDCU - MedCTS Commission of Contestation Assessment regarding the confirmation of didactic titles, scientific titles and professional degrees in MedCTS, member of AGER, member of AROMAR, member of

FIMAN, member of CECAR, member of the Scientific Committee of the Publishing House "Cursuri Universitare" – the Polytechnic University of Bucharest, member of the Editorial Board of the Scientific Bulletin – The Series Economical Sciences of University of Pitești, member of the Editorial Board of the Annals of the „Valahia” University of Târgoviște, Economical Series, member of the Editorial Board of the Annals of the University of Petroșani, member of the Editorial Board of ANCOM - Bucharest, member of the Board "THE ANNALS OF THE UNIVERSITY OF LUXEMBOURG, member of the Scientific Editorial Board of „Výrobné Inžinierstvo”, the Technical University of Kosice, Faculty of Industrial Engineering, Presov, Slovakia, member of the Scientific Editorial Board of „Polish Journal of Management”, Technological University of Czestochowa, Faculty of Management, Poland, member of Editorial Board of Journal of Reviews on Global Economics, Associate Editor of Topclass Journal of Business Management, Member of Editorial Board of "Organization Review", Poland and Member of Editorial Board of IJTEMT is a non-profit educational organization working for expansion of research in the field of Economics Management and Technology, Scientific secretary at AGIR Publishing House, founder member of the „Scrisul Românesc” Foundation, founder member of the International Conference of Cooperation in the Basi of the Black Sea (Varna 1994, non-governmental organisation), member of the European Conference of the Deans of Scientific Faculties (Paris 1994), member of the Comisia of Curricular Reform for higher Economical Education, member of the Catalogue - Director of the didactic personnel in the field of economics for the inter-university exchange of courses, member of the National Consortium of Economic Business Schools, member of the CEDIMES INSTITUTE, member of the Academic Society of Management in Romania, member of the Royal Economic Society etc. He is author or co-author of 53 professional books, of 380 scientific papers in Romania and international journals and in proceedings of international seminars and conferences.

Mariana Man is a graduate of the Bucharest University of Economic Studies, Romania - Faculty of Planning and Economic Cybernetics. Obtained her doctorate in Economic Science, in 1998, from the Bucharest University of Economic Studies. Between 2000 and 2008, Professor MARIANA MAN was the deputy dean of the Faculty of Sciences at the University of Petroșani and from 2008 is manager of the "Center of Economic and Social Researches for Regional Development" of the University of Petroșani, Romania. From 2000 is publisher-in-chief of the of the international publication "Annals of the University of Petroșani - Economics". Valuable specialist and experienced researcher with numerous documentations in country and abroad. Has a rich practical activity in superior economic education, being a professor in many universities. Main activities and responsibilities: courses and seminars; scientific research - doctorate coordinator (at the Valahia University of Târgoviște, Romania); academic administration; coordination of scientific publications; consultant and trainer in the financial and accounting field. Has a sustained scientific activity. She is author or co-author of 15 professional books published in the United States of America by IGI Global, in Germany by LAP LAMBERT Academic Publishing, in Croatia by InTech, in Poland, Slovakia and Romania; of 150 scientific papers in Romania and international journals and in proceedings of international seminars and conferences. Member of different professional-scientific structures and committees: expert accountant - member of The Body of Licensed Accountants and Accounting Experts in Romania; permanent expert evaluator - member of Romanian Agency for Quality Assurance in Higher Education. For her scientific and organizational work, she received a number of awards and distinctions, among others, individual and collective awards conferred by universities from Romania.

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Adolfo Benito Narváez

Universidad Autónoma de Nuevo León, México

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Preface

The spread of humans, information, knowledge, culture, wealth, goods, and services around the world can be thought of as globalization. Of course there are more that moves around the world and the globalization keeps producing more and more endeavors to be explored and researched. With that in mind, this book is a collection of well researched articles produced not by a single source, but by a global pool of academics and practitioners, thus adding a true meaning to the word “globalization.”

The contents of this book also cover many aspects of globalization that were just mentioned. At least two or three chapters are related to the globalization involving human movements; at least two chapters are related to globalization involving information and knowledge, including education; at least one chapter is related to globalization involving culture; at least two chapters are related to globalization involving wealth, and at least two chapters are related to globalization involving trade of goods and services. I did not name the chapters specifically because even when one chapter is focused on specialization, it could also spread to cover other specializations; such is the case, for example in Chapter 1, where the main specialization is information. Yet, the chapter connects to globalization of goods and services. One can see such cross-referencing to wide areas in many of the chapters in this book.

Though books on Globalization mostly focus on specific area such as transfer of goods, this book provides a wide coverage involving several aspects of globalization; thus, it could be a good source for reference for multiple aspects of globalization.

Jay Rajasekera
Graduate School of International Management
International University of Japan

Role of ICT and Border Trade in Global Supply Chain: Case of Myanmar

Jay Rajasekera and Nyi Nyi Aung

INTRODUCTION

The globalization has made each country play a role in the global supply chain. Even a less known country could be critical in this supply chain, if it is the provider of a very rare resource, such as rare metal. If such country is not properly linked as part of the global supply chain, it could have significant impact on the functioning of the entire downstream and distribution channels and markets.

The purpose of this chapter is to address the situation of Myanmar, whose overall contribution to total world trade is extremely small, yet it borders two of the fastest growing economies of the world – China and India. Among the vast resources Myanmar is holding under its territory include precious stones, oil, and gas, which are increasingly being demanded by a world, in particular China and India, hungry of energy. Myanmar is also known to hold rare metals which are vital for producing parts for smartphones and hybrid vehicles.

While Information and Communication Technologies (ICT) had played a key role in facilitating globalization, in particular, its contribution in managing global supply chains has been most noteworthy when it comes to global trade (Dutta and Mia, 2007). In case of Myanmar, border trade accounts for a significant proportion of its overall global trade. While presenting a comprehensive picture of Myanmar's border trade and its key role as a player in the global supply chain, this chapter explores how Myanmar is attempting to facilitate it with the help of ICT.

The presentation of the chapter is based on trade data and a survey of export and import oriented companies based in Myanmar. Myanmar is a developing country and its use of ICT and the infrastructure as a link in global supply chain could exemplify the situation common to many developing countries. The findings from the survey typifies the characteristics perhaps common to many such countries which are attempting to make use of ICT for trade and development.

MYANMAR'S WORLD TRADE

The globalization has brought dramatic increase of world trade, which in 2010, according to World Trade Organization (WTO), was in the neighborhood of US\$15 trillion; Myanmar's share of which is quite small, accounting for less than 0.1 percent of the overall world trade. Even within ASEAN, the Association of Southeast Asian Nations, trading block, of which Myanmar is a member, its rank is quite low (Table 1).

Table 1: Myanmar's trade position among ASEAN countries in 2007

No	Country	Trade Volume(US\$ Mil)
1	Singapore	562452.3
2	Malaysia	323115.9
3	Thailand	293536.8
4	Indonesia	188574.3
5	Vietnam	109982.5
6	Philippines	105979.4
7	Brunei Darussalam	9749.9
8	Myanmar	8782.5
9	Cambodia	7584.6
10	Laos PDR	1093

Source: ASEAN Statistical Year Book (2008)

Myanmar is also a member of international trade associations such as WTO. The current trade policy of Myanmar is one of export first and import later. It means that import is allowed only after receiving earnings from exports to other countries.

Myanmar government classifies “trade” into two “systems”: “normal trade” and “border trade” (Aung, 2010). Normal trade system means trade with oversea countries using US\$ as the method of payment. Border trade system means trade with neighboring countries and both US\$ and local currencies are used. To expand both overseas and overland trade with neighboring countries, a new border trade system, including significant use of ICT, was introduced in 1997 (Aung, 2010, Soe, 2008).

Though Myanmar is not a major exporting country, it is holding sizable natural resources, especially natural gas, forestry products, metal, gem stones, and other precious minerals. Since Myanmar started exporting natural gas in 2002, the demand from Thailand particularly had made natural gas the largest export item for the country, bringing about half billion US\$ income for international trade, per year (Thein and Myint, 2008).

Due to their rapid expanding economies, China and India are anxious to tap into Myanmar's oil and natural gas reserves (Hong, 2008). With China, Myanmar is already on the way to set up a pipeline to export oil and gas (Daojiong, 2009).

With India's adoption of “Look-East” policy in 1991, the relationship between India and Myanmar had changed gradually. Since 1998, it had gained new momentum, including increased trade between the two countries (Yhome, 2009). As India also looking for

energy sources and raw materials to fuel its expanding economy, Myanmar’s international trade, in particular border trade, is bound to increase.

Table 2 explains the major exports of Myanmar. As can be seen, natural gas has become the biggest export item. All these factors are making Myanmar’s role in ASEAN important, especially in energy sector.

Table 2: Myanmar’s major export in 2007-2008

No	Major Export Category	% of Total Trade
1	Gas	39.49%
2	Agricultural Products	13.26%
3	Gem and Minerals	10.08%
4	Timber	8.40%
5	Marine Products	4.68%
6	Garment	4.41%
7	Base Metal and Ores	1.35%
8	Animal Products	0.06%
9	Other Commodities	18.28%
	Total Export	100.00%

Source: Central Statistical Organization, Myanmar (2008)

In the table of Myanmar major export category, natural gas is the biggest. Among ASEAN (Association of South East Asian Nations) countries, Myanmar is among the few which holds sizable supply of natural gas – Indonesia and Malaysia hold vast reserves.

MYANMAR BORDER TRADE

Myanmar’s border trade has received special significance recently because of two of its neighbors, China and India, which are among the fastest growing economies in the world (Bail, 2010, Kudo, 2007). Myanmar’s other neighbors are Bangladesh, Laos and Thailand. Currently, Myanmar-China border trade is the biggest and Myanmar-Thailand border trade is the second biggest. Currently there are eleven border checkpoints between Myanmar and its neighbors, as shown in Table 3.

Among border checkpoints in Table 3, Muse border checkpoint, at China border, is the biggest with 71% of total border trade. Myawaddy border checkpoint, at Thailand border, is the second biggest with 11% of total border trade, and Kawthaung, also at Thailand border, Tachileik is the third biggest with 6% of total border trade. Average trade volume

of other eight border checkpoints is about 1.5% of total border trade and most of their original trade volume is less than 1% of total border trade.

Table 3: Border Checkpoints of Myanmar

No	Checkpoint	Opening Date	Border With
1	Muse	01/21/98	China
2	Chinshwehaw	10/19/03	China
3	Lwejel	08/23/98	China
4	Myawaddy	09/16/98	Thailand
5	Tachileik	03/16/96	Thailand
6	Kawthaung	06/01/96	Thailand
7	Myeik	07/01/99	Thailand
8	Sittwe	12/11/98	Bangladesh
9	Maungdaw	09/05/95	Bangladesh
10	Rhi	12/10/03	India
11	Tamu	04/12/05	India

Source: Myanmar Dept. of Border Trade

In this regard, it is clear that China and Thailand are the most important partners of Myanmar for border trade at present. In addition, there is so much potential for India to become as an important partner of Myanmar for border trade and transit trade (Yhome, 2009). Transit trade for India could use Myanmar to trade with Thailand, Cambodia, and Vietnam.

The figures in Table 4 clearly show the rapid expansion of Myanmar's border trade, despite an American embargo enforced since 1997 (Johansson, 2000). Due to this expansion, the government of Myanmar had established special border trade zones at Myanmar-China border area and Myanmar-Thailand border area. In these trade zones, whole sales markets have been established and auction systems are being used to sell some commodities. For example, fishery products and some agricultural products are sold to Chinese buyers by using an auction system. In these situations, ICT may be essential for both public and private sectors in order to make timely and efficient trading (Chinn, 2006).

Table 4: Border Trade Development of Myanmar

US \$ (millions)				
No	Fiscal Year	Export	Import	Trade Volume
1	1991-92	76.381	62.885	139.266
2	1992-93	94.406	163.521	257.927
3	1993-94	55.559	192.485	248.044
4	1994-95	66.018	165.855	231.873
5	1995-96	43.151	292.798	335.949
6	1996-97	58.404	298.721	357.125
7	1997-98	154.972	102.091	257.063
8	1998-99	146.300	153.968	300.268
9	1999-00	196.402	147.992	344.394
10	2000-01	235.401	176.339	411.740
11	2001-02	292.995	212.839	505.834
12	2002-03	272.635	187.937	460.572
13	2003-04	307.307	224.492	531.799
14	2004-05	409.985	277.899	687.884
15	2005-06	429.480	287.250	716.730
16	2006-07	647.210	445.400	1092.610
17	2007-08	746.683	582.849	1329.530

Source: Myanmar Dept. of Border Trade (2007)

Comparatively, among Myanmar’s neighbor countries, border trade with China is most important because it accounts for more than 70% of the total trade with China (Table 5).

Table 5: Border Trade by Country in 2007-2008

Country	Total Border Trade (US\$ Mil)	% of Total Trade
China	977.429	73.52%
Thailand	304.735	22.92%
Bangladesh	32.537	2.45%
India	14.831	1.12%

Source: Myanmar Dept. of Border Trade (2007)

The volume of border trade included 8% of all trade (normal trade + border trade) in 2001 and it was about 13% of all trade in 2008. Moreover, the yearly growth rate of all trade was about 9.5% from 2001 to 2008; however, the yearly growth rate of border trade was about 16% within the same period. Thus it is clear that border trade development in Myanmar had been growing considerably faster when compared to total combined trade, referred to as “all trade” from here on.

ROLE OF ICT IN BORDER TRADE

While ICT itself makes about 20% of global trade, its contribution as a facilitator of global trade is also a major factor which had contributed to globalization and expiation of world trade. Though, somewhat old, a UN study reported that ICT related services were one of the most dynamic export services, growing at an annual average rate of 31% (in the developing countries at 58%), in 2003 (Teltscher, 2006). Indeed, at all of the WTO rounds of meetings, starting from Uruguay, the role of ICT as a contributor to liberate world trade, including border trade, has been recognized (Audretsch and Welfens, 2002 and Jackson, 2009).

Table 6: iPstar Satellite Installation of the Department of Border Trade

No	Checkpoint	Installation Date	Usages	Border With
1	Muse	08/11/06	Internet & Phone	China
2	Chinshwehaw	01/01/07	Internet & Phone	China
3	Lwejel	03/20/07	Internet & Phone	China
4	Myawaddy	07/06/06	Internet & Phone	Thailand
5	Tachileik	12/28/06	Internet & Phone	Thailand
6	Kawthaung	05/15/07	Only Internet	Thailand
7	Myeik	03/09/07	Only Internet	Thailand
8	Sittwe	04/03/07	Internet & Phone	Bangladesh
9	Maungdaw	01/21/07	Internet & Phone	Bangladesh
10	Rhi	03/31/07	Internet & Phone	India
11	Tamu	03/03/07	Only Internet	India

Source: Myanmar Dept. of Border Trade (2007)

Indeed, Myanmar also had recognized the importance of ICT in border trade, early on. Among the first efforts to strengthen the use of ICT is laying the network infrastructure (Appendix 1). But, comparatively, Myanmar’s ICT penetration is quite low (Chinn and Fairlie, 2006).

NETWORK INFRASTRUCTURE

For the network infrastructure, currently the Department of Border Trade (DBT) uses two types: iPstar satellite and the optical fiber network connection (Table 6 and Appendix 1). DBT has installed iPstar satellite network connection at all border checkpoints; however DBT can use optical fiber network only at Muse and Myawaddy check point at present.

SOFTWARE APPLICATIONS

The aforementioned networks are being supplemented with a specially designed software system. Major software applications of the Ministry of Commerce, which supports DBT include the following:

- a) www.commerce.gov.mm: This is an official website of the Ministry of Commerce. People can see this website both in English and in Myanmar languages. People who want to trade outside Myanmar would use this website because international trade procedures and processes are announced in this website. Updated trade information for local and overseas are explained, along with trade news and prices of commodities with weekly updates. Trade journals also can be downloaded freely from this site.
- b) www.myanmartradenet.com: This is a dynamic website. A user who wants to access this website has to pay member fees. A user can access online application system via this site to apply export/import license. Updated prices of export/import commodities, trade related information, the directory of traders, and both local and regional trade news are also provided for users. This website acts as a trade portal and it is really useful for users who are doing trade.
- c) Border Trade Online System (BTOS): BTOS is an integrated software system for border trade especially in export/import processes. BTOS is specially designed for “One Stop Service” developed by a team including the DBT, the Customs Department, the Internal Revenue Department and the Myanmar Commercial Bank. The Department of Border Trade, the coordinator of One Stop Service, controls BTOS. Currently BTOS is running at 11 border checkpoints. Data from the BTOS’s server is sent to the main server of head office of the Department of Border Trade by online. BTOS in Muse and Myawaddy, the two largest border check points in Myanmar, at borders with China and Thailand, respectively, can directly connect to the servers of the head office by the fiber optic cable network. Others border checkpoints can connect to the head office via online to send data and information
- d) Price Database Software System: The system that saves and describes the prices of the export/import products handling by the Ministry of Commerce. Reports of the prices of export/import products can be seen according to H.S. Code, regional camp, currency, and country of origin. The users are both exporters and importers.

PROBLEMS

Though network infrastructure and software exists, based on observations of one author who has experience with The Department of Border Trade in Myanmar, it is not all that

smooth in an operational point of view. Among the problems in using ICT in border trade include the following:

- a) Lack of reliable electricity supply especially in border area.
- b) Limited of budgets (Insufficient budges to establish backup system).
- c) Lack of quality people for the sustainable development of ICT.
- d) Lack of incentives for technician people who are in ICT department.
- e) Lack of ICT standardization including software and hardware among government’s departments.
- f) Lack of monitoring process to improve and maintain current ICT applications.
- g) No online banking system for international trade transaction to implement a perfect electronic trade system.

Figure 1: Problems with use of Internet (survey result)

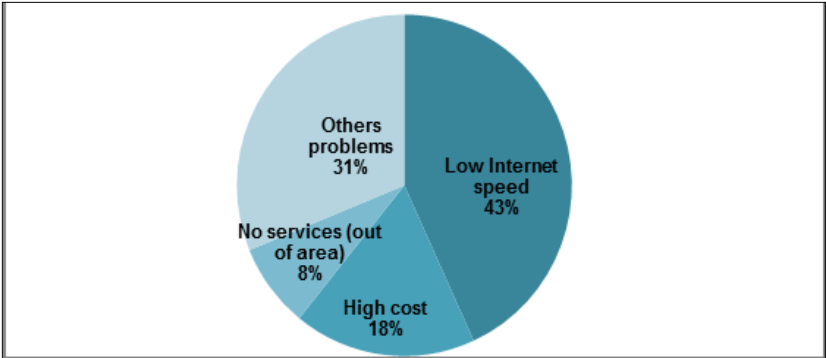
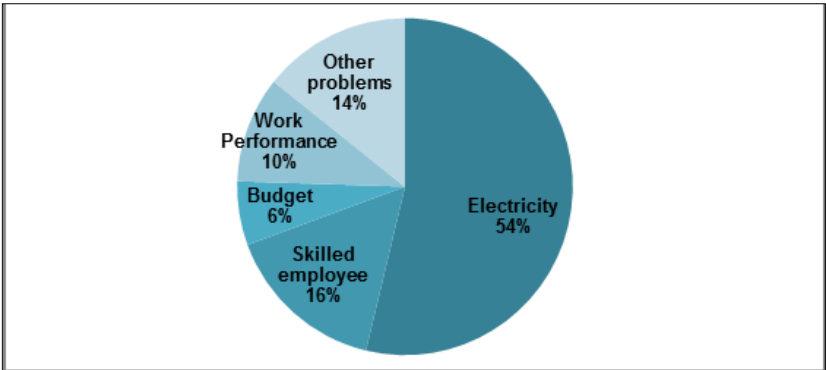


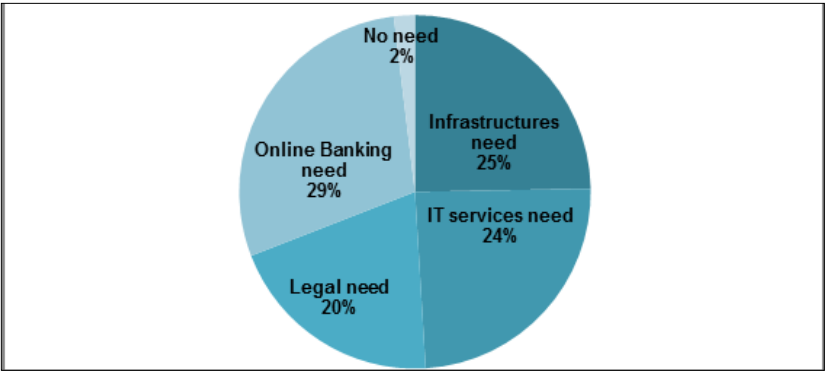
Figure 2: Problems with use of PCs (survey result)



To analyze the benefits and challenges faced by private trading companies, an online survey was conducted by the authors. The questions for this survey were randomly distributed to 300 private trading companies by email. About 120 companies responded to the online survey; but only 101 responses could be used because some responses were incomplete. According to the survey, the problems in using internet and the problems in using computers in general are shown graphically in Figures 1 and 2.

The survey also asked questions about the other problems associated with ICT in border trade. The results are shown in Figure 3.

Figure 3: Need of ICT for trading (survey result)



Though several other results were revealed by the survey, the analysis presented in this chapter highlights only the ones most relevant to the topic.

RELEVANCE FACTORS BENEFICIAL TO TRADERS

Based on survey answers, ICT can reduce manual process time and reduce manual workload. ICT can improve efficiency of the performance of work. For example, when the DBT uses the Border Trade online System, the department can issue export/import licenses faster than in manual system. For the private trading companies, ICT can share equal opportunities regardless of size of business as small, medium or large.

The survey found that trading companies consider use of ICT is quite critical for trade, as seen on Figure 4.

Also, it is clearly seen from the survey that traders has great belief that trade performance can be drastically improved by use of ICT, as seen in Figure 5.

Figure 4: Importance of ICT for trading (survey result)

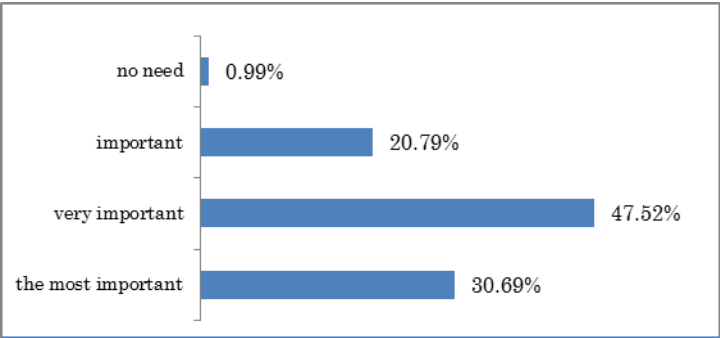
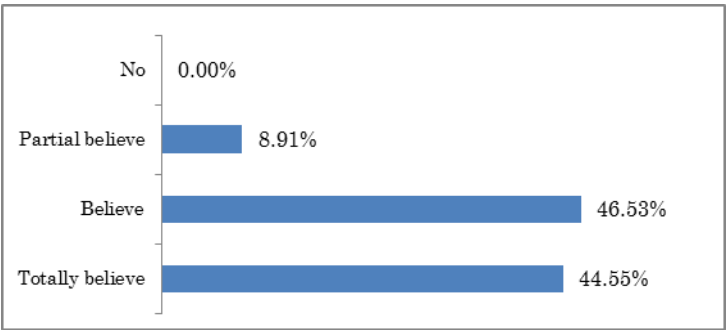
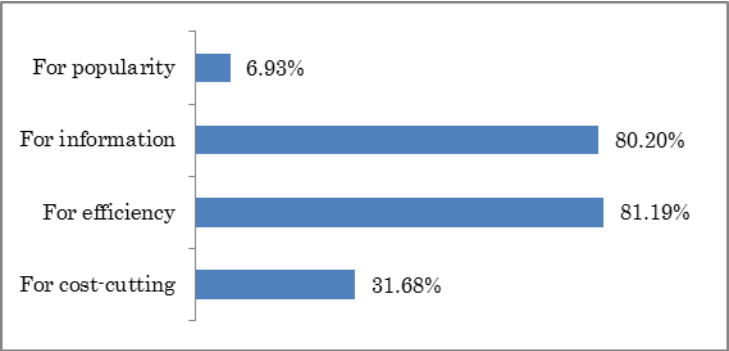


Figure 5: Importance of ICT for trading (survey result)



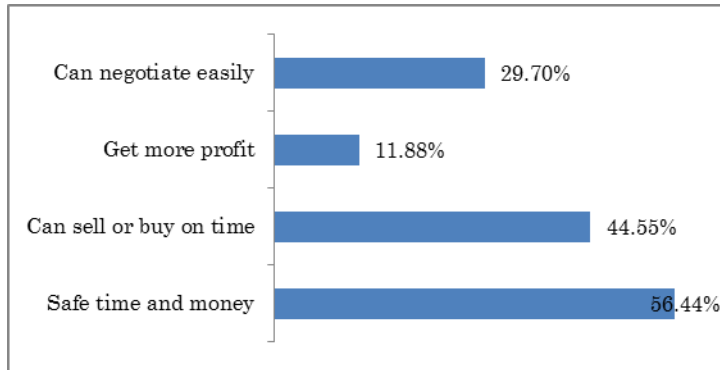
According to survey result, about 81% of trading companies use ICT for the reason of improving efficiency of work performance (Figure 6). For example, about 83% of trading companies use computers in their office work; therefore, they can manipulate and retrieve trade data and information easily without taking much time.

Figure 6: Reasons for using ICT by private trading companies (survey result)



Moreover, about 70% of trading companies want to sell commodities via online because of the reasons showed in Figure 7.

Figure 7: Reasons for online selling by trading companies (survey result)



Thus, based on the survey results, it is clear that Myanmar's traders see the need for a vastly improved ICT system, including improved online services.

EVALUATION OF ICT USE IN BORDER TRADE

In order to understand the benefits and challenges in using ICT, SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis was done in the perspectives of public sector and private sector (Dealtry, 1994). Based on survey results and published government regulations (Aung, 2010, Soe, 2008, and Nyunt, 2009) SWOT analysis for the public sector of border trade to develop ICT usages can be rationalized as follows:

Strengths:

- Strong support by government
- Existing e-government policy
- Existing e-government project
- Readiness for network infrastructure
- Command and control of border points
- Existing regional cooperation and interconnectivity
- Outsourcing quality of local companies

Weaknesses:

- Lack of technical and professional level of human resources
- Insufficiency of electricity
- Inadequate budgets
- High cost for telecommunication and network infrastructure
- Lack of maintenance for long-term
- Lack of ICT awareness of staffs
- Lack of standardization
- Lack of cooperation among organizations

Opportunities:

- Can form well-governed organizations
- Can abolish duplicated process
- Can reduce transaction cost and time
- Can accelerate the volume of work
- Can make better communication and improve transparency
- Can achieve strong leadership role

Threats:

- Trusts for safety
- Control for security
- Loss of human role due to bureaucracy
- Reaction due to previous unsuccessful projects

Similar to government sector, SWOT analysis for the private sector of border trade can be developed to understand the usage of ICT. The analysis, based on the survey and other sources mentioned in the government sector's SWOT rationalization, can be explained as follows:

Strengths:

- Encouragement by government
- Existing national projects
- Current Policy to privatize telecommunication industry
- ICT becomes a new driver of global economy
- Emerging information society based on ICT
- Local outsourcing quality company

Weaknesses:

- Lack of human resources
- Insufficiency of electricity
- Lack of incentives to encourage private business
- High cost for telecommunication and network infrastructure
- High fees for internet usages
- Lack of online banking
- Lack of established e-commerce practices
- Lack of trust to government's initiatives

Opportunities:

- Can abolish duplicated process
- Can reduce transaction cost and time
- Can accelerate the productivity
- Can share information via trade associations
- Can expand market
- Can follow international trading practices

Threats:

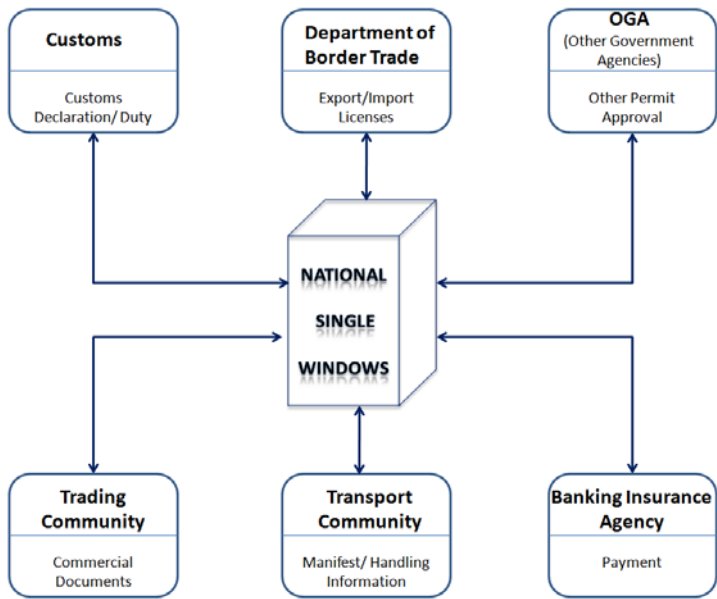
- Government's controls in Internet
- Possible new government regulations
- Rapid ICT technology changes
- Difficulties to retain skilled employees

The SWOT analysis is useful for the policy makers and decision makers to craft the policies for improving border trade; also for decision makers to arrive at strategies by taking into account the respective competitive forces (Soe, 2008).

CONCLUSION

Myanmar possesses a strategic linkage in South and Southeast Asia region (Appendix 2). Myanmar is participating highway projects for Asian highways, ASEAN highways, East-West Economic Corridor (EWEC) and North-South Economic Corridor (NSEC) highways of GMS and Indian-Myanmar-Thailand Trilateral highway for the sake of regional and international economic cooperation. Myanmar becomes a land of bridge between South and Southeast Asia especially for regional trade (Ishida, 2007, Tsuneushi, 2009). Regional trade such as transit and border trade have much potential for international trade development of Myanmar. For example, Myanmar’s neighboring countries are interested in transit trade through Myanmar. In accordance with regional trade cooperation, Myanmar needs to complete trade logistics requirement. In this regard, ICT becomes essential to improve trade logistics performance of Myanmar especially for transit and border trade scheme of near future.

Figure 8: The Sample Model of National Single Windows



In addition, Myanmar needs to expand the scope of the National Single Windows (NSWs) related to trade, customs, and transport process and procedures as well as document requirements. NSWs are defined under ASEAN Single Windows Agreement (ASEAN, 2000). Myanmar has to operate NSWs by no later than 2012 according to this

agreement. The sample model of NSWs for border trade of Myanmar is showed in Figure 8. Given these factors, the necessity of ICT in border trade would become increasingly important since the facilitation of border trade is included as a major requirement for Myanmar to comply with the ASEAN Single Window Agreement.

Moreover, Myanmar has the responsibility to implement the e-ASEAN Framework Agreement as well (ASEAN, 2000). Under this agreement, all ASEAN member countries have to complete harmonization and standardization for processes, procedures of trade, and customs by year 2015. It is a great challenge for Myanmar because Myanmar needs to develop e-Payment, e-Banking, e-Customs, and e-Trading.

Because of the above reasons, the demand for ICT in trade logistics is getting increased and excellent opportunities exist for investments in new technologies (Nyunt, 2009). Actually, trade logistics include a collection of business arrangements which include not only transport, warehousing, cargo consolidation, and border clearance, but also country distribution and payment systems (World Bank, 2010). According to World Bank's Logistics Performance Index (LPI), Myanmar's LPI in 2007 was 147th ranked among 150 countries. Myanmar's LPI in 2009 was 133rd rank among 155 countries. To decide logistics performance, the quality of ICT infrastructure is essential because ICT is a major factor to improve logistics performance. It is impossible to ignore the role of ICT to reduce lead time of export and import and to improve the quality of supply chains. Therefore, the demand for ICT is really high and both public and private sector have to prepare for the higher demand for ICT in trade logistics.

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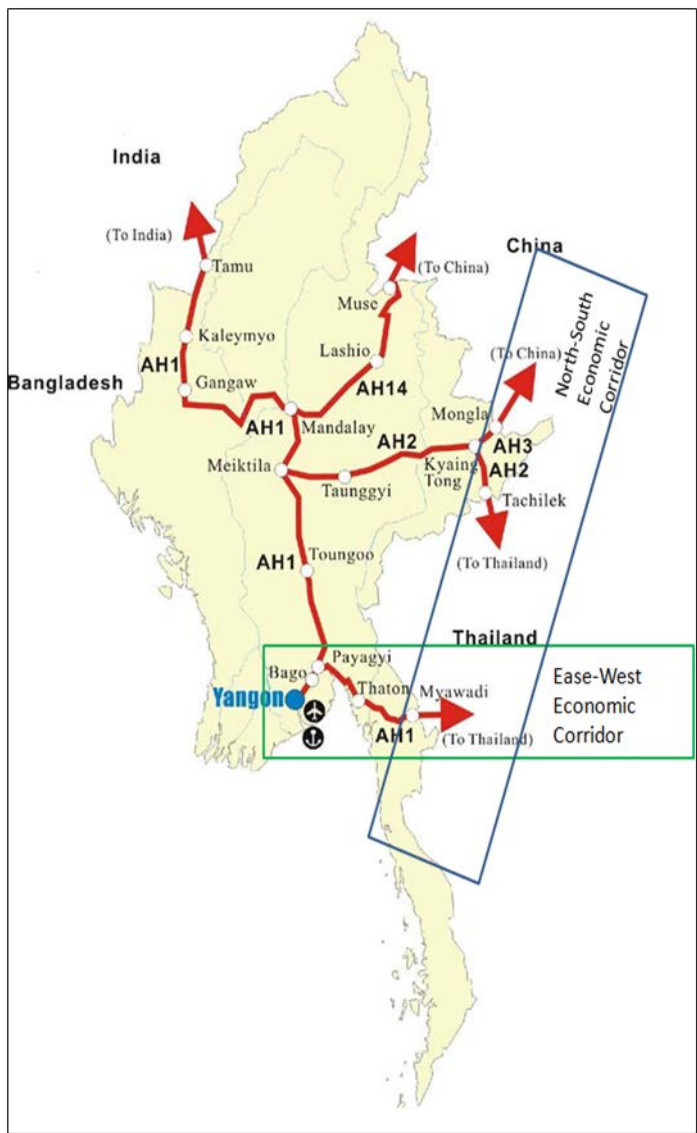
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APPENDIX 1: Myanmar's Optical Fiber Network with Neighboring Countries



Source: Myanmar Dept. of Border Trade

APPENDIX 2: Strategic Highway Linkages of Myanmar in South and South Asia Region



Source: Tsuneishi, 2009 and ESCAP, 2005

Abstract

This work takes the view that the concept of globalisation is a contemporary dominant system and framework for focusing on, codifying and bringing coherence to ideas and themes across the world. Globalisation is a major factor in stimulating change that legitimizes the transformative power of education in the 21st Century. However, the transformative capital of change inspired by globalisation fails, because it does not readily embed into local contexts. Consequently, this work attempts to examine the impact globalisation has on science education in Sub-Saharan Africa, through answering the following broad questions: What perspectives or views on globalisation drive philosophy of or thinking on science education in Sub-Sahara Africa? What impacts of globalisation on science education in Sub-Sahara Africa are evident? What important lessons and questions or issues emerge from the study? The chapter concludes with a reflective end-piece calling for case studies that can help illuminate and give meaning to the issue of the impact of globalisation in Sub-Saharan Africa.

Key words: Globalisation; Sub-Saharan Africa; Science Education; Impact; Science Curriculum; English Language; Internationalisation; Aid Agencies

An Examination of the Impact of Globalisation on Science Education in Anglophone Sub-Sahara Africa

Anthony T. Koosimile & Shanah M. Suping

Introduction

The Sub-Saharan Africa region comprises 45 countries in total and, according to the World Bank, about 34 of the world's 48 poorest countries are in Africa. Furthermore, Unesco's Education For All Global Monitoring Report of 2005 (see Unesco, 2005) states that the Sub-Saharan Africa region is characterized by massive educational deprivation. However, of Sub-Saharan Africa's roughly 600 million inhabitants, about 88 million are of general secondary school age (Bregman and Bryner, 2003); nearly all of them are exposed to some form of school curriculum with a science education component. By science education we mean not only the school curriculum (i.e., official curriculum & curriculum-in-action), but also everything else (the policies, politics, resources, structures, etc.) that goes into shaping its existence and reality as a discipline in education. Interestingly, the field of science education has been developing for over half a century, flourishing over the past few decades (Fraser and Tobin, 1998), in response to a variety of pressures and practices impinging on education across the world. Similarly, the understanding and appreciation of science education occurs within many frameworks or paradigms, of which concept 'globalisation' is one.

However, there is some consensus that globalisation has a spectrum of meanings to scholars (Held, McGraw, Goldbat and Perraton, 1999). It seems Marshall McLuhan's

coining of the term “global village” in 1960 (in the context of the then envisaged spread and impact of communication technology (Barnard and Burgess, 1996)), resulted in the emergence of the concept of globalisation, and is central to giving meaning to the processes of launching ideas or ideologies on a world-wide scale. Education in all its shapes, forms and scope, at whatever level, as a multifaceted enterprise in a globalised social, cultural, political and economic milieu, has invariably been thrust into a world-wide domain where its nature is a subject of interest, debate and contestation. In that way, it has come to pass that, as Fensham (2011) states, ‘the globalized nature of modern society has generated a number of pressures that impact internationally on countries’ policies and practices of science education’ (p. 698).

However, the development of this chapter embraces the view that globalisation is understood by many in literature or research texts. The positions, though not articulated in this chapter, are generally useful in two ways. First they complement each other in building some appreciation of globalisation in the education landscape. Second, as Tobin (1998) notes, “the research texts are potentially useful as sources of perturbation for practitioners in a variety of educational niches” (p. 130). Consequently, each publication is used recursively in this work to reflect on strengths and weaknesses of prior research (cf. Tobin, 1998). The idea is to act on gaps in the literature in ways that reveal the real or perceived impact of a globalizing activity on science education. In that way this chapter can make some contribution to the main discourse on the impact of globalisation in science education in Sub-Saharan Africa.

The study undertakes a literature review, although not exhaustive, that gravitates selectively around the following areas: identifying emergent themes on the relationship between globalisation and science education (cf. Carter, 2005); identifying gaps in previous research (Marshall and Rossman, 1999); and generating some insights on the impact of globalisation on science education in Sub-Saharan Africa. Search Engines such as Google Scholar, Google, Ebscohost, Academic Source Premier, Science Direct, and Scopus are but some of the sites for and sources of scholarly articles, reports and any other relevant literature. However, this work needs to be appreciated further within the context outlined in the rest of the paragraph. The word *impact* as used in this work suggests searching for evidence that falls into two mutually inclusive camps: evidence that demonstrates the *contribution* globalisation has made to science education; and the *attribution* of some trends and practices in science education to globalisation. It is worth noting that focusing on impact is strategic in this work. The focus on impact locates this work within studies of similar genre, yet it also attempts to go beyond what most studies have uncovered and explored in terms of the *impact* of globalisation on education in Sub-Saharan Africa. This has a bearing on the presentation of this chapter, as it will not merely recite much of what is captured elsewhere in the literature.

Furthermore, as a consequence of a clear lack of case studies on globalisation in individual countries in Sub-Saharan Africa, the evidence provided in this chapter serves, in most cases, a limited but important purpose in that it may not provide *definitive proof* of the impact of globalisation on science education; it provides *supporting evidence* of the same. However, in research methodology terms, such evidence, irrespective of how

isolated or remote it is in the world-wide domain, is viewed positively here as significant in as far as it is a potential growth point for research and introspection. This conviction is central to developing this chapter such that the work uses evidence from Sub-Saharan Africa in general and, where appropriate, focuses on selected local or regional situations with outstanding illustrative strength. Finally, the write-up of the chapter eschews a positivist tradition of separating, as it were, research findings from their discussion and analysis. This said, discussion on the impact of globalisation on science education will be interspersed with text throughout, depending on context.

The structure of the chapter revolves around several distinct sections. An overview of the concept of globalisation in relation to science education is explored first. The overview also considers the general nature of the science curriculum that emerges from the literature. The next section explores gaps in the literature and exploits them in searching for the impact of globalisation on science education in Sub-Saharan Africa. Among other themes, the section explores the widely publicised issue of the lack of impact of aid on education, before focusing on examining how the concept of internationalisation seems to provide some evidence of the impact of globalisation on education. Finally, the work terminates with some reflective comments that seek to inspire and stimulate more research into the topic of the impact of globalisation on education in Sub-Saharan Africa, or elsewhere for that matter

Context: perspectives on globalisation and science education

According to Al'Abri (2011), the term "globalisation" is a broad and ambiguous concept that has found wider use and application in education. Diverse definitions are found in the literature. See, for instance, Altabach (2004), Barnard and Burgess (1996); Carter (2005); Giddens (2003); Inda and Rosaldo (2008); and, Lewin and Dunne (2000). In this work however, globalisation simply means "the increasing tendency for the globe (*Sub-Saharan Africa*) to constitute the effective domain of action and of thinking, in relation to a specific issue" (Kress, 1996, p. 186). The issue in this context is science education with respect to how it takes shape or evolves in Sub-Saharan Africa in response to pressures of a global nature. Carter (2005) contends that "the very nature of globalisation itself as simultaneously able to manoeuvre between/within/around, colonizing all contexts, and consummate at creating the conditions for its own success" (p. 575). But,

What makes globalisation today ...different from everything that preceded it, is the interconnectedness of its political, economic, cultural, educational and technological agenda, complemented by the intensity of its omnipresence all over the world, as measured by the speed with which its diverse components can affect people's lives (Abdi et. al., 2006, p. 20)

Globalisation in contemporary education is considered a major factor in stimulating change, and in legitimizing the perceived and real transformative power of curriculum when it aligns with the needs and demands of modern societies. However, perhaps owing to a lack of clear policy initiatives to define and guide globalisation in Sub-Saharan Africa, the concept has been viewed with some consternation and ambivalence by some

in the region. According to Bregman and Armstrong (2004), participants at a conference on science education in Uganda (in Africa) in 2003 were divided, or rather unsure, on the extent to which globalisation was a viable framework for their deliberations. Green, Little, Kamat, Oketch and Vickers (2007) also echo similar sentiments, and note that “globalisation has not been perceived positively in Kenya, partly because it is associated with the Structural Adjustment Programme (SAP) implemented by the Kenyan Government since 1990 on the recommendation of the World Bank and IMF” (p. xiii).

Nonetheless, in studying its pervading influence, “it would become the case that ‘the medium is the message’, that is, how a message is transmitted would become more important than the message itself (McLuhan and Fiore, 1967)” (cited by Barnard and Burgess, 1996, p. 444). Thus, the *medium* of flow of information or interaction, as opposed to power (Al’Abri, 2011) and knowledge (Carnoy, 2000), is a fundamental issue in this work.

However, while “globalisation is indeed implicated in the discourses of science education, even if it remains under-acknowledged and under-theorized” (Carter, 2005, p. 561), the relationship between globalisation and science education is rather tenuous and uncertain. Vavrus (2009) notes that the current thinking in education in globalised contexts suggests that improving the quality of science content and pedagogy in schools is an economic imperative for developing nations, in an era when knowledge is a vital form of capital, or an international commodity (Al’Abri, 2011) in the Knowledge Society (Fensham, 2008). Consequently, quality education is now regarded as one of the main components in poverty alleviation and occupational growth (Vaggi, Ventura & Viezzoli, 2003), and in the political democratization of education in the contemporary world (Kamens and Mcneely, 2010, p. 5). Carter (2005) elaborates on this point:

It is increasingly clear that contemporary education, including science education, needs to be considered in tandem with globalisation as the dominant logic at work, rethinking and reconfiguring the social and cultural landscape in which it is embedded. Globalisation and education become mutually implicative categories with knowledge globalisation’s fundamental resource, and education as a major player in its production, rationalization, distribution, and transmission (Carter, 2005, p. 562).

But,

Science education works somewhere in the spaces between globally influenced nation-state policy production, and local sites of practice, strongly influenced by traditional trajectories of science education. Consequently, there is a naturalization of globalisation’s shaping forces, influencing and changing science education in ways that remain largely under-acknowledged and opaque (Carter, 2005, p. 573).

However, the influence of globalisation on education in general has been studied from different perspectives such as, for instance, anthropological perspectives, cultural sociology and critical theory. Some gaps on the issue, however, remain in literature. For

instance, “an overt acknowledgment of the relationship between globalisation and science education is mostly absent from the science education literature” (Carter, 2005, p. 571). And, “too often, it is difficult to assess the impact of interventions due to the lack of baseline data” (Hardman, Ackers, Abrishamian and O’Sullivan, 2011, p. 673). However, contends Al’Abri (2011), “the process of globalisation has deeply shifted and changed the ways in which education policies are developed, implemented and evaluated as globalisation has witnessed the reworking of the nation-state – the site at which public policy was most commonly created” (p. 493). However, issues of equity, access, opportunity and quality of science education are hitherto unexplored in the literature, despite being critical in assessing the possible impact of policies and practices of globalisation in Sub-Saharan Africa. This leads to the next subsection, which focuses on the question of the nature of school science, and some conditions impinging on its existence in Sub-Saharan Africa as explained in the literature.

Nature of school science curriculum in Sub-Saharan Africa

This sub-section begins with a reflective comment on the way the science curriculum in Sub-Saharan Africa is depicted in the literature. The stark irony of descriptions of the nature of the science curriculum is that nearly all authors, with due respect, present a rather depressing, unfavourable, parochial and patronising view of the school science curriculum. Sadly, in most cases, the characterisation of the curriculum is often done outside the theoretical lenses or perspectives of the respective studies. This generates a homogenous or monotonous view of science education in Sub-Saharan Africa. There is too much concentration on the constraints imposed by the operative contexts and the under-privileged conditions prevailing in schools. Generally, this aligns well with a functionalist approach to the study of globalisation; that is, one that emphasizes the significance of how relatively permanent features of the education environment function as a buffer to, or contribute to, constant failure of reform initiatives in Sub-Saharan Africa. This comes across as one of the hidden ‘unintended consequences’ or impacts of globalisation on science education.

Some of the ‘attributes’ of science in Sub-Saharan Africa include some pervasive concerns with the so-called traditional and prescriptive instructional behaviour in schools, with pedagogical practices generally described as authoritarian, teacher-dominated and lecture-driven (Altinyelken, 2010). Nonetheless, as Tikly and Barrett (2007) observed, “there has been a tendency in Africa to contrast the extremes of didactic performance in pedagogic practice with learner-centred methods. ... [which] does not do justice to the range of practices within Africa (p. 10). The existence of a gap between what students need to know and what the curriculum promotes in schools, if they (students) are to contribute to the promotion of the social and economic growth, is widely reported on (see, for instance, Bregman & Armstrong (2004)). Issues such as a lack of quality instructional materials (e.g. textbooks), lack of laboratory accommodation, and the abundance of unqualified teachers, due to the lack of incentives to recruit and retain qualified teachers, are ubiquitous in the literature.

However, the broader meaning of science education that emerges from literature on globalisation revolves around several key elements: science curriculum as a policy issue; issues on pedagogy and teacher practices; English language as a medium of instruction in science teaching; and issues on curriculum reform or innovation where aid agencies and supranational organisations act as definers and arbiters of change. Each of the areas constitutes one type or other medium for globalisation, and is important in this work.

Curriculum interventions or reforms inspired by aid agencies are well documented in literature. Typical curriculum reforms follow “incremental development designed to build on past experience (locally or international)” (Coll & Taylor, 2008, p. 356). As Kress (1996) notes, a spectrum of possibilities exists such that

How a locality (whether as nation-state or as regional authority) responds to the effects and pressures of globalisation and internationalisation is an open question. The possibilities range from reactionary retreat into cultural nostalgia, to progressive attempts to turn local cultural values into productive resources in an engagement with these challenges (p. 195).

For instance, according to Lewin (1990), the curriculum innovations “merely built on existing syllabuses or were weakly modified ... (and) frequently, adaptation concentrated on modifying the content without questioning very deeply the aims, the dominant views of the nature of the scientific knowledge and the prevalent conventional wisdom of the teaching methods” (p.4): “there was little or no suggestion that there might be ‘cultural’ difficulties in using material originally from an entirely different context” (Lillis and Lowe, 1982, 172)(cf. Ingle and Turner, 1981). Studies in Ethiopia, Botswana, Kenya, Tanzania, Gambia and South Africa, among others, tend to confirm what happens wherever child-centred, active pedagogy, cooperative learning and the development of critical thinking and problem-solving skills are embraced without question (Altinyelken, 2010). Also, the 1980s was a period characterised by “a consolidation in science education in many industrialised countries” (Lewin, 1990), in which case the changes were in line with the then dominant thinking in educational circles, of the OECD* countries and the World Bank, which marked a distinct change from the manpower planning perspective so dominant of the 1960s (Kahn, 1989). Incidentally, “one should recognize that the consensus on the specifics of improving the science curriculum is less clear and simple than sometimes suggested by sweeping statements in visionary literature” (de Feiter, Vonk, van den Akker, 1995, p.32).

However,

orthodox views of science education tend to stress the importance of discovery, invention and understanding of the natural world over application, improvement of already existing technologies and the development of scientific knowledge related to the needs of the poor and marginalised. The central point is that the kind of science education and training that might prepare young people to generate new technologies, invent new products and discover fundamental scientific truths, may well not be the same as that best suited to the

need to adapt the application of science and technology to new contexts (Lewin, 2000, p. 1).

And, as Ogunniyi (2007) notes, the justification for introducing a new curriculum in any country derives from historical, political or socio-economic considerations such that:

definitions of science content within the general curriculum have been broadened to include environmental concerns, health science, agriculture and issues of social responsibility. Integration has been favoured as a way of organising curricula up to the end of lower secondary, in preference to separate biology, physics and chemistry programmes” (Lewin & Dunne, 2000, p. 381).

Consequently, according to Kamens and McNeely (2010), there has been an emergence of the hegemony of science across developing nations which is explained thus:

the hegemony of science contributes to the sense of a rationalized global world in which everyone is subject to the same kinds of causal laws and understandings under which virtually all arenas of human endeavor are subject to scientific analysis. ... Thus, the belief in science as a larger cultural system of explanation as well as a technology undergirds the universalism concerning the role of education in development (p.11).

However, “recently it has become more common to argue that general statements of commitment are not enough, and that specific policy on science and technology is needed which is associated with particular economic development strategies” (Lewin, 2000, p. 1).

The reinforcement and promotion of the utilitarian ideology of science in Sub-Saharan Africa is testimony to the prevailing lack of viable alternative definitions of science; this has resulted in a more like monolithic view of science that has prevailed for a long time in Sub-Saharan Africa. The literature seems to attest to this fact, although rather indirectly, by portraying a restricted or limited understanding of science as a concept, practice and praxis occurring within specific contexts. The general consensus, nonetheless, argues that it is widely the case that science in schools, despite being regarded a globalisation and developmental issue in Sub-Saharan Africa, is a cultural misfit (cf. Ingle & Turner, 1981). For instance, Prophet (1990) avers that an examination of classroom dynamics (i.e., curriculum in action) readily shows that the value system and practices of indigenous culture militates against the adoption of progressive reforms in pedagogy. Science, arguably, “reflects the norms of a liberal western sub-culture and represents a process of westernisation” (Altinyelken, 2010, p.155) such that western science “presents itself as an imperative and superior way of knowing” (Malcom, 2002, p. 228). As Waast and Krishna (2003) note, “the fact that science fitted only ‘awkwardly’ into the overall culture meant that it would become bound with political power. Widespread scientific literacy among the general population (made) *makes* popularisation of science difficult” (p.157). Nonetheless, recent attempts at embedding science into communities through integration of the Indigenous Knowledge System (IKS) into the curriculum (see, e.g., Ogunniyi, 2007) suggest, although it is too early to evaluate their impact, that:

By creating a place in science curricula and classrooms for indigenous knowledge, this will add to scientific knowledge and methods by learning from indigenous people. ... [it] could serve as a model for cross-cultural classrooms that are forced to face similar issues due to globalisation. This approach also has implications for Western science classrooms as these students learn another valid approach to thinking about the world, and can serve as a way to examine internally their own beliefs and habits of mind (Quigley, 2009, p. 85).

However, dissenting voices in the characterisation of the status quo would argue that although there seems to be some considerable convergence in science education in Sub-Saharan Africa, it cannot be claimed that the schemes in different countries follow identical policies and practices (cf. McGrath, Akoojee, Gewer, Mabizela, Mbele & Roberts, 2006):

The point, then, is that the ubiquity of western cultural forms around the world cannot in and of itself be taken as evidence that the world is being homogenized. Homogenisation entails much more than this: it entails the transformation of the way people fashion their phenomenal worlds ... this is not to say that there has been no cultural convergence at all in the world. It is to suggest, though, that as long as the process of customisation is hard at work, the spectre of homogenisation will be kept somewhat at bay and the world will remain full of difference (Inda & Rosaldo, 2008, p. 20).

The foregoing citation is important in Anglophone Sub-Saharan Africa, where the use of English in science education is taken by some as symbolic of the western imperialism that apparently lies at the centre of globalisation. The issue of language in science education is explored below, to complete the picture on science education in Sub-Saharan Africa.

English language in science education in Sub-Saharan Africa

Studies on the impact of English language on the teaching of science are readily available (e.g., Wellington, Handerson, Lally, Scaife, Knutton and Nott, 1996; Jenkins and Whitfield, 1974; Prophet, 1990; Lewis, 1972; among others), but nearly all treat the subject (i.e., English as a medium of communication in science) as a curriculum and pedagogy issue or concern. The general approach focuses on the linguistic and conceptual problems that the use of English Language poses in science teaching (Lewis, 1972). However, the strategies for dealing with the problem have been rather varied, ranging from calls for adoption of the native language in teaching science (despite the fact that native languages in Sub-Saharan Africa are not standardised and institutionalised for teaching science), to some advocating the retention of the status quo in which English is the sole medium of teaching science. Those seeking a compromise between the two extremes have suggested 'code switching' (see Rollnick and Rutherford (1996); Setati, Adler, Reed and Bapoo (2002) in the case of South Africa) in science classrooms for the sake of motivating the learner and improving their cognitive development (Ncedo, Peires and Morar, 2002).

Generally, the issue of English language in science education in Sub-Saharan Africa focuses predominantly on language as an impediment to learning, a position readily captured in the literature. Lewis's (1972) position, representative of the majority, observes that the issues associated with the use of English language as the medium of instruction in developing nations cannot be divorced from the fact that:

what is almost universally the case is that foreign languages are taught with aims unrelated to science, and even where the foreign language is used in the teaching of science this is done with little professional acknowledgement of the special conceptual tasks facing the learner. First the pupil learns English ..., then he is taught science as if he was an English pupil. ... What is worse, in most countries the general effectiveness of the teaching of a second or foreign language... is by no means satisfactory or even encouraging (p. 66).

The general concern is that the majority of pupils who are non-native English speakers in Sub-Saharan Africa can neither express themselves in, or understand English, and have to struggle to make sense of science before they even have a reasonable command of the language system, particularly as they encounter challenging science in secondary school settings. Barnes (1969) elaborates on other complexities of the situation in the following manner:

The teacher teaches within his frame of reference; the pupils learn in theirs, taking in his words, which mean something different to them, and struggling to incorporate this meaning into their own frames of reference. The language which is an essential instrument to him is a barrier to them. How can the teacher help his pupils to use this language as he does? Certainly not by turning away from the problem (p. 28).

However, all the arguments that concentrate on the conceptual and linguistic challenges in teaching science in a foreign language, while valid, do not acknowledge that they need to be reconciled with the currency of both scientific knowledge and English language as media of globalisation. The literature also shows the co-existence of two diametrically opposed camps or schools of thought on the subject. These schools of thought are explained briefly here to bring some perspective to the presentation. One argues for a delicate balancing act in which case proper recognition is given to English language in globalisation, though not at the expense of local languages. For instance, according to Crystal (2003), English is now arguably "so widely established that it can no longer be thought of as 'owned' by any single nation" (p. 26), for its dominance is consistent with the view that "any language at the centre of such an explosion of international activity would suddenly have found itself with a global status" (ibid, p. 8). However, in an attempt to reconcile the globalisation mandate with other realities on the ground, Crystal (2003) suggests that "languages of identity need to be maintained. Access to the

emerging global language – widely perceived as language of opportunity and empowerment – needs to be guaranteed” (p. 28).

In articulating the second school of thought, Zughouli (2003) argues that some confusion needs to be cleared up first, regarding either seeing “English as a language of globalisation” or “English as a medium of globalisation”. Zughouli (2003) notes incisively that:

the spread of English as the language of globalisation, it is contended, cannot be fully understood without the realization of the hegemonic and imperialistic nature of English. It is also shown that English is unilateral in vision and it forms a real threat to other languages and cultures. (p. 106)

However,

It has become very clear that indeed English has served as the language of globalisation. But it should be emphasised that English does not only serve as a medium of globalisation, it also serves as a tool that facilitates and finally brings about more facets of globalisation. It is far easier to occupy a room in this structure if you know the language. Moreover, the continuous talk about the functionalism of English and its relationship to occupational, economic and social mobility, as well as the privileges that users of the language can get in terms of prosperity, are further contributing to its spread as a language of globalisation (Zughouli, 2003, p. 121).

The general conclusion in the literature is that the interrogation of globalisation seems to be capable of generating a new consensus about the aims and purposes of English in science education, by refocusing attention on globalisation as a new socio-economic and cultural force. The paucity of literature or research in this area in Sub-Saharan Africa makes it difficult to understand the bigger picture, and the impact on science that emerges wherever active attempts are ongoing to embrace the new thinking.

Clearly, in the context of globalisation, where the medium rather than the message is important, English language as a medium of globalisation is analogous to, for instance, the internet, which has become more than just a medium for connectivity, networking, and participating in the global village but is fundamental in engendering a sense of belonging to the global village. This analogy is significant as it encourages a re-conceptualisation of the use of English in science education. According to Law (2004), English now is a generic and transnational skill, while Zughouli (2003) aptly regards it as a working language and the international currency of science and technology. This redefinition in the context of globalisation offers an alternative view of the relationship between science and the English language, as the language is the medium. The teaching of science in this language becomes an empowerment issue in terms of preparing individuals for participating in the ever-competitive contemporary market-driven environments.

In terms of research, it means rethinking perspectives of the cultural paradigm to realign them with thinking that English in a global context might be a necessary evil. Thus, globalisation comes across as a viable alternative framework for redirecting or rethinking arguments on English language in schools as a medium of instruction, to arguments on English language as a commodity to give one access to internationally competitive environments where returns could be good in comparison to nationalist intonations heralding patriotism and nation-state building. The use of English language in science education in Sub-Saharan Africa clearly requires some management of the emergent tension between its cultural imperialist tendencies and it being more than a generic transnational skill, but a medium of globalisation. By extension, the new meaning of science education that emerges needs exploring and articulating for the world, and indeed for Sub-Saharan Africa.

Discussion of Observations from the Literature

In examining the impact of globalisation in Sub-Saharan Africa, the foregoing sections of this chapter sourced information from the literature. This section, while not necessarily speculative, inevitably presents examples of impact which were arrived at through inference and some understanding of globalisation that the authors bring to the fore. The section teases out possible instances of the impact of globalisation on science education by focusing on the following set of questions; *What are some of the observations that emerge from the literature? What gaps are evident in the literature? What examples of the impact of globalisation arise from reflecting on the gaps?*

It is necessary for the section to have a selective emphasis because the literature on globalisation in Sub-Sahara Africa is quite extensive, and has dealt adequately with some issues. Consequently, the impact of aid agencies in science education and the concept of internationalisation provide a framework for organising deliberations in this section. They are also useful for highlighting some evidence of the impact of globalisation that is missing in mainstream literature. Thus, the emphasis is on situated discussions of globalisation within Sub-Saharan Africa.

It suffices here to state that the role aid agencies play in diverse assessment packages in Sub-Saharan Africa is well documented in the literature. See, for instance, Carter, 2005; De Boer, 2011; Bregman and Bryner, 2003; Broadfoot and Black, 2004; Brock-Utne, 1995; Kellaghan, 2001; and, Lewin and Dunne, 2000. The relationship of the assessments to the globalisation of science education in Sub-Saharan Africa is readily summed up by the following position:

they seem to echo a view of education as utilitarian, perceive the need to develop human capital and show concern for performance/results and efficiency. ... questions remain about the extent to which they might contribute to many of the factors associated with globalisation (Kellaghan and Greaney, 2001, pp. 97-98).

The motive behind international assessment is widely about accountability and returns on investment, both often expressed in terms of the importance of knowing “the extent to which students actually learned as a result of educational opportunities provided” (Kellaghan, 2001, p. 88), and the “relative national success in a world of increasingly global competition has served significantly to reinforce the prevailing domination of established forms of educational assessment” (Broadfoot and Black, 2004, p. 14). However, “information about such assessments does not always reach the literature available to an international audience; often an assessment results only in a national report, which may or may not be published” (Kellaghan, 2001, p. 88).

Aid Agencies and their impact on science education in Sub-Saharan Africa

The role and general influence in education (in areas of pedagogy, curriculum reform, examinations and assessment, teacher training) of supranational aid agencies such as United Nations through UNESCO/UNICEF/UNDP, World Bank, and the International Institute for Educational Planning (IIEP), is widely covered in the literature. See, for instance, Altinyelken (2010), Bregman and Bryner (2003); Guthrie (1990); Kellaghan and Greaney (2001); Lewin (2000); and, Tabulawa (2003). Aid agencies often structure their ‘intervention schemes’ as a response to the overwhelming economic and human challenges confronting developing countries, and perceive their multifaceted involvement in such schemes as a moral and ethical imperative. However, the literature clearly questions whether aid agencies constitute the best medium to champion change in science education in Sub-Saharan Africa. The question of the impact and indeed cost effectiveness of intervention, although not accounted for in the literature reviewed in this work, has been a matter of concern to supranational bodies, resulting in the hosting of the Paris Declaration on Aid Effectiveness in 2005, and the Accra Agenda for Action in 2008 (see www.ousaid.gov.au). The agenda focused on improving the quality of the delivery, the management of aid through good practices, changing paradigms in aid management and impact evaluation (see White, 2009).

Reports of widespread failure and inconclusive results on the impact and cost-effectiveness of intervention by aid agencies (Dembélé and Miaro-II, 2003) are pervasive in the literature. Claims also exist that some of the programs are over-ambitious (Chapman and Quijada, 2008), while others are imposed on aid recipients (Mcgrath, 2002). Moreover, it is claimed that as aid agencies aim for replicability of programs, the aid packages end up with similar logic, priorities, and expectations across diverse socio-economic contexts (Welmond, 2002). Hence, there are suggestions that aid packages lack an explicit development theory to guide implementation (Danielson and Wohlgemuth, 2002) such that they fail on key system issues relating to capacity, policy and efficiency and management in education and teacher development (Gillies, 2010). It is, nonetheless, intriguing to learn from the literature of the reluctance of some researchers to report on the impact and cost effectiveness of aid (Doucouliagos and Paldam, 2009). Sometimes it appears, according to Schulpen (2007), that the question of effectiveness of aid is perhaps irrelevant, because the aim of aid “in development is to lighten the lives of some people in developing countries now by providing those things that they lack” (p. v). However, an examination of the impact of globalisation on science education in Sub-Saharan Africa

has to contend with such constraints. What is clear, though, is that it is far easier to pick examples in the literature of areas where globalisation has failed, than areas where it has registered some success. However, some evidence suggests that institutionalised barriers in some countries frustrate the adoption of intervention schemes by aid agencies. This is important to understand because the mainstream literature fails to explore and unearth the roles played by governments in managing education when dealing with globalisation.

The barriers require one to appreciate that state-run schools in some developing countries are part of the wider nation-state building process, and are deliberately insulated from external influence. For instance, the currently radical, anti-western and nationalist state of Zimbabwe would be sceptical of any foreign aid that is not in line with its priorities, or even aid that is perceived to be aligned to western imperialist tendencies. Botswana, a country aligned to the west, has put in place some subtle *protectionist measures* to insulate education – a fundamental part of the state ideology apparatus - from unpredictable influences. The salient aspects of the situation are discussed here purely for illustration purposes. There is no pretence that they are representative of the situation across countries in Sub-Sahara Africa, but its illustrative strength might open up possibilities for appreciating globalisation in other countries as well.

When the government of Botswana embarked on rapid expansion of lower secondary school education in the 1980s, state-run teacher training colleges were also built as part of the tight control over the school curriculum and its political function in the building of the nation state. The curricula for various subject disciplines in the school curriculum, including science, constituted a full package with purpose-built classroom accommodation, qualified teachers, and teacher-proof materials. Incidentally, Davies (1988) notes how teachers in Botswana are part of the government's resources for education. The situation deliberately frustrates teachers' professional autonomy in that they are trained literally on the curriculum in schools as a subtle way of indoctrinating them to be more attuned to, and to be responsive to, the dictates of the government as communicated through the curriculum packages. The curriculum packages, representing a massive socio-political-and-economic investment in education, would run for a standard 10-year cycle for lower secondary school, and a 5-year cycle for high school. During that time, the *banded* curriculum is enforced *as is* for it to fully embed into the system before it is reviewed or overhauled. Textbooks, forming part of the curriculum, belong to the state, are issued on loan to pupils, and each book has a useful lifespan of 5-6 years before replacement, whereupon "a single textbook would have been used countless times by about 200-300 students" (Suping and Koosimile, 2011). Textbooks other than those prescribed by the state cannot penetrate the market during this time – a factor that frustrates both the local publishing industry and any attempts at opening up the curriculum to alternative interpretations. Under the circumstances, or regime of curriculum management, curriculum reforms by external aid agents are endorsed in principle by the government, but their impact will be more or less non-existent. This happens as senior government officials learn and publicise the rhetoric and *lingua franca* of change, while keeping the science curriculum intact, as part of a wider public relations exercise for the diplomatic community and aid agencies themselves. This is important, not only because the officials are politically correct in as far as they are seen to belong to

and actively identify with the *coalition of the willing*, but also because such gestures are true hallmarks of the time-tested bilateral relations the government has with aid agencies and the diplomatic community.

A case in point is the launching of in-service projects for teachers in Botswana, sponsored by the Free University of Amsterdam. The in-service activities were meant to promote constructivism in mathematics and science education. They coincided with the resurgence of constructivism in science education in the late 1980s and early 1990s, which failed to embed in the school system because of carefully crafted protectionist measures. For instance, the reform came at a time when the 5-10 year cycle for curriculum implementation had just begun in schools. Some new sets of science textbooks framed within the constructivist framework, such as that by Motsumi, Motswiri, Mpugwa and Prophet (1999), did not elicit any interest from the government – the sole client for such a book. The book was declined because it was found to be focused more on conceptually engaging learners in learning science than on rapid dissemination of science content that underlies entrenched practices in schools. The book finally made it into schools after substantial revision of the text, which fundamentally stripped the book of its original focus when it attempted to align with the dictates of clients.

The promotion of constructivism - alongside that of concepts that are part of the official rhetoric of the new curriculum, such as mixed ability teaching (Koosimile, 2002), practical work in science (McDevitt, 1998), criterion-referenced assessment, learner-centered pedagogy, and course work assessment - are restricted to periodic workshops (see O'Sullivan (2002; 2004) in the case of Namibia) for teachers as they are treated as issues for continuous professional development – a fringe or peripheral activity that distracts attention from pedagogy and has little prospect of impacting classroom realities. Incidentally, there is one office for Curriculum Development and another for Teacher Training and Development in Botswana. This results in compartmentalisation of issues pertaining to the curriculum. The offices do not see curriculum and its reforms, and invariably globalisation, from the same viewpoint. This adds further permutations to complexities within the system, that may result in reforms being misplaced, misrepresented, misinterpreted and lost within the maze of the bureaucratic establishment, while the impact of globalisation becomes almost illusive and impossible to ascertain. This has implications – both technical and methodological – for investigating, documenting and answering questions on the impact of globalisation on education in Sub-Saharan Africa.

However, contrary to practices adopted in handling issues of continuous development of teachers, curriculum reforms sponsored by the government that require mass participation of teachers in Botswana are well synchronised, stage-managed, and supported by rapid dissemination of teacher-proof packages. Regional education offices ensure compliance with reforms in a way that embeds them in the school system. To this end, it is safe to say that it is not clear just how many of the projects sponsored by aid agencies have lost meaning and impact because of the maze of bureaucratic establishment not only in Botswana, but also in other countries where provision of education is centralised and is at a huge cost to the government. The point is that any curriculum change in Botswana, no

matter its intentions, including those in pursuit of ideals of globalisation, is predominantly politically-driven, and not market-driven. Interestingly, and by comparison, the rapid dissemination of curriculum packages as reforms in developed countries is facilitated by the appreciation of knowledge as a commodity marketed by highly specialised curriculum agents, whereas developing nations see education as a public good to be managed through central government agencies. Consequently, any research into curriculum reforms and the impact of globalisation which ignores the intricacies of management of education in any country is generally missing the point, and is perhaps misguided.

Internationalisation – as an offshoot of and manifestation of globalisation at regional level

Internationalisation is widely described in the literature. See, for instance, Stromquist (2007) and Kress (1996). However, the functional definition adopted in this paper is that supplied by the vice-chancellor of the University of Bristol in UK. He notes that internationalisation embodies, among other things, “a vision that promotes and encompasses the international ... numerous collaborative international linkages, whether for research or for student and staff exchange” (<http://www.bris.ac.uk/university/vc/education-intl.html> retrieved 19/02/2012). According to Altabach (2004), “internationalisation includes specific policies and programmes undertaken by governments, academic systems and institutions, and even individual departments or institutions, to cope with or exploit globalisation” (p.6). Internationalisation, thus, is the medium through which globalisation takes effect, including in education in Sub-Saharan Africa. Consequently, any evidence of the existence of internationalisation points to the interconnectedness and networking of countries in action and thinking in dealing with issues. In the context of this paper, focusing on Sub-Saharan Africa does not remove issues from the global agenda to confine them to a particular location; rather, globalisation takes effect as some form of continuity in dissemination of some contemporary thought and action of significance in global proportions, and as such needs scrutinizing and magnifying in the context of Sub-Saharan Africa. This section explores three areas which hold a promise of unearthing evidence of globalisation through internationalisation: student movement across states; international networks in education; and collaboration between key stakeholders in science education.

Student movement across states

There has been widescale movement of students across some regions - in some cases students travel to other nations within Sub-Saharan Africa to access quality education (cf. Altabach, 2004) that is either not available in their home countries, or is exclusive and provided at a prohibitive cost. The earliest trends of this type of internationalisation were manifest in the mid-1970s, during the political turmoil in the Southern African sub-continent. Children from middle class families criss-crossed the region to attend schools in Zimbabwe (then a British Colony), Swaziland, Botswana, and even the then apartheid South Africa. Children in Botswana, Zimbabwe, Lesotho, and Swaziland could enrol in

high schools in any of these states because the University of Cambridge O-level curriculum was common between them. However such trends, signalling some convergence in education that appears to be more than an intra-African affair, were short-lived following the indigenisation of curriculum in some of these states, leading to loss of quality and competitive advantage, as in the case of Zimbabwe, where quality education is undermined by the enduring and sustained harsh economic upheavals. Botswana has of late established the Botswana Education Hub with a clear mandate to market education to attract international students to Botswana for study at all levels of education. The main aim is to reach economic diversification and sustainable economic growth in Botswana through education (see www.behbw.com), as the heavy reliance of the country on diamond revenue is clearly unsustainable in the long term. This reform initiative is driven by the perspectives that see quality education as a commodity that can be marketed worldwide – a direct consequence of globalisation.

Similarly, the prestigious schools formerly reserved for whites in the then racially segregated South Africa have, under the current democratic dispensation, now found a market in Botswana, where clients are readily available for primary school, high school and tertiary education. Intriguingly, the high school science curriculum within the sub-region in southern Africa shows a rather strong character of convergence in terms of colonial origins, purpose, scope and thrust as they predominantly aim at preparing youths for tertiary education. According to Lewin and Dunne (2000), “one manifestation of globalisation can be argued to be a convergence of what is valued, what is assessed, and what is thought relevant to future employment” (p. 380). What is clear though is that access to quality education is important, particularly in the areas of science and technology, and that globalisation – the idea of global competitiveness of individuals – has encouraged parents and even governments to spend more on educating their children. What is perhaps noteworthy in this context is some impact on science education in terms of the emergent imbalance and inequities in patterns of and distribution of opportunities, and access to quality education that is promoted by globalisation.

International networks in education within Sub-Saharan Africa

The mainstream literature on education in Sub-Saharan Africa fails to adequately account for the networks and activities that showcase the existing fertile ground for globalisation to occur. Some examples are briefly discussed here, with emphasis on how regional focus on research, teaching and professional service is not only a critical vehicle that fosters globalisation of science education, but is also suggestive of its impact.

At regional level within the Southern Africa sub-continent, the Department for International Development (DfID, an entity of the British Government) has since the early 1990s funded the Southern African Association for Research in Mathematics, Science and Technology Education (SAARMSTE), located in South Africa and boasting both regional and international membership, to promote research, networking, and popularisation of science, mathematics and technology education within southern Africa. SAARMSTE now has 13 chapters in 8 countries, a peer-reviewed journal, and holds an annual conference on rotational basis (among chapters and non-chapters) where teachers,

graduate students, academics, international scholars, researchers and policy developers meet to share knowledge and learn from each other. The wide range of topics presented at conferences and in journals clearly indicates the influence or impact of globalisation as contemporary themes in mainstream education are fundamental to the advancement of education in Southern Africa. It is through conferences that universities, through their academic staff actively involved in curriculum and pedagogy, are not only reasserting their authority, role, status and position in education, but are also revealing significant convergence in terms of thought and action to concerns beleaguering education. SAARMSTE clearly leads the way in having a journal that has international contributors and readership, and which is very critical, for propagating to the world the perspectives, ideologies and practices in education.

Another initiative, this time with a phenomenal geographic spread or footprint in Sub-Saharan Africa, is the Strengthening of Mathematics and Science in Secondary Education (SMASSE). This is a Technical Cooperation initiative funded by the Government of Japan. It has around 32 chapters in Africa, in countries such as Egypt, Ethiopia, Kenya, Uganda, Nigeria, Niger, Malawi, Botswana, Rwanda, Burkina Faso, Senegal, Lesotho, Swaziland, South Africa and Mozambique (Micheal and Orado, 2009). Kenya has since 1998 served as a pivotal country in globalisation efforts of SMASSE in some Sub-Saharan Africa states, by providing technical expertise in all aspects of project management, while member countries meet their own project costs. The workshops - targeting teachers' attitudes, pedagogy, content mastery and teaching/learning materials - are generally in reality merely symbolic, with their impact questionable, as they are aimed at providing an opportunity for teacher development whereby the latter

refers to the actual learning opportunities which [prospective, beginning and experienced] teachers engage in – their time and place, content and pedagogy, sponsorship and purpose. [It] also refers to the learning that occurs when teachers participate in those activities ... professional development means transformations in teachers' knowledge, understandings, skills and commitments, in what they know and what they are able to do in their individual practice, as well as in their shared responsibility (Feiman-Nemser, 2001, p. 1038).

However, teacher knowledge, skills, dispositions and commitments will always serve as filters for any change initiative that has a bearing on classroom processes (Dembélé and Miaro-II, 2003). The projects by SMASSE have been active and ongoing for the last one and half decades, and yet their impact as a globalisation agent in Sub-Saharan Africa is relatively unknown. However, publications on the project are now starting to become readily available in international peer-reviewed journals. This follows a rather hesitant start and a slow trickle of publications; this possibly shows that the major participants in this initiative are mainly senior government officials or technocrats, and not university academics or research fellows.

Nonetheless, the SMASSE initiative has opened up opportunities for some key institutions to influence the dynamics of globalisation in Africa. Currently, the

examination of the role of aid agencies in mainstream literature focuses extensively, and almost exclusively, on supranational organisations and overshadows, neglects and undermines some key institutions in the globalisation of education in Africa, such as the Association for Development of Education in Africa (ADEA), New Partnerships for Africa's Development (NEPAD) and the African Union (AU). For instance, according to Michael and Orado (2009),

The future for capacity development for teacher management and instruction in mathematics and sciences is a matter of interest to key institutions in Africa, the ADEA, NEPAD and AU. Upon realising the extent of the network established under SMASE-WECSA (*an acronym for SMASE in Western, Eastern, Central and Southern Africa*) Association, ADEA granted the Association a working group status in mathematics and science ... while NEPAD adopted the Association as a flagship project, and more so to focus on post conflict countries (p. 20).

Accompanying the SMASSE initiative is the establishment of the Centre for Mathematics, Science and Technology Education in Africa (CEMASTEA) which between 2001 and 2009 hosted 8 major international conferences. The conferences were in countries such as Kenya, Ghana, South Africa, Rwanda, Senegal, Zambia and Kenya (Micheal and Orado, 2009): "The main objective of the conferences is to provide opportunities for sharing of good practice, promising approaches and strategies to mitigate emerging challenges in teacher development through INSET" (ibid, p.22).

Generally, while the impact of globalisation is hard to assess with respect to initiatives reported in this section, it is clear that Sub-Saharan Africa too is attempting to deal with issues in science education, even though the frameworks for understanding such issues are informed by western ideologies on education. As usual, the gestation periods of these programmes could be long, particularly given the number of countries that are involved in the SMASSE initiative that have a history of weak economies and average to low project implementation capacities.

Collaboration between some key stakeholders in science education

The impact of globalisation is also noticeable in the exchange of information and collaborative engagements amongst players in education outside and beyond the confines of the annual SAARMSTE and CEMASTEA conferences. This section explores this view through focusing on activities that support globalisation initiatives, particularly at pre-service teacher training level. Some universities in Sub-Saharan Africa are nerve centres for change, and are also veritable sites for feeling the pulse and dynamics of reforms. In exercising their professional autonomy in the global competitive tertiary education environments, academics regard pre-service teachers (students) as 'change agents' (cf. Lane, Lacefield-Parachini, and Isken, 2003) who should be properly trained to adopt and introduce progressive reforms into their host schools – this is a convenient way of circumventing bureaucratic hurdles associated with courting governments in introducing change at national level.

For instance, the model of pre-service teacher training for all disciplines (science, mathematics and humanities) in Botswana has undergone some reforms since 2004. The reforms in science education started with the arrival of two mid-career lecturers, who upon returning from the doctoral studies in science education in USA in 2005, immediately revamped teaching methodology courses to advocate argumentation in science teaching; introduced a renewed vision of practical work in science; facilitated some infusion of information and communication technology into practical work; and advocated the development of teaching portfolios for pre-service teachers. Similarly, the teaching practice internship component of teacher training education programmes at the University of Botswana has since 2009, under the influence of Professor Tabulawa (who has contributed to debates on globalisation in education – see Tabulawa (2003)), deviated from the entrenched traditional behaviourist focus to reflective practice (cf. Tafa (2001) for Botswana; Zeichner and Ndimande (2008) and O’Sullivan (2002) for Namibia). The reforms in Botswana have started to redefine the relationships among teachers in host schools, interns and university tutors, as well as impacting on the interpretation of teaching, classroom dynamics and the science curriculum. Furthermore, Koosimile and Suping (2011) have re-oriented a pre-service teachers’ course on *contemporary issues in science education*, to put emphasis on skill and attitude development as a way of preparing teachers for participation in globalisation and the knowledge economy.

Elsewhere in South Africa, there are attempts at infusing Indigenous Knowledge Systems into the science curriculum, and there are clear attempts and research by academics in that country to embed it into the education system through argumentation as a teaching strategy (see, for instance, Ogunniyi, 2007; Scholtz, Braud, Hodges, Koopman, and Lubben, 2008; Ramorogo and Ogunniyi, 2010). Argumentation is currently receiving widespread attention internationally, and this makes the curriculum in South Africa a clear example of the impact of trends born of globalisation. Clearly, while governments may delay in adopting and aligning with initiatives promoting globalisation ideologies and practices, academics at the local universities leverage on their professional autonomy to remodel pre-service courses for teachers to embrace globalisation in ways that would possibly impact not only on the calibre of teachers, but also on their appreciation of science, its role, status and teaching in a globalisation environment.

Apart from reforming pre-service teacher education courses to support the globalisation of science education in Sub-Saharan Africa, there is evidence that academic institutions collaborate in areas of staff development and exchange, benchmarking of programmes, and in areas of research and publications in ways that have a significant bearing and impact on science education. However, most universities in Sub-Saharan Africa hardly report on such collaborative efforts; on the contrary, nearly every university in America or Great Britain never misses an opportunity to make known where they stand on globalisation and competitiveness. As before, examples given here, irrespective of how isolated they are, do make a point on the impact of globalisation on science education in some part of Sub-Saharan Africa. There is some evidence that globalisation in science education was in the past driven through collaborative links between governments and universities in developed and developing nations.

For instance, the period spanning the entire 1990s experienced a marked globalisation drive in the area of teacher development in mathematics, science and design and technology disciplines, in which literally hundreds of teachers from Botswana enhanced their academic qualifications in Britain (in Portsmouth, Plymouth, Brighton, Leeds and Manchester, among others) as part of the British overseas technical cooperation programme. At the same time, the University of Bristol, among others, ran a graduate program for science and mathematics teachers and officials targeting participants from Zambia, Botswana, Lesotho, Swaziland and South Africa. As yet, the impact that the arrangement has had on education in the affected countries has not been reported on in the literature. Similarly in the 1990s, the Universities of Leeds and Bristol in UK established, respectively, links with the University of Botswana and a teacher training college in Gambia. Professor Zeichner, currently with the University of Washington in Seattle, has been involved in teacher education in Namibia (1994-2004), and contemplates some involvement in professional teacher development to university teacher educators in Ethiopia (<http://education.washington.edu/areas/tep/profiles/zeichner.html> retrieved 2 march 2012). At a regional level, there is a much more intense, complex and involved pattern of alliances that suggest some impact that globalisation could be having on science education.

A case in point is the study of collaborative engagements and interaction that universities in southern Africa have had with the Department of Maths and Science Education (DMSE) at the University of Botswana. Professor Meshack Ogunniyi, the current UNESCO Chair of Science Education at the University of Western Cape in South Africa, was in September 2008 hosted by DMSE on a week-long trip to deliver seminars and undertake programme reviews as a visiting scholar. This was after one senior lecturer in science education from the University of Botswana returned from a year-long sabbatical where he had worked with Professor Ogunniyi on indigenous knowledge systems and argumentation at the University of Western Cape. At roughly the same time, Botswana hosted three visiting scholars from universities and research centres in South Africa and Zimbabwe, and hosted yet another from Namibia in early 2012. The major highlight of the visits was a visit to DMSE by a team of mathematics and science educators from a university in Mozambique on a benchmarking and cultural exchange mission. All these movements, or patterns in the internationalisation process, are indicative of the dialectical nature of globalisation (cf. Giddens, 1990), and indeed impact on science education at a regional level, as they help anchor some practices within the education landscape in Sub-Saharan Africa, and beyond.

Reflective conclusion

In examining the impact of globalisation on science education in Sub-Saharan Africa, this chapter has deliberately eschewed taking a stance on whether globalisation is good or bad. This is because countries in Sub-Saharan Africa have so far failed in defining or redefining globalisation to guide research on, and an appreciation of, how it manifests itself across the region. However, the literature is united in the view that developing

countries are losing out on opportunities for investigating globalisation for their own benefit. Consequently, developed countries seem to derive more benefit from globalisation than the entire Sub-Saharan Africa region. This is more like the metaphorical case in which the rich always get richer while the poor get poorer by the day, because of their perennial failure to see the bigger picture on how to survive with globalisation as a concept, practice and praxis. Subsequently, the examination of the impact of globalisation on science education in Sub-Saharan Africa in this work has been a challenge due to a lack of appropriate evidence in the literature.

That situation forced this work to be guided by the maxim, typical of qualitative research, that:

a numerical count of incidents (*that showcase globalisation in Sub-Saharan Africa*) may not give a true sense of their relative importance, and that a single event may be more significant than a large number of other occurrences, or, and this may be a more important point, may provide a key insight into the processes being described (Croll, 1986, p. 165).

Furfey (1965) elaborates the point thus:

A few cases, no matter how collected, or even a single indubitable case, will be sufficient to prove at least that a certain phenomenon is possible. Here the logical axiom applies, *Ab esse ad posse valet illatio* ("Inference from existence to possibility is valid inference"). ... In the meantime, however, the mere knowledge of what can happen, knowledge of the range covered by exceptional behaviour, is itself valuable to science, and the study of even haphazard cases can be useful in this way (p. 341 - 344).

Operating within such a perspective allowed this work to supply a few illustrative examples, providing a bird's eye view of possibilities of where to look for impact. The major apprehension remains whether or not such examples can project onto the bigger image of the realities of globalisation in Sub-Saharan Africa. Similarly, there may be questions as to whether the work has successfully demonstrated concerns that relatively little is known about globalisation in Sub-Saharan Africa as a region. However, there is no pretence that the examples supplied are typical or representative; they only highlight possibilities of trends from within Sub-Saharan Africa. It is hopefully the desire of every researcher in this area to see more examples that can develop this study further by way of enriching the findings and unearthing the complexities associated with globalisation in Sub-Saharan Africa.

It is envisaged that the contribution of this chapter should be merely a spark to encourage a new wave of understanding of globalisation and its manifestations on science education

in Sub-Saharan Africa. Clearly, the issue of impact proves illusive, but this chapter has provided examples hitherto missing in the literature on globalisation.

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BRAIN DRAIN IN THE GLOBAL WORLD: THE CASE OF ROMANIA

Dana Blideanu, dana_blideanu@yahoo.com

The Bucharest University of Economic Studies

Irina Boncea, irinaboncea@gmail.com

The Bucharest University of Economic Studies

Rodica Milena Zaharia, milena_zaharia@yahoo.com

The Bucharest University of Economic Studies

The brain drain phenomenon, namely the movement of skilled workers from poor to rich countries, has significantly accentuated in the last decades and therefore has generated considerable debate, research and policy initiatives in many countries.

While the initial research was concentrated on the negative consequences of the skilled migration on the sending countries, in the 1990' the attention was shifted towards more complex aspects of the phenomenon, including potential benefits for the same sending countries.

The term brain drain itself has been reconsidered in the last years ,some authors qualifying it "out of date", "inadequate", "inflammatory", "nationalistic" etc. having in view a more neutral and accurate way to replace it by "skill flow" .

The chapter we propose is structured in 2 parts : the first is a theoretical one including aspects related to concepts, recent trends of the phenomenon, main push and pull factors driving it, global and national effects of international skilled migration, policy options to manage the flows etc.

The second part is a case study referring a former communist country, Romania, facing the outflow of skilled workforce. The research focuses on 3 main affected sectors: IT, research and health care and has the objective to offer some policy options in order to diminish the negative impact of the above mentioned flows.

BRAIN DRAIN – STATE OF KNOWLEDGE

Nowadays, migration can be classified into two main groups: economic migration connected to work, and other types of migration for non-economic reasons (Todisco, Brandi and Tattolo, 2003). Economic migration has, in turn, been divided into two groups: mass migration and skilled migration (Todisco, 2002). Recent research concluded that individuals with little or no education have limited access to international migration, the highest migration rate being registered by individuals with a tertiary education - 13 or more years of schooling (Carrington and Detragiache, 1998).

In this part of the chapter the theoretical framework concerning the migration of the highly-skilled is analyzed. The most relevant contributions are exposed in a chronological way, starting from 1950 to present. During this period of time the "brain drain" concept

was studied in a relationship with different economic and social topics, like international migration, human capital accumulation, economic growth, etc.

Use of word „brain pertains to any skill/competency or any quality that is considered as a possible asset. „Drain involves greater exit than normal or desired. Connecting the two entails the departure of talented people at an increasing rate” (Bushnell and Choy, 2001).

The analysis of the brain drain literature reveals the fact that there is no agreed definition of the concept across countries. The first definitions to be mentioned are those existent in economic dictionaries. Some of them (Pearce, 1981) emphasize the movement of highly-skilled from poorer to richer countries. “Brain drain = the migration of educated and skilled labour from poorer to richer countries. Education skill, which represents investment in human capital, is usually cheaper to acquire in poorer, labour abundant countries, since its provision is usually a labour intensive activity. Those with the skills or education then move to more developed countries where the return to their human capital is higher. Such migration is often encouraged by laws and institutional factors, as most countries look more favourably on immigration by those with skills than those without”. Others (Rutherford, 1992) identify the disparities between developing and developed countries as the main determinant of the brain drain. “Brain Drain = international migration of highly qualified persons, e.g. surgeons, physicians, scientists and engineers, from low income countries to more prosperous economies, especially the USA. Differences in salaries and research facilities, together with the over-supply of specialized graduates in less developed countries, have brought about this increase in the human capital stock of advanced countries”.

Brain circulation was mentioned in the literature (Gaillard & Gaillard, 1998, Johnson & Regets, 1998) as a positive movement of the labour force leading to a knowledge transfer. In an OECD Report (1997:5) two basic concepts are revealed: *brain exchange* and *brain waste*. According to Brandi (2001:4) those concepts are defined in research studies whose main purpose is to analyze the decision of the highly educated to emigrate, and the effect of that decision on the country of origin. *Brain exchange* (Salt, 1997:5) is defined as the two-way flow of expertise between the sending country and the receiving country. In this context the terms *brain gain* and *brain drain* are used, depending on where the net flow is heavily in one direction. Straubhaar (2000:20) considers that the United States are the best example for emphasizing the *brain gain*, by attracting highly-skilled people from all over the world, those contributing to the economic growth, while Europe is the most suitable example for the *brain exchange* concept, the mobility being only inside the continent as a consequence of the labour market’s liberalization. A *brain drain* could be identified in the developing countries from Eastern Europe. On the other hand, the *brain waste* (Salt, 1997:5) occurs when the highly-skilled migrants accept in the host country a form of employment which is not adequate to their level of education and experience. An example of *brain waste* is the massive migration of the highly-skilled from Eastern Europe and the former Soviet Union after the break-up of the Warsaw Pact, those accepting in the host country a job that doesn’t match their education level (Brandi, 2001:3). Furthermore, brain return is one of the positive consequences of the brain circulation – migrants who return in their home countries are considered important transmitters of technology and tacit knowledge (Davenport 2004).

Migration of the highly-skilled was observed after the end of Second World War, as a consequence of the important changes in the socio-economic international context. The

expression “brain drain” has its origins in Great Britain and it was mentioned for the first time in a report of the Royal Society of London (1963), referring to the exodus of British scientists and technologists to the United States and Canada. On the contrary, a brief analysis of the literature before 1950 should be made – brain drain “ante litteram” – mentioning the human capital as the root of the brain drain concept (Giannoccolo, 2004:4). Starting from this point of view, Giannoccolo (2004:9) proposed an ideal path of the brain drain literature, connecting the first studies of the phenomenon and the recent ones in a synthesis, trying to underline the complexity of the brain drain and the connections with other concepts established by research studies. (See Table 1).

Table 1. The ideal path of the BD literature

	1950s 1960s	–	1970s	1980s	1990s – 2000s
Human Capital (HC) and Education	Social aspects of education		Education implies HC HC is a very peculiar productive factor	HC is an important component of the Economic Growth	HC and its effect on technology and Progress
Brain Drain's Studies					
Topics	Social Welfare		Fall in the Welfare of sending countries - Public Goods - Taxes	Macroeconomics HC, Education and Growth - International Commerce	Microeconomics Innovation, Technology and Growth
Countries more studied	UK, Europe, USA and Canada	West and	LDCs and HDCs (few)	LDCs And emerging countries	HDCs and LDCs
Motivation to Migrate	Political and Social		Market incomplete or inadequate to employ skilled workers	More productivity (and so income) of the skilled workers in the HDCs	Individual motivation (income, vote with their feet, social, etc)
Effects and Consequence for the sending countries	Bad effect on the welfare, on the social		Bad effects on the economy and on the development (Short Run	Bad Effects on the economy and on the Growth (Long	Bad Effects and Good Effects (Brain Gain)

	structure and on the population	effect on the taxes, on the unemployment, etc	Run effects, increase of the divergences between LDCs and HDCs)
Solutions Suggested	International Organizations and Institutions	Coordination among States and BD taxes to compensate the externalities	Incentives to coming and back and increase the opportunity to work in the LDCs
			Individual Incentives and Implement the conditions to have Brain Gain

Source: Giannoccolo, 2004

Brain drain phenomenon has been analyzed for fifty years, period in which the research studies covered different topics. The first wave of economics papers on the brain drain analyses the impact on the welfare. These early contributions generally concluded that the impact of the brain drain on source countries was essentially neutral and emphasized the benefits of free migration to the world economy (Docquier and Rapoport, 2011:2). Mixed effects have been shown by the work of Johnson (1965), who concluded that there are positive and negative effects and the final result depend on the proportion of the positive or negative externalities. A negative effect of the brain drain phenomenon occurs when the net social loss to Less Developed Countries is greater than the gain to the migrant. The net social loss is considered when the loss of externalities to the Less Developed Countries is greater than the gain of externalities. However, the brain drain shouldn't be separated from the advances in science and technology that occur for both home and host countries, and, finally, these advancements can be considered the main result of the phenomenon (Grubel and Scott, 1966).

The second wave viewed the emigration of highly-skilled as a contributor to inequality at international level, with rich countries becoming richer at the expenses of poor countries (Docquier and Rapoport, 2011:3). An important contribution in analyzing negative effects of the brain drain for developing countries is the work of Bhagwati and Hamada. They emphasized the importance of the social (strong externalities in production provided by skilled workers) and fiscal (foregone tax income) costs of emigration (Bhagwati and Hamada, 1974). There have been revealed other negative aspects of the brain drain, as distortions on the local labor markets, augmenting the unemployment and lowering the potential GDP. To compensate such losses for the home economies, Bhagwati proposed to tax the income ("Bhagwati Tax") of skilled emigrants. The revenues from obtained should had been channeled back to countries of emigration through United Nations development programs (Bhagwati, 1976). Other studies (Miyagiwa, 1991, Haque and Kim, 1995) focused on the role of increasing returns to scale in education or on the lowering the accumulation of human capital in home economies. The brain drain increased the national income and the returns to education in

host countries, but on the other hand lowered the propensity to study and the income at home. Also, brain drain slows the accumulation of human capital in home economies, contributing to the permanent reduction of the economy's growth rate.

The third wave of interest appeared in the late 1990s and it was named the new economics of brain drain. Based on the fact that the brain drain has both detrimental and beneficial effects for origin countries, its objective was to characterize the conditions under which the net effect on development and welfare is positive or negative. An important step forward was made by new economics of brain drain through its empirical analysis. The pioneering works of Carrington and Detragiache (1998), and the efforts of Docquier and Marfouk (2005), Dumont and Lemaître (2005) and Beine et al. (2006), who created harmonized databases of skilled migration rates, made possible to test the theoretical models and to verify some of the positive effects of brain drain (Brozozowsky, 2008:4)

Human capital is considered one of the four factors contributing to a nation's development, the other three being the level of technology, natural resources and the level of investment (Berry, 2005). There is a strength linkage between the brain drain and the human capital accumulation, observed from the first studies of the concept. According to Salt (1997) the term "brain drain" has been used as a synonymous of the movement of human capital where the overall stream of expertise is heavily in one direction. Human capital theory was firstly developed by Becker (1962) and by Schultz (1962) and states that skills acquired in school contribute to an individual's subsequent productivity. There is also evidence that the differences in growth rates across countries are explained by the level of schooling across countries (Barro, 1991 and Mankiw et al., 1992). Briefly, human capital theorists argue that an educated population is a productive population. High levels of human capital lead to faster growth rates. On the contrary, those countries facing a lack of skilled people register low rates of economic growth. Foreign investments stays away thus conducting to a bigger incentive for the highly skilled to leave. As a consequence, the brain drain is intensified. The result is a vicious cycle (Straubhaar, 2000:16). Although, the international labour mobility was seen at the beginning as phenomenon conduction to a "win-win" situation, with benefits both for developed and developing countries, the reality seems different: disparities between countries are growing constantly, poor countries become poorer, rich countries become richer, the world is divided between "winners" and "losers" (Beine et al., 2003). The famous "core-periphery" model (Krugman, 1991) is emphasized, with underdeveloped 'periphery' countries, which are losing the highly skilled, and the growth potential, to the higher developed 'core' regions, who gain from an over-proportional income increase. Disparity between countries is enlarged; the brain drain restricts growth in the less developed 'peripheral' regions and encourages it in the 'core'. (Straubhaar, 2000:16).

The competition in attracting the highly-skilled has its roots in the past, after the Western European states discovered the benefits of importing human capital, and became US competitors. Nowadays, in a globalized world, the competition is even bigger, not only between continents, but also inside them, between developed countries whose aim is to attract skilled labour from developing countries. The methods may vary – from scholarships (Erasmus Mundus, Fulbright, Daad) and lower tuition fees, in order to attract the students, to strong links between education and industry, openness to innovation and foreigners and also a flexible system and low taxes (Mahroum, 2000). No

matter the methods adopted, developed countries are aware that, once attracted, there is a low chance for those to return in their home countries. On the other hand, developing countries face a lack of individuals with higher education. In this context, can we consider that developed countries are acting accordingly to the cooperation rules and in the respect of the eradication of poverty and decreasing the economic disparities or, they are acting accordingly to their own interest, putting the competition in attracting the highly-skilled above the global welfare? A good global framework in the migration of skilled workers, which should be able to balance between the rights of poor countries to survival through the skills of its population and the rights of its citizens to move freely is needed. (Prisno, 2005:92). The only suitable solution for diminishing the brain drain is the scientific and technical cooperation and the pursuit of reciprocal interests between developed and developing countries (Gaillard and Gaillard, 2001). Under these circumstances, the following question was raised: "Is brain drain a form of intellectual piracy?" The world's top universities can easily attract intellectuals arguing their practice on the idea that a bright mind is more productive in institutions with corresponding resources (Prisno, 2005:89). Furthermore, Massey (1998) considers that the process itself is questionable, as the poor countries to a large extent finance the education of the skilled emigrants. So the brain drain could constitute a subsidy of wealthy nations by the poor. Although most of the studies in this domain emphasize skilled migration as a loss of human capital and production capacity, there are some theoretical contributions which reveal the positive aspect of the phenomenon. Remittances, skills of potential returnees, transferred technology, free knowledge, and products of science are the main benefits for source countries (Adams, 2003). World Moreover, returnees contribute to the growth of the domestic economy, due to the access to foreign markets and to the networks established during their stay overseas (Zweig et al. 2005). According to the neo-classical economic theory, the movement of workers from low-wage to high-wage countries contributes to a more efficient use of labor and narrows wage differences between countries (UNECA 2000). Unemployment is lowered, wages are raised, economic growth and household welfare are boosted (Mountford, 1997).. In order to obtain an advantage, developing countries can use policy instruments whose aim is to simulate the return of the highly-skilled. Here, a distinction should be drawn between individual-based approaches' and policies targeting the 'environment for research'. The first one is a short-term policy that seeks to shape the decisions of researchers and scientists individual-by-individual. The second one is a medium to long-term approach whose aim is to stimulate return by improving framework conditions and opportunities (Thorn and Holm-Nielsen, 2006:6). An interesting point of view is the "Six Rs" policy proposed by Professor Lowell: return (migration), restriction (migration), recruitment (migration), reparation (monetary), resourcing (diaspora options), retention (opportunities). Return of migrants to their source country is one sure way to cultivate human capital for source countries, especially when there is value added from working abroad. Restriction of international mobility refers to restrictive emigration policies that make it difficult for their national to take jobs abroad. Recruitment of international migrants implies searching abroad for skilled workers which cannot be found on the domestic labour market. Reparation for loss of human capital suggests that developed countries either compensate source countries, or that that emigrants directly submit taxes, to deal with externalities created by the immediate loss of human capital. Resourcing expatriates is based on the

assumption that skilled emigrants are an important source of knowledge transfer, especially if ongoing contact between academic and private sector institutions is fostered. Retention through educational sector policies implies the creation of a powerful educational system, in order to encourage the highly-skilled to remain in their home country. Retention through economic development is the most effective policy for reducing emigration and the surest long-term means of boosting average human capital, as well as economic growth (Lowell, 2001:4)

As every phenomenon has at its origins some contributing factors, brain drain literature (Kline, 2003) identifies two categories: push factors and pull factors. Push factors refer to the origin country and the most important are: the low incomes, the lack of opportunities for professional development, institutional support and future career opportunities (Kapur & McHale, 2005:198) instability and political strife (Marchal & Kegels, 2003). Some authors mention avoiding military service for the particular case of Turkey (Tansel & Güngör, 2003:13). Pull factors are correlated with the country of destination and include active and passive ways of attracting the skilled labour from developing countries.

A strong competition appeared between receiving countries in attracting the highly-educated, based on the benefits that could be obtained. From another point of view, sending countries are worried about losing the most educated workers. As the migration of highly-skilled seems to become a growing concern for the world economy of the 21st century, a deep understanding of the possible effects is required. Regets's classification includes possible effects on sending countries, possible effects on receiving countries and possible global effects, with the specific mention that sending and receiving aren't synonymous with developing and developed. Possible positive effects on sending countries are: increased incentive for natives to seek higher skills, possibility of exporting skills reduces risk/raises expected return of personal education investments, possibility of increasing domestic economic return to skills, knowledge flows and collaboration, increased ties to foreign research institutions, export opportunities for technology, return of natives with foreign education and human capital, remittances and other support from diaspora networks. Possible negative effects on sending countries are: lost productive capacity due to at least temporary absence of higher skilled workers and students, less support for public funds for higher education. Possible positive effects on receiving countries are: increased R&D and economic activity due to availability of additional high skill workers, knowledge flows and collaboration, increased ties to foreign research institutions, export opportunities for technology, increased enrollment in graduate programs/keeping smaller programs alive. Possible negative effects on receiving countries are: decreased incentive of natives to seek higher skills, may crowd out native students from best schools, language and cultural barriers between native and immigrant high skill workers, technology transfers to possible hostile countries. At global level, the possible effects of high skill international migration are: better international flow of knowledge, better job matches - greater employment options for workers/researcher's ability to seek the work most interesting to them, greater ability of employers to find rare/unique skills set, formation of international research/technology clusters, international competition for scarce human capital may have net positive effect on incentives for individual human capital investments (Regets, 2007:2).

In the years following the Second World War, the United States were the first who understood the importance of attracting the highly-skilled. On one hand, they took

advantage from the pressure the intellectuals were facing in Europe and, on another, they developed an educative system with university programs adapted to the labour market demands, thus facilitating the integration after graduation, the government policies encouraged the immigration of highly skilled from all over the world and financial programs were adopted in order to attract scientists from communist countries. The export of education services (by an “import” of foreign students) has become a money machine for the US. Every year foreign students contribute over \$7bn to the US economy (Straubhaar, 2000:9). In the period 1956-61, more than half the of scientists moving to the USA came from Britain and Germany (28.23% and 22.59%): scientists accounted for 11.1% of all Germans and 13.9% of Britons emigrating to the USA (Brandi, 2001)..

The next period of time (1970-1980) was characterized by a migration flow from the developing countries. The main destination remained the USA but, Canada, Australia and the European developed countries also faced an inflow of foreign students. At the beginning, the first who emigrated from developing countries were the students, those facing a lack of academic institutes in their home countries. There were some factors that contributed to the migration of students, as the lack of economic resources and infrastructure in the country of origin, better wages and working conditions in destination countries and the possibility of better life (Ardittis, 1989). So, the destination countries, as the US, experienced a “brain gain”: at the beginning of the 1990s, more than 430,000 of the science and technical workers in the USA (more than 16% of the total) had been born outside the country. Also, more than 100,000 doctorate researchers (almost 30% of the total) in the USA were of foreign birth (Cervantes, 1999). The situation in Europe was influenced by The Treaty of Schengen, which promulgated the free movement of the labour force within the European Union – the highly skilled were encouraged to migrate but only within the continent, leading to a “brain exchange”.

The globalization process, with its direct consequences - liberalization and free circulation of capital, goods and work force was supposed to lead to a “win-win” situation for both developed and developing countries and to diminish the disparities between regions. After 1990s what happened was exactly the contrary: the highly-skilled from the Eastern Europe and from the ex-members of the Soviet Union were attracted by higher incomes and better conditions offered in developed countries. The biggest concerns regarding brain drain are related to the risk of “brain waste”, because of the slow down of the world economy (Bernstein and Shuval, 1995). In the context of the world wide recession, not only were the developing countries witnessing the largest brain drain of all time, but there are some growing concerns that there is no benefit, neither for the origin country – whose investment in education is lost, nor for the destination one, whose investments in labor market is minimal and not capable to absorb the whole skilled workforce. This is a mismatch of the skill of the worker and the demand of the market (Mountford, 1997). However, the biggest loss is for the emerging economies that invest in training skilled workers, but are unable to offer their highly-educated people a sufficient number of professionally satisfying posts (Gaillard and Gaillard, 2001). The lag behind of the labor force market capacity to absorb highly educated personnel reduce dramatically the chances of a “brain return”, which become almost inexistent. The final outcome of the brain drain phenomenon becomes an “inverse technology transfer” – which means that poorer countries invest in the education and training of the highly-skilled, who then put their services at the disposition of the wealthy nations (Boussaid,

1998). The migration of skilled individuals is considered costly for the sending country due to loss of investments in education, high fiscal costs and labor market distortions (Commander et al. 2003). Since the education has been pointed out as a major determinant of long-term growth (Lucas, 1988), the following dilemma appears: investing in education is still a priority for developing countries? The empirical analysis of Beine et al. (2003) remains nowadays the most important voice in favor of the new economics of brain drain - the optimistic point of view on skilled migration (Brozozowsky, 2008:6). Beine's research (2001) confirm the existence of "beneficial brain drain effect": there are two effects of the brain drain on growth: an ex ante "brain effect" -migration prospects foster investments in education because of higher returns to education abroad, and an ex post "drain effect" - some, if not all, educated agents actually migrate. The case for a "beneficial brain drain" emerges when the first effect dominates. This research is based on the context of uncertainty. Considering that the education is valuable all over the world, the migration perspectives will increase the attractiveness of educational investments - as a condition for future access to international migration. Given that only a proportion of the educated residents would emigrate the average level of education of the remaining population would increase. (Beine et al, 2003:277). The hypothesis of Beneficial Brain Drain is very tempting indeed, because its existence alone may be used to argue that brain drain is no more detrimental, even while not taking into the consideration additional positive effects of the phenomenon (Brozozowsky, 2008:6).

MIGRATION TRENDS IN THE EUROPEAN REGION

For more than 2 centuries Western European countries have been source countries of emigration.

European transition to a primary receiving region took place gradually in the decades that followed the world war II, the process being uneven across time and space.

A number of European countries such as Italy, Spain, Greece, Portugal, Ireland etc. were emigration countries until the 1980's but since then have experienced strong immigration flows. Other countries experienced the transition process well before(UK, France, Sweden, Austria, Belgium, Holland etc).

During the recent years of crisis some countries have experienced significant waves of outflows to become again net emigration countries (in Ireland net migration turned negative for the first time from 1995)(Papademetriou, 2010).

The new member states have begun to experience simultaneously emigration, transit migration and immigration.

The pattern of origin of immigrants in Europe up to 1980 could be characterized by 3 main categories:(Penninx et al. 2008)

- a) migration with colonial background;
- b) labor migration that connected a number of "recruiting countries" to a limited number of "sending countries";
- c) refugee migration that was strongly dominated by flows from Eastern to Western Europe.

Today, in the context of increasing globalization in all domains, the categories and channels of immigrants are extremely diverse. Immigrants in significant numbers come from all over the world: expatriates working for multinational companies and international organizations, skilled workers from over the world, refugee and asylum seekers from African, Asian, Balkan, former Soviet Union countries, students etc. (Penninx et al. 2008).

While in the past migration tended to be viewed as leading to permanent resettlement, recent migration has shifted to more fluid practices of international mobility, with consecutive stays in different countries.

An important feature of international migration has specifically developed within the EU. There is on the one side the migration phenomena including flows with non-EU countries and on the other side the free movement of people as a fundamental right stated in the Treaty of Roma.

The EU member states have very different situations as regards migration: different historical backgrounds, different level of dependence on the immigrants, different preoccupation regarding the phenomena etc.

The importance of the migration issue for the EU countries is based on at least four main considerations:

- a) today the most important force behind population growth is intra and extra Europe migration;
- b) due to the aging of population a shrinking labor force will be a problem for many European countries in the future;
- c) EU lags far behind the US in attracting skilled migrants, particularly in the information technology and science;

c) immigration can be a stimulus to economic performance both at national and regional level but it is also a complex and risky management issue for the receiving countries.

For a long period of time the right to enter and live on the territory of an EU member state was governed by laws drawn down by each member state.

Over the last decade EU countries have experienced a rapid rise in both legal and illegal migration. According to a recent Report (Erf et al. 2010) the overall migration balance for the EU 27 in 2006 amounted to 1.1 million resulting from 4,7 million immigrants and 3,6 million emigrants (more than half of the immigrants came from outside the Union and the large majority settled in the old EU 15 member states).

The number of foreigners living in the EU 27 was 25 millions (about 6% of total population).

The positive migration balance of the EU 27 masks significant differences between the Member States, most of the Eastern and Central European countries still displaying negative net migration balances.

However the number of immigrants is expected to increase in these countries once the process of economic transition has stabilized. This process is already taking place in some countries such as the Czech Republic, Hungary or Slovenia.

The important dimension of the migration phenomenon combined with the increased force of global interdependence makes it more difficult for individual national states to control migration autonomous, making European collective action an essential tool for better managing the issue.

The main step was taken in 1980 with the signatures of the Shengen Treaty creating the Shengen Space.

Even the Treaty does not regulate migration, it sets specific norms about the mobility of people and on the entrance of citizens of the third world countries.

It was the Maastricht Treaty which integrated for the first time the common migration policy in the institutional framework of the EU, through the Justice and Home Affairs Pillar. The common action include making European borders management more effective and technologically advanced, integrating migration issues (visas, border control, the settlement of refugees, the return of illegal migrants etc) and last but not least helping Europe to fill the 50 million skilled vacancies esteemed for 2060) (Brady, 2009).

European policies to tackle these challenges are in their infancy. "One reason for this is that ministers have to work around major gaps about specific labor needs of the single market and about the movement of migrants into and around the EU" (Brady, 2009).

As regards the mobility of skilled workers and the "brain drain" phenomena in Europe- 2 main trends are visible: an outflow of highly skilled people (especially researchers) from Western Europe to other countries, mainly the US and an outflow of highly skilled workforce from Central and Southeastern Europe to Western Europe.

In 2000, on the occasion of the Lisbon European Council, European leaders engaged to transform Europe into "the most competitive and dynamic knowledge economy in the world".

One of the most suggestive signs as regards the failure of such an ambitious objective is represented by the steady outflow of European scientists to the US, with the intention to have a permanent stay.

European bureaucracy, the rigid promotion schemes in universities, the fact that European universities are under-funded as compared to competitor economies, a weaker context of competition in Europe are among the main factors explaining this trend. Figures show that compared to the US, Europe is unsuccessful in attracting human resources for science and technology.

While 55% of the US immigrants are highly qualified this is only true for 5% of the immigrants to EU (www.europeanbluecard.com).

On the other hand, students studying abroad are seen as one of the main channels leading to the migration of the highly skilled.

Very often their studies abroad are supported in the form of scholarships by the governments of their origin countries and a substantial number of them do not return, especially those at master or PhD level.

As an example, some 60% of the European graduate scientists remain in the US after completing their PhD degree. (European Commission, 2007)

Although studies mostly refer to the outflows of EU students to the US, a similar trend has appeared from Central and Eastern European countries to Western Europe.

With more and more countries looking to international students as a potential source of skilled migrants-the number of international students in OECD countries is continuously rising, reaching over 2,3 millions in 2008 (OECD, 2011). The estimated stay rates range from 20 to 30% in most OECD countries.

It is to be mentioned that international students can serve as a source of highly skilled migrants especially when the students are enrolled in programs delivered in the same language of the host country and this is a largely spoken language (English, French, Spanish).

It is suggestive that the US, UK and Australia are the most popular destinations for overseas studies, with about 45% of the total foreign students. (WES, 2007)

Besides of being English speaking host countries, all of them have developed impressive market strategies to target potential students, with a sound awareness of the contribution that foreign students make to host nation economies.

In the recent years a growing number of European countries have sought to attract international students, either as a source of finance for education institutions or as source of skilled migrants.

Some policy measures are designed to encourage international students to study in a specific country, others have the objective to make it easier for the students to stay after graduation and enter the labor market. (OECD, 2011)

An example is Finland, where a strategy for the internationalization of higher education was completed in January 2009, with the view to increase the number of exchange students and foreign students. Support has been given to the international cooperation and networking among tertiary institutions. International students will also be able to gain Finnish citizenship earlier. (OECD, 2011)

Poland and Latvia are other 2 examples of countries which are taken important steps to attract foreign students.

As regards the other group of measures, Austria plans to largely open the labor market for international students. Similarly in the Czech Republic labor market entry has been facilitated for international students who have completed secondary or tertiary education in the country.

Under the new immigration law in Norway, graduates from Norway universities may apply for a six month permit to seek a job consistent with their qualification. In addition, family members of students are allowed to work full time.

The selective nature of migration in Europe is also demonstrated by policies implemented in order to attract skilled workers, many developed countries in Europe facing skill shortages in different professional sectors: science, health, engineering, IT, tourism etc.

To improve Europe's ability to attract highly skilled workers, the EU Commission issued (may 2009) a Directive authorizing the creation of the EU Skilled Immigration Blue Card- a residence and work permit that would allow highly skilled workers from non EU countries to temporary live and work in any of the EU countries (with the exception of Denmark, Ireland and UK which have not participated).

The Directive establishes a fast-track admission procedure for the foreigners and ensures a common set of social and economic rights, equal to those of EU nationals.

The "Blue EU Labour Card " has been inspired by the "US Green Card" and is the EU's bid to attract highly skilled workers competing with other developed countries such as the US, Canada , Australia, New Zealand.

The card would allow the workers to bring family members with them and to move across member states.

The Blue Card give EU members a new tool to facilitate temporary work procedures for skilled workers but each country can use the tool in its own way.

Member states are permitted to set individual quotas for specific skills and countries of origin and to adjust details such as minimum salaries.

The other important trend in Europe is the brain drain phenomena caused by the outflows of highly skilled workforce from Central and Southeast to West European countries.

A major barrier in analyzing the size and effects of the migration of this particular group is related to the paucity of reliable and internationally comparable statistic data.

Most of the available statistics do not draw a clear demarcation line between migrants in general and the subgroup of highly skilled.

Moreover, there is no commonly agreed definition of the highly skilled and no standardized treatment of them in the statistics of different countries and organizations.

There are however two measures which play a role in practically all definitions. The first one is related to prior educational qualification. According to this parameter persons with a tertiary education qualification count as highly skilled (although there are differences between countries as regards the type of tertiary education considered).(Kelo, 2004)

The second parameter is profession-based. In this understanding, the highly skilled are identified by means of the type of work they carry in the destination countries.

Even if the data are partial and fragmented they clearly show that brain drain in the region is no small matter, mainly after EU enlargement in 2004 and 2007.

If skilled migration between developed countries is dominated by temporary flows, suggesting more a pattern of brain circulation, with a low risk of brain drain, the outflows of skilled workers from some Central and Southeastern Countries to the Western ones tend to become a focus of anxiety and a great challenge.

One of the most striking examples is Albania, the Europe poorest country with one of the highest emigration rate in the world and where during the 1990 almost 40% of lecturers is and researchers left the country. (Vedran 2004)

As regards the subgroup of academics and researchers from Central and Eastern Europe- the Survey conducted for the European Commission's Directorate General for Research in 1997 by a research team led by Daniela Boleva (Bulgaria) offers some important conclusions:

- a) The peak of the outflows of scientists to Western Countries was in the early 1990 and by 1997 the trend has been replaced by a more balanced "research exchange";
- b) In almost every country of the region the research sector went through a shrinking process in the first half of the 1990's which led to an important in-country brain movement from the public research sector to the private one, mainly in the engineering and the ICT fields;
- c) The percentage of scientists who left the universities and research institutes for foreign destinations range from 1,7% in the case of Slovenia to 15% in the case of Poland, this last percentage representing some sort of exodus. High rates were also recorded in Estonia(14%) and the Czech Republik(11%).
- d) The scientists who emigrated were almost all of highest performance and had often spent periods at research institutions abroad.

In the last decade concerns appeared about a growing migration of health professionals from the European transition countries to the Western ones, with a great potential to undermine attempts to achieve health systems improvement in the sending countries.

Accession to EU in 2004 and 2007 for the 12 new members has accentuated the phenomena.

ECONOMIC CONTEXT AND THE MIGRATION ISSUE IN ROMANIA

Romania is a South-European country, part of the European transition countries group and member of the EU since 2007.

It is the 22 nd largest economy in Europe (the 17 th in EU) (www.undp.ro/profile) by absolute GDP and the 11 th largest in Europe by total area, with a population of 19 million, according to the last census.

Romania is a country of considerable potential: over 10 million hectares of agricultural land, considerable natural resources for a country of its size, a substantial manufacturing base, opportunities for expanded development in tourism etc.

Since the fall of communism in 1989, Romania started a long process of difficult transformations at political, economic and social levels with the aim to reach the new status of a market economy and to integrate in the global economy.

Romania entered the 1990's as a relatively poor country by European standards and this is largely the result of both policies in the communist period and the failures of macroeconomic measures and privatizations during the 1990's.

After a sharp recession during the first decade of the transition, Romania enjoyed a steady economic growth thanks to a strong demand in EU markets but also to domestic consumption and FDI inflows.

2008 was the last year of great economic expansion (7,3% growth rate and more than 3 times the EU average).

Romania began to feel the effects of the financial crisis in the last quarter of 2008 and in 2009 the GDP fell more than 7%, prompting the government to seek an assistance package from IMF and the EU.

As a result of the austerity measures implemented through 2010, the GDP contracted by only 1,9% in 2010 and had a 2,5 % in growth in 2011.

Romania's per capita GDP (PPP) is only about 40% of the EU average while the country's nominal GDP is about 25% of the EU average.

Romania lags behind European average standards in many aspects, both at economic and social level.

Migration is one of the most pervasive socio-economic phenomena in Romania since the fall of communism.

The migration process in Romania can be discussed on four dimensions: emigration, immigration, intra-European migration, extra-European migration.

Comparing the number of emigrants with that of immigrants- Romania is an emigration country.

In 2009, the number of immigrants was 88,500 and that of emigrants about 3 million (OECD, 2011).

In the same year Romania was the second country of immigration into OECD countries(5 % of total immigrants) after China (9,2%) and followed by India (4,5%), Poland (4%) and Mexico (3.5%) and had by far the largest number of emigrants per million population out of the 25 top countries of immigration into OECD countries (12,000 emigrants per million population).(OECD,2011)

In the aftermath of the 1989 Revolution, massive emigration emerged, with over 90,000 persons only in 1990 and about 170,000 in the first three years.(IOM 2008).

Migration flows at this stage were mainly ethnically driven (more than 75% of emigrants were ethnic Germans and the rest Hungarians and Jews).

In the years that followed, visa restrictions and other push factors such as economic hardship and political instability have led to the predominance of temporary migrations, the main pattern of migration from Romania at present.

Labor migration has undergone 4 stages of evolution in the past-communist period, corresponding to a gradual change in the profile of destination countries:

- The first stage (1990-1995), characterized by a rate of emigration of 3/1000 and the main destination countries Germany, Israel, Turkey, Hungary, Italy; ethnical reasons coupled with economic difficulties caused by unemployment, high inflation and lack of security were the main reasons of emigration.(Sandu, 2006)
- The second stage (1996-2001)with a rate of emigration of 7/1000 and the main destination countries being Spain, US, Canada;
- The third stage (2001-2007) which registered a huge rate of emigration (28/1000), with the main countries of destination Italy (40% of all labor migrants), Spain (18%), Germany (5%), Hungary (5%), Israel (6%).

The 3rd stage was deeply influenced by the remove of visa requirements for Romanian citizens in the Shengen Area. According to the OECD Report 2011, the year of the accession to the EU was the peak in terms of emigration into OECD countries (almost 450,000 emigrants compared to only 90,000 in 2000).

The global financial crisis reversed the trend and the number of Romanian emigrants to OECD countries dropped to about half in 2009 .

Europe was one of the most affected regions as regards international migration and the largest absolute declines were recorded from the new EU member countries, most notably Romania, Poland and Bulgaria.(OECD 2011).

- The year of the EU membership of Romania (2007) is considered by some specialists the start of a new stage of migration, characterized by a massive migration of skilled workers, mainly physicians to Western European countries.(Ulrich, 2011).

If the migration during the first 3 stages generated benefits for Romania in terms of remittances and an outflow of a surplus workforce in a period of economic difficulties, the new category of migrants has some distinct features:

- a) Skilled migrants represent an economic loss due to funds invested by the state in providing education and training ;
- b) They appear to send little money to the home country as they tend to bring their immediate family with them;
- c) They have a greater capacity to integrate in the host country so their departure is most often permanent;
- d) They are “attracted “ in developed countries mainly in Europe by specific policies in the context of Europe facing a severe shortage of skilled workers.

The proportion of higher education graduates in the flow of emigrants in Romania is about 25%, with great differences as regards the destination countries.(Ulrich, 2011).

In 2005 the percentage of skilled workers out of total emigrants was 54% for Canada, 46% UK, 38% US, 34% Belgium and only 6% Turkey, 10% Italy, 13% Spain.(Ulrich, 2011).

There is a large range of categories included in the “high skilled workers” concept namely: researchers, academics, health professionals, engineers, multinational managers, international experts, international functionaries, students, trainees etc.

For each of this group, beyond a set of general factors influencing the intention of emigration, there are specific features of the domains creating a different conceptual framework for the analysis.

We have chosen as suggestive for the brain drain phenomena in Romania 3 sectors : research, ICT and health.

Research

One of the most affected domains in Romania as regards the brain drain phenomena is represented by the research sector.

The drastic drop of the number of researchers from 150,000 in 1989 to about 40,000 nowadays can be explained both by the reorientation of researchers to other professions, mainly in the private sector (profit oriented research centers, consulting firms, branches of foreign companies etc.) as a result of a significant decrease of the R&D capacity and by the fact that many researchers seeking to have a scientific carrier opted for leaving the country.

Other European transition countries experienced similar situations. The loss of scientists in the 1990-1994 period was 60% in Latvia, 55% in Bulgaria, 70% in the Czech Republic, 79% in Poland etc.(Boleva,1997).

After having overestimated science in the communist period most of the countries in the Central and Eastern Europe underestimate this sector.

In Romania researchers represent about 0,36% of the active population while the EU average is 1,6%.

Other ex-socialist countries have a better position (0,8% Poland, 1% Hungary, 1,5% Check Republic)(www.fundatiadinupatrici.ro/media/stiri).

Emigration occurred mainly in the sectors of science having a high profile, recognition and contacts with the international research community (in Romania mathematicians and biologists experienced high emigration rates).(Boleva,1997).

It is esteemed that about 64% of the researchers with relevant international results are working outside Romania, most of them in the US and the majority are young (30-35 years)(Florian, 2004)

There are a lot of reasons explaining the migration of researchers from Romania and they have been extensively cited in the Romanian literature.

One of the most important is the low level of funding of the research sector; most of the transition period Romania had one of the lowest GDP share of R&D expenditures out of the European countries.

Other frequent reasons were: lack of transparence in the public funding research, the evaluation of research projects only by Romanian experts and often based on subjective criteria, the low quality of research results of the evaluators of projects, the lack of modern research infrastructure, the bureaucracy involved in carrying on of the projects, the weak quality of Romanian universities, the absence of excellence criteria in the research activity, the equalitarian view in spreading public funding of research, the lack of flexibility in using public funds on R&D etc.

It is worth mentioning that in most of the above aspects the Higher Education and Research landscape in Romania has considerable changed in the last years.

To begin with-the funding of research showed a radical change starting 2005, due both to a good economic growth of the economy and to the commitments of Romania to become an EU member.

In the 2005-2007 period the GDP share of R&D expenditures almost doubled (from 0,2% to 0,5%) with a subsequent target of 1% in 2010, but is still low compared with the European average (2%).

The recent global crisis had a negative impact on the R&D expenditures (only 0,47% GDP share in 2010).

Until mid 2010, Romanian R&D funds were managed by 4 different agencies.(Ciuparu,2011)

In order to increase efficiency, coherence and transparency, these activities are now concentrated within a single agency.

Several online platforms are used for managing all submissions and evaluation securely.

Another important change in the R&D sector refers to institutional reforms. All R&D institutes will be evaluated by teams of experts at least half of which must be from EU or OECD countries.

Following the validation-each research institute is entitled to 2 types of funding: the baseline funding and the performance (complementary) funding. (Ciuparu, 2011).

The last one is based on quantitative and transparent output such as: the number and visibility of publications, the number of patents registered, the funds attracted from the private sector etc.

A third type of funding is the competitive-grant based .

The total budget is split as 20% base funding, 30% performance funding and 50 % competitive grants.

The competitive programs have been organized under supervision of independent and highly prestigious experts, at least half of them from abroad.

Until 2011 the evaluation of projects in the competition schemes was done only with the contribution of Romanian evaluators, leading to a low level of efficiency of the public funds on R&D.

It is worth mentioning that the evaluation of projects by teams including international recognized experts, mainly outside the country, has been solicited through a petition signed by over 4000 researchers in 2006 and was implemented only in 2011.

Numerous legal provisions guaranteeing the transparency of evaluation and funding are now in force and the legal framework regarding ethics has been overhauled. Romania has now one of the most detailed legal framework in Europe in the area of ethics and good conduct of academic and research activities.(Ciuparu ,2011).

Human resources have been given more weight in the eligibility criteria.

The most important criterion in the funding decision is the past performance and experience of the project leader. The aim is to eliminate the spread of funds on too much projects with low quality but to direct the funds to a true elite.

Last but not least, in the years before the crisis, the HE&R infrastructures had seen major updates, with many universities and laboratories obtaining world class equipment.

A visible effort has been registered in the last years to evaluate the position of the Romanian universities in the international classifications and the fact that none of Romania university is included in the main world tables generated great concerns at academic, policy and not last civil society level.

The “ranking “exercise has become an important tool in stimulating the efforts to improve the performance of Romanian universities and to reduce uniformity in the higher education sector.

As to the quality of human resources in the higher education institutions, in 2005 new principles of academic evaluations have been introduced, according to international practices.

Among policies targeted to reduce the magnitude of the brain-drain phenomena- 2 categories were most frequent in the last years on the international stage;

- a) The ones intending to repatriate researchers, academics and other valuable specialists;

China has been among the first to try to repatriate the scientists it lost mainly in the US.

Several National Programs offered considerable amounts of money for returning scientists themselves but also for research and infrastructure.

There are today many European countries following this direction: Finland, Austria, Germany, Greece etc.

Some EU countries including UK and Netherland have improved the working conditions for researchers including a rise of salary, others (Sweden, Denmark, Netherland, Belgium) are focusing on fiscal incentives for specific highly skilled categories.

b) The ones focused on capitalizing the benefits from Diaspora facilitating the contact between researchers working home and outside the country of origin.

Taking into account the low level of economic development in Romania and the fact that the reorganization of the HE&R sector is still in an infant stage- the first set of policies may have only a limited impact at this moment in Romania.

However some steps have been taken in this direction.

Many of the barriers preventing the return of young academics and researchers have been removed in Romania.

The new Law of Education removes the possibility of senior academics or researchers keeping their posts many years beyond their retirement. Even this was a highly contested aspect of the Law, it must be admitted that through this channel a large number of positions held by the retired persons are open to competition. This will provide opportunities for Romanians working abroad or for foreigners to obtain positions in Romanian universities and institutes.

As mentioned before, repatriating the scientific elite is not the only modality to benefit from the international experience of the highly skilled emigrants. The transfer of know how may be easily obtained by facilitating the contacts between Romanian and emigrant researchers through a lot of methods such as: conferences, symposia, collaborations of different types.

One of the most recent measures from this category in Romania is a program designed to allow researchers working abroad to lead research projects in Romania. They may establish and develop a research group in the country from distance- disseminating knowledge, management skills, western experience etc.

With a similar intention, an international conference has been launched in 2008, named "Diaspora in the Romanian Research Sector" with the aim to find the most suitable mechanisms to bridge Romanian researchers working at home and abroad.

In the same group of policies it is worth mentioning an ambitious project carried on by the Ministry of Education, Research, Youth and Sport with the support of UNDP, intensively exposed in the media, namely "Special Grants of the Romanian Government". The program was supposed to offer finance to young people intending to follow tertiary studies abroad, with the condition of their returning home to occupy a job in the public administration for a period of at least 3-5 years.

The Grant was meant to resolve 3 problems: a) to offer young people the opportunity to specialize in prestigious higher education institutions abroad with public finance, b) to improve the process of the modernization of the public administration in Romania and c) to reduce the magnitude of the brain drain.

Unfortunately the results were not very encouraging taking into account that the costs of the program reached about 5 million Euros for some 150 young people but few of the grant beneficiaries could obtain an adequate job in the public administration.

The ICT sector

ICT is one of the most dynamic and competitive domains in the world economy.

The importance of the sector for Romania is fully demonstrated by statistical data: the ICT sector contributes with 3-4% to GDP employing about 115,000 people while agriculture, employing about 30% of the active population has a contribution of 6-7%.

The sector can be structured in 3 fields: a)Telecommunications, b)Softwear and IT services and c)Hardware.

In Romania the most important contribution of the ITC sector to GDP is generated by the telecommunication field .(Vuici 2010).

The ITC sector accounts for about 10% of the Romanian exports . ITC exports had a good evolution in the crisis period with 10% growth in 2009 and 30% in 2010 and most of the growth attributed to hardware and electronic products exports, dominated by the Nokia platform.

Some of the ITC multinational corporations are among the top companies in Romania in terms of sales (Vodafone , Orange etc) or in terms of exports (Nokia).

Unfortunately Nokia closed the plant in Romania in 2011, after 3 years of activity with a great impact on the Romanian economy.

ICT in Romania has deep roots in the past. Romania was the first country in the Eastern and Central Europe to build the first generation of computers.(Baltac, 2006).

An industrial base was built in the 1970's due to imports of technologies and patents from developed countries (France, US, Netherland etc) but technologies became obsolete in the 1980's .

In 1989 the workforce in the ITC sector reached 100,000 people as compared to some several hundred in 1960.

In the 1990-2000 period the brain drain of IT workers had a severe impact on Romanian ICT companies.

It was only in the last decade that the ICT sector transformed itself in an attractive location for foreign investors due to a set of specific advantages.

According to the 2009 A.T.Kearney Report, Bulgaria and Romania are the new offshoring stars in Europe, in the context of a drastic fall of Central East European countries as leaders in the region.

Many multinational corporations have opened branches or R&D centers in Romania (Alcatel, Siemens, Oracle, HP, IBM, Nokia, Microsoft etc) and they enjoy a large and growing market, highly qualified workers, access to EU funds.

Romania education system is largely recognized as one of the best in the world of ICT with about 8000 graduates entering the labor market every year, with a high qualification in both technical and the foreign languages skills. (Baltac, 2006).

Government support has played a great role through fiscal facilities offered in order to support the development of a high promising sector.

It is worth mentioning that during the early 2000's - five leading ICT business associations formed an alliance called "Tech 21 Coalition" in order to initiate a joint advocacy campaign to reform the ICT sector.

The coalition developed a business agenda with reform priorities and solutions, organized public hearings on specific legislative proposals, and offered advice to Romanian public authorities on the design of public policies that would make the industry more competitive.

The efforts resulted in a dialogue with the government authorities leading to several key reforms such as the introduction of zero salary tax for softwear developers in order to limit the brain drain, the amendment of the leasing legislation to encourage softwear acquisitions, the adoption of the e-signature for business, the development of e-government programs etc (Frausher, 2009)

Romania is used today as a model of proactive business associations initiatives trying to foster constructive relations with governments and contribute to substantive reforms in the ICT sector.

According to government officials, since the country joined EU there has been no brain-drain of skilled IT workers from Romania and Romanians are even returning from abroad.

The ICT sector in Romania entered a human-resources crisis in the last years because of the growing demand of specialists, much over the market supply. This has led to a raise of salaries in the sector and some specialists are worried about a reduction of foreign investments in Romania in the following years, having in view the existence of cheaper workforce in the neighboring countries such as Moldavia, Ukraine etc.

There is however also a positive aspect here: Romania may change the role as a country of low cost outsourcing into a country able to develop original products on its own.

The health sector

The migration of health professionals globally constitutes a small part of labor migration but is a subject of major debates having in view the significant effects on the health systems in some less developed source countries.

This type of migration can have positive aspects: it can be a solution to the staff shortages in some countries, it can also assist source countries which have a surplus of staff and can be a means by which individuals health workers can improve their skills, career opportunities and living standards.(WHO 2006)

However it can also create additional problems of shortage in the health systems of some countries that are already understaffed, affecting the provision of basic services to population.

The topic is an emerging one in the European region and regards the flows of health workers from East to West European countries .

It is increasingly rising concerns among health policy makers about geographic health workforce imbalances as a key challenge in Europe in the years to come and also about the negative effects on the origin countries.

The migration of health workers from East to West European countries is essentially a “brain-drain phenomena”, having in view the costly and rare human resource lost by the source countries and the small compensating benefits of the remittances.

Moreover, the East European countries are not experiencing a 2 way flow model like many developed countries. In their case the transfer of skilled people is unidirectional and on a permanent base.

International health workers in some European countries constitute an important part of the health workforce and this is particularly true for the United Kingdom, where in 2005 nearly $\frac{3}{4}$ of new doctors and $\frac{1}{2}$ of new nurses came from abroad (with $\frac{1}{3}$ of foreign doctors from European countries).(Wiscow,2006).

Without the foreign health workers the system could not function and this is one of the reasons why the government made international recruitment an integral part of its national health workforce development strategy.

The enlargement of the EU starting with 2004 had an important impact on the dynamic of inflows from Central and East to West European countries.

Some figures are suggestive : 500 doctors from Poland registered in the UK in the accession year (2004) meaning 30 times more than the previous year (Wiskow, 2006) , in Ireland the employment of the EU new members nationals in the health sector almost doubled between sept.2004 and 2005, in Sweden the number authorizations granted to EU doctors jumped from 230 in 2003 to 740 in 2004 (OECD, 2007)etc.

To some extent, the presence of the imported medical expertise in the developed countries may cause professional dissatisfactions to the local workforce generated by the increased competition on the labor market but such a disadvantage is strongly compensated by the net benefits for the receiving countries.

It can take 3 - 5 years to train a nurse and 15 - 20 years to train an experienced senior physician and immigrants can deliver these staff quicker and with the training costs having been supported by other countries.

The emigration(or intention of emigration) of health workforce from Romania to the Western European countries has become a worrying issue for the professional associations and even the civil society .

The emigration of doctors from Romania attained 4% in 2007, a level considered as crisis situation by WHO experts. (Ulrich, 2011).

According to a recent declaration (February 2012) of the President of the National College of Physicians from 2007 up to present about 8,000 doctors left the country, 80% being young. (www.paginamedicala.ro/stiri-medicale). He qualifies this outflow in terms of an exodus and a national security problem for Romania.

The public costs to train a physician in Romania are about 8000 Euros.

There are today 55,000 doctors in Romania, 60% of them over 50 years.

The outflow of doctors takes place in the context of a weak position of Romania among the European countries as regards the number of doctors per 1000 inhabitants (2 doctors compared with 3,4 European average).

These figures masks significant imbalances in the territorial distribution of doctors in Romania, most of them being concentrated in the developed regions and in the most important cities.

The external migration phenomena is doubled in Romania by internal migration (from rural areas to important urban centers) and to a lesser extent by the “brain-waste”, the migration of physicians to other professions, namely the distribution of medicines for multinational corporations.

Most of the factors influencing the health workers migration apply to labor migrants in general but there are also some specific factors.

According to recent literature - the main reasons for the emigration in the health sector are : the low level of salaries, the low level of public funding of the health sector (in the last 20 years Romania had a 2-4 % GDP share of health expenditures compared with up to 8% in the Central European countries and 10 -13% in OECD countries), the discrepancies between the high level of specialization and the work conditions, the inadequate work conditions in the rural areas, the high number of work hours due to workforce shortage in many hospitals, lack of training facilities etc.(Dragomiristeanu, 2008)

Countries experiencing a net outflow of health workers need to be able to assess its causes and impact on the provision of health care to population and to carefully monitor the evolution of outflows in order to find the best policies and actions.

Some European transition countries such as Estonia, Latvia, Poland are good examples of countries where the authorities are aware of the risks of the growing outflows of health professionals and are trying to improve the retention of them by dealing with poor pay, poor working conditions, high workload etc. (WHO, 2006).

Unfortunately Romania is still a country with a passive attitude at the government level as regards the health workers brain drain.

There are no clear objectives to target, no systems to monitor the migration phenomena both internal and external and implicit no strategies, policies or intervention initiatives in this field.

On the other side, the call for ethical recruitment strategies is on rise at national and international levels.

As a consequence, instruments have been adopted to guide different wealth sector stakeholders in the process of international recruitment.

The UK has taken the lead in this field with a Code of Practice published by the Department of Health in 2001 and revised in 2004. (OECD, 2007)

The Code identifies the guiding principles for the international recruitment of health professional and seeks to prevent targeted recruitment from developing countries which are experiencing shortages of health staff.

Similar instruments have been adopted at national or international level but there is a great skepticism as regards their efficiency due to the lack of support systems, incentives and sanctions as well as monitoring systems. (OECD, 2007)

Conclusions

The conclusion of this study may be asses on two directions; general aspects on the international migration and brain drain theory and the particular facets concerning the Romanian case.

There is a growing awareness that the movement of people is potentially as important to development outcomes as the movement of goods and capital.

Although low skill migration still dominates in absolute terms at the global level, the cross border migration of highly skilled persons has expanded markedly making it a focus of intense policy interest and academic debates in many countries.

The importance of the highly qualified group is linked to the concept of “Knowledge economy”, according to which the future of any region or country will critically depend on its ability to produce sufficient workers of highly skilled but also to retain them and to attract further ones from other countries.

The movement of highly qualified workers is inevitable when people posses professional skills that can be sold on a global market.

This mobility leads to equilibrium between supply and demand on the global labor market with positive effects on employment at global level.

On the other hand, this type of migration may have significant negative effects when the outflows have as source countries the less developed ones.

Recruitment policies of the developed countries have fuelled the outflows of skilled workers and have been frequently criticized and considered unethical measures (especially in the health sector).

Some developed countries have tried to make international recruitment of skilled workers more ethical and principle based as a response to difficulties encountered by the less developed source countries

However, pressuring rich countries to diminish or stop skilled immigration is questionable having in view that the freedom to live and work where one wishes is a basic human right.

In such a context, a major responsibility of reducing losses generated by the brain drain phenomena relays on policies and actions of each affected country.

The case of Romania is not so different from other former communist countries in terms of international migration. The level of development of this country, and the accession to the EU are the most important elements that shape the international migration process. Romania is mostly a labor force supply country (mainly for other EU economies), with a particular trend in the last years in the brain drain area. Difficulties in adjusting the economy, in implementing strong and healthy reforms, coupled with the financial crisis determined a failure in managing efficiently the labor force market and brain drain phenomenon.

However, the briefly presented sectors in Romania show that in research and ICT the policies and actions to reform and enhance the work conditions have had an important impact on the brain drain phenomena.

Moreover, in both of them the professional associations had a crucial role in initiating advocacy campaigns to change the business environment.

They demonstrate that the private sector can significantly contribute to business environment reforms by helping policy makers to identify problems and priorities and to develop responses in terms of regulations and norms with high impact on sector development.

As regards the health sector, the outflow of professional workers is not only a new phenomenon in Romania but also one with a significant magnitude.

A rate of departure of over 1000 doctors /year in the context of a stock of about 55,000 doctors must be an alarming sign for national authorities as regards the capacity of the health system to ensure basic health service delivery to population.

Romania accession to the EU in 2007 coupled with the difficulties to overcome the financial crisis have had adverse effects on the health system in Romania but until now one cannot identify initiatives or reactions at the authority level to improve the situation. This sector seems to remain the most vulnerable in terms of brain drain. The negative consequences of the brain drain phenomenon for Romania in the case of health system may count for a double loss: resources to train those people and a bad health care system because of lack of qualified personnel.

Romania needs firstly to improve its ability to assess the dynamics of migration of health workers and the impact on the national health system in order to identify the correct solutions and policy actions.

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Transaction Cost, Specialization and Division of Labor

--- A General Equilibrium Analysis of Entrepreneurship under Globalization

Ke Li

Email: li.ke@nihon-u.ac.jp

Graduate School of Business, Nihon University, Japan

INTRODUCTION

Regarding the evolution and impact of entrepreneurship, there are many economists began recognizing the entrepreneur as early as 1700s, such as Richard Cantillon, Adam Smith, Jean-Baptiste Say, John Stuart Mill, and others (McDaniel 2002, pp.31-34). Cantillon's (1755) remark on uncertainty has been widely interpreted as the first introduction of the term entrepreneurship into economic theory (Casson 1990; Hebert & Link, 1988). However, an analytically distinct role for the entrepreneur was first introduced by Say (1803) who distinguished the revenue accruing to the activity of organizing production from that accruing to the ownership of capital. This insight was further developed by the marginal economists of the late 19th century whose recognition of the importance of the market function of combining together all the resources required for production, led them to think about the role of entrepreneur (Marshall 1920, Menger 1871). Unfortunately, subsequent research under the neoclassical economics, as the Walrasian general equilibrium model was becoming its analytic core, ignored and eliminated the role of entrepreneurs from the analytical model of neoclassical theories, yet Walras himself recognized the existence of entrepreneurship as a distinct category.

Although entrepreneurship faded from neoclassical theory, it was central to the modern Austrian school and to the early Schumpeter, whose work on this issue. The focus of Austrian analysis has been the market process itself, the ways in which necessarily decentralized "tacit" knowledge about an environment that is continuously changing is socially mobilized via entrepreneurial activities. The essential functions of entrepreneurship for the Austrians, therefore, are to alter the existing framework of the

means–ends nexus and to introduce novelty. The neoclassical approach, by contrast, takes the means–ends framework as given and deals only with optimization problems within given constraints. Therefore, in neoclassical theory, as Kirzner (1980, p.6) rightly pointed out, “correct decision-making in this non-entrepreneurial sense, means correct calculation; faulty decision-making is equivalent to mistakes in arithmetic.” Moreover, Langlois (1994, p.118) noted that, whereas the neoclassical focus is on “parametric uncertainty, a lack of complete knowledge *ex ante* about the values that specific variables within a given problem structure will take on *ex post*”. In this sense, the Austrian emphasis is on “structural uncertainty, a lack of complete knowledge on the part of the economic agent about the very structure of the economic problem that agent faces.” As a result, for the Austrian school the essence of entrepreneurship lies to “in stepping outside existing cognitive frameworks” (Langlois 1994, p.122). According to the Austrian school, the Misesian–Kirznerian entrepreneur use the notion of “human action” and is alert to previously unnoticed opportunities and acts as an arbitrageur; and the Schumpeterian entrepreneur changes the framework by innovating.

Kirzner used the Misesian notion of “human action” (Mises 1949) to analyze the entrepreneurial role, which is “the human-action concept, unlike that of allocation and economizing, does not confine the decision-maker (or the economic analysis of his decisions) to a framework of given ends and means” (Kirzner 1973, p.33). Thus, the entrepreneurial element in human decision-making is defined by Kirzner (1973, p.35) as “the element of alertness to possibly newly available resources and to possibly newly worthwhile goals which is absent from economizing behavior but present in human action.” The Kirznerian entrepreneur notices “profit opportunities that exist because of the initial ignorance of the original market participants and that have persisted because of their inability to learn from experience” (Kirzner, 1973, p.14). Joseph A. Schumpeter (1911) explicitly recognized and defined the role and activities that the entrepreneur contributed to the economic system. According to him, since the late 1700s, the modern world started developing and there is a major transition taken place in human activity. During this major transition in human activity, a new sociologically distinct individual emerged and later became known as the entrepreneur. In the *Theory of Business Enterprise*, Schumpeter (1912) stated that the entrepreneur is pecuniary, and in an institutional system of market economy the participants are all pecuniary, and being pecuniary means seeding payment of money or expecting money from efforts. If all

participants in system of market capitalism are pecuniary, then Schumpeter's description of the entrepreneur was definitive of the institutional system of market capitalism and not necessarily a unique description of the sociologically distinct individual known as the entrepreneur. This view is further substantiated by the first work of Schumpeter published in Germany in 1908, and Schumpeter described the entrepreneur as being neither hedonic nor utilitarian, and they can transcend particularly institutional system to the new ones. Schumpeter described the entrepreneur as a creative innovator and an innovation is as the commercialization of innovation. If this is the case, then the entrepreneur are with the creative talents and not a product or result of particularly given institutional system (McDaniel 2003). However, the efforts, activities, and results of the entrepreneur in bringing about innovations will surface differently in each different institutional system.

Nowadays, the term "entrepreneurship" in economic theory is used almost exclusively to refer to the innovative or the market equilibrating activities that are performed by individuals or firms in conditions of uncertainty. Baumol (1993) distinguishes between productive, unproductive and destructive entrepreneurship, defined in terms of whether the activity adds to, redistributes or subtracts from net output. However, it is possible to go beyond Baumol's definition in terms of conventional measures of net output by introducing wider social considerations. A value system that emphasizes the importance for the quality of life of sustainability, viable local communities, social stability and considerations of equity may assess different types of entrepreneurial activity and innovation very differently from a value system emphasizing simply additions to net output (Devine, 2002). Although the concept of entrepreneurship is found throughout the economic literature, most economic theories in fact fail to give it a coherent place in their studies. As world economies evolve, the entrepreneur quickly surfaces to make changes in economic products and economic activities. These changes are not necessarily a result of a given institutional system but rather the newly allotted freedom given to the entrepreneur in order to bring about activities and goods that meet society's wishes and needs (Waters 1994). Mondal defined these entrepreneurs as the path breakers in a country where there are significant obstacles to the development and marketing of new products (2002). More logically, these entrepreneurs would be driven, in a given institutional system, by the desire to creatively bring about new products, new production processes, new business patterns and new economic institutional systems to improve material well-being to the members of society. The contemporary importance of

Schumpeter's theory of the entrepreneur can be summarized by quoting Kishor Thanawola in a 1994 article about Schumpeter's unexplored relevance to changing institutional frameworks: "It is clear that we have come a long way from Schumpeter's economic development which starts endogenously with entrepreneurs who destroy static economic circular flow by introducing new combinations" (Thanawola 1994, p.361).

Therefore, neither the neoclassical school nor the Austrian school discuss the question of how the entrepreneurial function is embedded in different types of economic structures or business patterns, at both micro and macro levels, thus leaving the relationship between economic structures and entrepreneurial success un-theorized. There is a large literature on entrepreneurship, yet it seldom addresses the relationship between economic structures or business patterns and entrepreneurship based on transaction cost, division of labor and specialization. Recently, Yang-Ng (1993) appear to provide a promising framework for revitalizing the concept of entrepreneurship by situating entrepreneurial activity and related economic structures or business patterns, and re-conceiving it as a collective social process.

According to Li et al. (2010), "a competitive market under globalization" in this paper can be defined as the market and production resources can be fairly mobilized among countries and regions, and also the general market mechanism and rules are prevailing during the process. This paper attempts to analyze the relationship between entrepreneurial activity and type of economic structures or business patterns, with special emphasis given to the social network of division of labor, the level of specialization, and transaction efficiency. The aim of this paper is to clarify the relationship between entrepreneurship and different types of economic structures or business patterns of a competitive market under globalization. This paper proposes that entrepreneurship and transaction cost are fundamentally interrelated in the determination of the level of division of labor and specialization, and identifies the key mechanisms of their co-evolution. Specifically, we argue that the entrepreneurship would be driven, in a given institutional system, by the desire to creatively bring about new products, new production processes, new business patterns and new economic institutional systems to improve material well-being to the members of society. Furthermore, we argue that there are particular evolutionary mechanisms that shape economic structures over time. The radical transformations in the conduct of business and the fundamental restructuring of existing business pattern and

operation are the different aspects of entrepreneurship. In this paper, it will investigate the evolution and impact of entrepreneurship on market exchange and restructuring economic institutional systems. Section 2 provides a theoretical model to investigate the evolution and impact of entrepreneurship service on the network of division of labor and the level of specialization. Section 3 extends the prospects of entrepreneurship service, particularly are about its prospects for exchange facilitation and its impact on the network of division of labor and the level of specialization. It also unveils the relationship among entrepreneurship, transaction costs and business restructuring. Section 4 will conclude the paper.

THE FRAMEWORK OF GENERAL EQUILIBRIUM MODEL OF TRANSACTION COST, SPECIALIZATION AND DIVISION OF LABOR WITH ENTREPRENEURSHIP UNDER GLOBALIZATION

Following the infra-marginal analysis (Yang and Ng, 1993), we consider a large economy with a continuum of consumer-producers of mass M . This assumption implies that population size is very large, and it can avoid an integer problem of the numbers of different specialists, which may lead to non-existence of equilibrium with the division of labor (see Sun, Yang, and Zhou, 1998). Each consumer-producer has identical, non-satiated, continuous, and rational preference represented by the following utility function:

$$u = f(x^c, y^c) \quad (1)$$

where $x^c \equiv x + (e + e^d) \cdot x^d$ and $y^c \equiv y + (e + e^d) \cdot y^d$ are the amounts of the two final goods that are consumed, x and y are the amounts of the two goods that are self-provided, x^d and y^d are the amounts of the two goods that are purchased from the market. Moreover, $f(\cdot)$ is assumed continuously increasing and quasi-concave, and for simplicity without losing generality, it is also assumed here that

$f(\cdot) = (x^c)^\alpha \cdot (y^c)^{1-\alpha}$ and for simplicity without losing generality we assume $\alpha = \frac{1}{2}$. Besides, $(e + e^d)$ represents the level and efforts of entrepreneurship

service which can come from self-provided management knowledge or skills, or by purchasing the entrepreneurship services from the market, like the consulting services or hiring the professional entrepreneur. Here, globalization indicates there are free mobility of commodities, production resources and services worldwide.

The amount of entrepreneurship service is shown as,

$$e^p = e + e^s = \text{Max}\{0, l_e - b\} \quad \text{and} \quad b \in (0,1) \quad (2)$$

where e^p is the total amount of the entrepreneurship services produced; e^s is the amount of the entrepreneurship services sold to the market; and b is the fixed learning cost of entrepreneurship services, and is related to the degree of economies of specialization.¹

Each consumer-producer's production functions are:

$$x^p = x + x^s = (l_x - a) \quad \text{and} \quad a \in (0,1),$$

$$y^p = y + y^s = (l_y - a) \quad \text{and} \quad a \in (0,1) \quad (3)$$

Here, x^p and y^p are the amounts of the two final goods produced, x^s and y^s are the amounts of the two final goods sold; a is the fixed learning and training costs in producing final goods, and is related to the degree of economies of specialization.

The endowment constraint for each individual is assumed to be endowed with one unit of working time, and is given as follows:

$$l_x + l_y + l_e = 1 \quad (4)$$

¹ The basic trade-off between gains from specialization (saving on the fixed learning costs) and transaction costs determines the equilibrium pattern of the division of labor in production for the whole economy. The division of labor occurs in equilibrium if and only if, which may legitimately be interpreted either as that the transaction efficiency is high enough for a fixed production technology and endowments, or as that the economies of specialization are sufficiently significant for given trading conditions, so that gains from the division of labor outweigh the costs of exchange between individuals of different specialization patterns.

where l_x , l_y , and l_e are the amount of labor allocated to the production of these goods and services. This system of production implies that each individual's labor productivity increases as she narrows down her range of production activities. As shown by Yang (2001, chapter 2), the aggregate production schedule for three individuals discontinuously jumps from a low profile to a high profile as each person jumps from producing three goods to a production pattern in which at least one person produces only one good (specialization). The difference between the two aggregate production profiles is considered as positive network effects of division of labor on aggregate productivity. This network effect implies that each person's decision of her level of specialization, or gains from specialization, depends on the number of participants in a large network of division of labor, while this number is determined by all individuals' decisions in choosing their levels of specialization (so-called the Young theorem, see Young, 1928). Since economies of specialization is individual specific (learning by doing must be achieved through individual specific practice and cannot be transferred between individuals), labor endowment constraint is specified for each individual, so that increasing returns are localized.

The budget constraint for an individual is,

$$p_e \cdot (k \cdot e^s - e^d) + p_x \cdot (k \cdot x^s - x^d) + p_y \cdot (k \cdot y^s - y^d) = 0 \quad (5)$$

$$k = K \cdot (1 + g) \quad \text{and} \quad g \in (0,1) \quad (6)$$

Here, p_x and p_y are the prices of good x and y ; and p_e is the price for purchasing entrepreneurship service. Besides, K is a general transaction efficiency coefficient, which represents the conditions governing transactions.² K relates to transportation conditions and the general institutional environment that affects transaction efficiency. Fraction $(1-K)$ of a good sold disappears in transit due to an iceberg transaction cost. Besides, we let g representing the level of Globalization, which can be evaluated by the mobility of commodity and resources, plus the standardization and generality of market mechanism and

² The specification of such iceberg transaction cost is a common practice in the equilibrium models with the trade-off between increasing returns and transaction costs (Krugman 1995). This specification avoids notoriously formidable index sets of destinations and origins of trade flows.

rules. Hence, k is the transaction efficiency coefficient with the concern of the level of Globalization.

Due to the continuum number of individuals and the assumption of localized increasing returns in this large economy, a Walrasian regime prevails in this model. The specification of the model generates a trade-off between economies of division of labor and transaction costs. The decision problem for an individual involves deciding on what and how much to produce for self-consumption, to sell and to buy from the market. In other words, the individual chooses nine variables $x_i, x_i^s, x_i^d, y_i, y_i^s, y_i^d, e_i, e_i^s, e_i^d \geq 0$. Hence, there are $2^9 = 512$ possible corner and interior solutions.

Since corner solutions are allowed in our model, standard marginal analysis of interior solution does not work. We need a three-step infra-marginal analysis. In the first step a set of candidates for an individual's optimum decision is identified by ruling out all inefficient interior and corner solutions. Possible network structures of division of labor and related transactions can then be identified as combinations of corner solutions. This first step of infra-marginal analysis will be done solve for all possible corner solutions and the local equilibrium in each market structure that is a combination of compatible corner solutions, using marginal analysis. Then, we will use total cost-benefit analysis to figure out under what condition, which local equilibrium is a general equilibrium.

The set of candidates for each individual's optimum decision includes many corner and interior solutions. In order to narrow down the list of the candidates, Yang and Ng (1993), and Wen (1998) used the Kuhn-Tucker conditions to establish the following lemma:

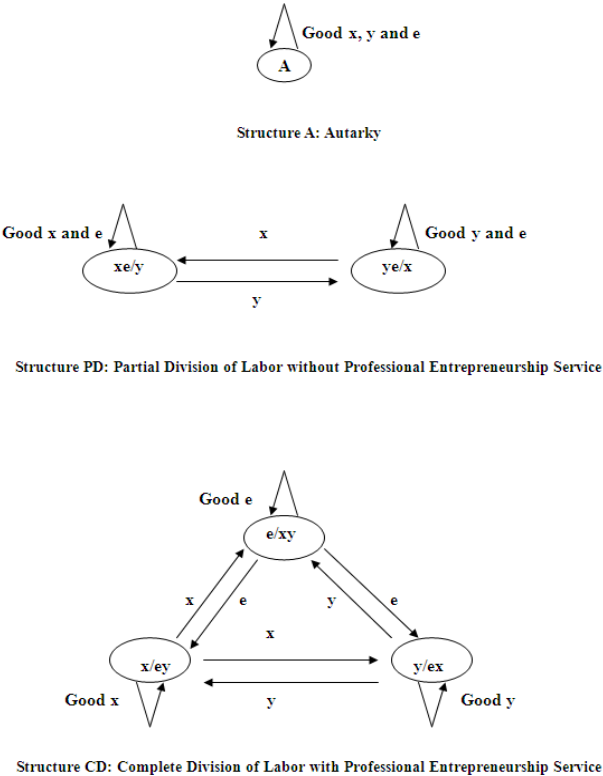
LEMMA 1: *Each individual sells at most one good, but does not buy and sell the same good, nor buys and self-provides the same good at the same time.*

We define a "Configuration" as a combination of zero and positive variables which are compatible with Lemma 1. When labor trade and bundling are allowed, there are six configurations from which the individuals can choose. A combination of all individual's configurations constitutes a "Market Structure" (or "Structure" for short). After examining all structures that might occur in equilibrium, there will be three types of structures: 1. Structure A: Autarky; 2. Structure PD: Partial Division of Labor with

Professional Entrepreneurship Service; 3. Structure CD: Complete Division of Labor with Professional Entrepreneurship Service (see Figure 1).

According to Sun, Yang, and Zhou (1998, see also Yang, 2001, chapter 13), a general equilibrium exists for a general class of the models of which the model in this paper is a special case under the assumptions that the set of individuals is a continuum, preferences are strictly increasing and rational; and both local increasing returns and constant returns are allowed in production and transactions. A general equilibrium in this model is defined as a set of relative prices of goods and all individuals' labor allocations and trade plans, such that, (1) Each individual maximizes her utility, that is, the consumption bundle generated by her labor allocation and trade plan maximizes her utility function for given prices; (2) All markets clear.

Figure 1. Configurations and Market Structures



Since the optimum decision is always a corner solution and the interior solution is never optimal according to Lemma 1, we cannot use standard marginal analysis to solve for a general equilibrium. We adopt a three-step approach to solving for a general equilibrium. The first step is to narrow down the set of candidates for the optimum decision and to identify configurations that have to be considered. We can identify structures from compatible combinations of configurations. In the second step, each individual's utility maximization decision is solved for a given structure. The utility equalization condition between individuals choosing different configurations and the market clearing conditions are used to solve for the relative price of traded goods and numbers (measure) of individuals choosing different configurations. The relative price and numbers, and associated resource allocation are referred to as corner equilibrium for this structure. General equilibrium occurs in a structure where, given corner equilibrium relative prices in the structure, no individuals have an incentive to deviate from their chosen configurations in this structure. In the second step, we can substitute the corner equilibrium relative prices into the utility function for each constituent configuration in the given structure to compare the utility between this configuration and any alternative configurations. This comparison is called a total cost-benefit analysis. The total cost-benefit analysis yields the conditions under which the utility in each constituent configuration of this structure is not smaller than any alternative configuration. With the existence theorem of general equilibrium proved by Sun, Yang and Zhou (1998), we can completely partition the parameter space into subspaces, within each of which the corner equilibrium in a structure is a general equilibrium. As parameter values shift between the subspaces, the general equilibrium will discontinuously jump between structures. The discontinuous jumps of structure and all endogenous variables are called infra-marginal comparative statics of general equilibrium. The three steps constitute an infra-marginal analysis.

Next, for the purpose of simplicity we use one example to illustrate how marginal analysis can be conducted to solve for the corner solution in each configuration and for the corner equilibrium in each structure. The example is the corner equilibrium of structure CD which involves the division of the population among configurations (x/ye), (y/x) and (e/xy).

In Structure CD, the decision problem for an individual choosing configuration (x/ye) is:

$$\text{Max: } u_x^{CD} = \sqrt{e^d xy^d} \quad (7)$$

subject to the following constraints,

$$x + x^s = l_x - a, \quad l_x = 1 \quad \text{and}$$

$$p_x \cdot k \cdot x^s = p_y \cdot y^d + p_e \cdot e^d \quad (8)$$

Similarly, the decision problem for an individual choosing configuration (y/xt) is:

$$\text{Max: } u_y^{CD} = \sqrt{e^d x^d y} \quad (9)$$

which is subject to the following constraints,

$$y + y^s = l_y - a, \quad l_y = 1 \quad \text{and}$$

$$p_y \cdot k \cdot y^s = p_x x^d + p_t t^d \quad (10)$$

The professional individual who providing the entrepreneurship service is denoted by configuration (e/xy), and has the following decision problem:

$$\text{Max: } u_e^{CD} = \sqrt{e^2 x^d y^d} \quad (11)$$

and is subject to the constraints:

$$e + e^s = l_e - b, \quad l_e = 1 \quad \text{and}$$

$$p_e \cdot e^s = p_x \cdot x^d + p_y \cdot y^d \quad (12)$$

The two utility equalization conditions across three configurations yield the corner equilibrium relative prices of goods x, y over service t.

$$\frac{p_x}{p_e} = \frac{p_y}{p_e} = \frac{3(1-b)^{\frac{4}{3}}}{4 \cdot \sqrt[3]{4}(1-a)} \cdot [K(1+g)]^{\frac{1}{3}} \quad (13)$$

The two independent market clearing conditions for goods x and y, ³ yield the corner equilibrium relative numbers of specialists producing goods x, y, and e,

$$\frac{M_e}{M_x} = \frac{M_e}{M_y} = \frac{(1-b)^{\frac{1}{3}}}{\sqrt[3]{4}} \cdot [K(1+g)]^{\frac{1}{3}} \quad (14)$$

³ The other market clearing condition is not independent due to the Walras' law.

where M_x is the number of x specialist-employers choosing (x/ye); M_y is the number of specialist producers of good y choosing (y/x); and M_e is the number of people who provide entrepreneurship service, which also can indicate of the scale of entrepreneurship service the market demanded. The relative numbers of specialists, together with population size identity $M_x+M_y+M_e=M$, will yield the corner equilibrium numbers of different specialists. Plugging relative prices into an indirect utility function of any of three configurations yields the per capita real income in structure CD as:

$$u^{CD} = \frac{\sqrt[3]{4(1-a)} \cdot (1-b)^{\frac{2}{3}}}{12} \cdot [K(1+g)]^{\frac{2}{3}} \tag{15}$$

Following this above procedure, we can solve the corner equilibria for all three structures. Information about such solutions of corner equilibria from three economic structures is summarized in the following Tables 1.

Table 1: The Corner Equilibria of Three Market Structures

Market Structures	A	PD	CD
Relative Price	N/A	$\frac{p_x}{p_y} = 1$	$\frac{p_x}{p_e} = \frac{p_y}{p_e} = \frac{3(1-b)^{\frac{4}{3}}}{4 \cdot \sqrt[3]{4(1-a)}} \cdot [K(1+g)]^{\frac{1}{3}}$
Number of Specialists	N/A	$\frac{M_x}{M_y} = 1$	$\frac{M_e}{M_x} = \frac{M_e}{M_y} = \frac{(1-b)^{\frac{1}{3}}}{\sqrt[3]{4}} \cdot [K(1+g)]^{\frac{1}{3}}$
Per Capita Real Income	$u^A = \frac{1}{2} - a$	$u^{PD} = \frac{(1-a-b)^{\frac{3}{2}}}{3\sqrt{3}} \cdot [K(1+g)]^{\frac{1}{2}}$	$u^{CD} = \frac{\sqrt[3]{4(1-a)} \cdot (1-b)^{\frac{2}{3}}}{12} \cdot [K(1+g)]^{\frac{2}{3}}$

GENERAL EQUILIBRIUM AND ITS INFRA-MARGINAL COMPARATIVE STATICS

We now consider the third step of infra-marginal analysis. Based on the first two steps of the infra-marginal analysis, we will partition the parameter space into subspaces within each of which a particular structure occurs in equilibrium.

For any given structure, each individual can plug the corner equilibrium prices into her indirect utility functions for all configurations including those that are not in this structure. She has no incentive to deviate from a constituent configuration in this structure if this configuration generates a utility value that is not lower than in any alternative configurations under the corner equilibrium values of prices in this structure. Each individual can conduct such total cost-benefit analysis across configurations. Let indirect utility in each constituent configuration not be smaller than in any alternative configurations under the corner equilibrium prices in this structure. We can obtain a system of semi-inequalities that involves only parameters. This system of semi-inequalities defines a parameter subspace within which the corner equilibrium in this structure is the general equilibrium. This total cost-benefit analysis is very tedious and cumbersome. Fortunately, the Yao Theorem (see Yang 2001, chapter 6, p.156) can be used to simplify this total cost-benefit analysis. It states that in an economy with a continuum of ex ante identical consumer-producers having rational and convex preferences and production functions displaying individual specific economies of specialization, a Walrasian general equilibrium exists and it is the Pareto optimum corner equilibrium. Here the Pareto optimum corner equilibrium is a corner equilibrium that generates the highest per capita real income. Since our model in this paper is a special case of the above mentioned general class of models, the individuals have no incentive to deviate from their chosen constituent configurations in a structure if and only if individuals' corner equilibrium utility value in this structure is not lower than that in any other corner equilibria. With the Yao theorem, we can then compare corner equilibrium per capita real incomes across all structures, and the comparison partitions the four-dimension (a, b, K, g) parameter space into several subspaces, within each of which one corner equilibrium is the general equilibrium. As parameter values shift between different subspaces, the general equilibrium discontinuously jumps between corner equilibria. This is referred to as infra-marginal comparative statics of general equilibrium. The results are

shown at Table 2.

Table 2: General Equilibrium and Its Infra-marginal Comparative Statics when $b \rightarrow 0$ and $g \rightarrow 1$

a	$a_1 \leq a < 0.5$			$0 \leq a < a_1 \equiv f(b)$	
K	$0 < K < K_1$	$K_1 < K < K_3$	$K_3 < K < 1$	$0 < K < K_2$	$K_2 < K < 1$
Equilibrium Structure	A	PD	CD	A	CD

Here,
$$K_1 \equiv \frac{27(1-2a)^2}{4(1-a-b)^3} \quad , \quad K_2 \equiv \frac{3\sqrt{6}(1-2a)^{\frac{3}{2}}}{(1-a)^{\frac{3}{2}}(1-b)}$$

$$K_3 \equiv \frac{256(1-a-b)^9}{27(1-a)^6(1-b)^4} \quad , \quad \text{and } a_1 \equiv f(b) \text{ can be implicitly resulted from the}$$

equation $K_3 - K_1 = 0$.

Table 3: General Equilibrium and Its Infra-marginal Comparative Statics when $K \rightarrow 1$ and $g \rightarrow 1$

a	$0 < a < 0.5$		
b	$0 < b < b_2$	$b_2 \leq b < b_1$	$b_1 \leq b < 1$
Equilibrium Structure	A	CD	PD

$$\text{Here, } b_1 \equiv 1 - \left[\frac{6(1-2a)}{4^{\frac{1}{3}} \cdot (1-a)} \right]^{\frac{3}{2}}, \text{ and } b_2 \equiv 1 - a - \left[\frac{27^{\frac{1}{2}} \cdot (1-2a)}{2} \right]^{\frac{2}{3}}.$$

Moreover, when $a \rightarrow 0$, the equilibrium structure will always be Structure A: Autarky.

Next, let's first examine the change of per capita real income in response to changes in transaction efficiency, in fixed learning cost, and entrepreneurship service, which results in the following inequalities,

$$\begin{aligned} \frac{du^A}{da} &< 0; \\ \frac{\partial u^{PD}}{\partial a} &< 0, \quad \frac{\partial u^{PD}}{\partial b} < 0, \quad \text{and} \quad \frac{\partial u^{PD}}{\partial K} > 0, \quad \frac{\partial u^{PD}}{\partial g} > 0; \\ \frac{\partial u^{CD}}{\partial a} &< 0, \quad \frac{\partial u^{CD}}{\partial b} < 0, \quad \text{and} \quad \frac{\partial u^{CD}}{\partial K} > 0, \quad \frac{\partial u^{CD}}{\partial g} > 0 \end{aligned} \quad (16)$$

which imply that to improve the per capita real income level, we can either by increasing the transaction efficiency, or by reducing the fixed learning cost of the final goods or of the entrepreneurship service. Moreover, from Table 2, Table 3, and the inequalities of (16), it also indicates that, if the transaction efficiency of entrepreneurship service from business pattern PD to the new one CD is improved, then the real income level will be increased when the transformation is completed. However, if the fixed learning cost of final goods and/or the fixed learning cost of entrepreneurship service are too high, then people will prefer self-provide the entrepreneurship service instead of purchasing from the market, and the social network of division of labor and the level of specialization will also retain at lower level. Besides, the improvement of the level of globalization and the general transaction efficiency coefficient will increase the level of division of labor and also the per capita real income level.

Similarly, if we examine the change of relative prices with the changes in transaction efficiency, in the fixed learning cost of final goods, and in the fixed learning cost of

entrepreneurship service, there will be the following results,

$$\begin{aligned}\frac{\partial(p_e / p_x)}{\partial a} &= \frac{\partial(p_e / p_y)}{\partial a} < 0, & \frac{\partial(p_e / p_x)}{\partial b} &= \frac{\partial(p_e / p_y)}{\partial b} > 0, \\ \frac{\partial(p_e / p_x)}{\partial K} &= \frac{\partial(p_e / p_y)}{\partial K} < 0, & \text{and} & \frac{\partial(p_e / p_x)}{\partial g} = \frac{\partial(p_e / p_y)}{\partial g} < 0\end{aligned}\quad (17)$$

These inequalities imply there are negative correlation between relative price $\frac{P_e}{P_x}$ or

$\frac{P_e}{P_y}$ with the transaction efficiency and the fixed learning cost of final goods, while there is

a positive correlation with the fixed learning cost of entrepreneurship service. Hence, if the transaction efficiency is improved and the fixed learning cost of entrepreneurship service is declining, then the price of entrepreneurship service can be cheaper.

Following Sun, Yang and Yao (1999; see also Yang 2001, chapter 6), it can be shown that a general equilibrium in our model is always Pareto optimal as long as nobody can block free entry into any sector and nobody can manipulate relative prices and numbers of specialists. This first welfare theorem in our model with entrepreneurship and endogenous network size of division of labor implies that the very function of market is to coordinate impersonal networking decisions in restructuring existing business pattern, and to fully utilize network effects of division of labor on aggregate productivity, net of transaction costs. Entrepreneurship in a competitive market under globalization is an effective way to promote division of labor and productivity progress. The above analysis leads to the following proposition.

PROPOSITION 1:

- i. *As transaction efficiency is improved, the equilibrium level of division of labor increases, thereby the real income level is also increased. Transaction efficiency has a negative correlation with the relative price of the entrepreneurship service in term of the final goods.*
- ii. *If the fixed learning cost of entrepreneurship service is getting lower, it will*

simultaneously improve the real income level, promote the level of division of labor and productivity progress, and offer the flexibility to charge cheaper price for the entrepreneurship service.

- iii. The fixed learning cost of final goods has a negative impact on per capita real income, and has a negative correlation with the relative price of the entrepreneurship service in term of the final goods.*
- iv. The improvement of the level of globalization and the general transaction efficiency coefficient will increase the level of division of labor and also the per capita real income level.*

Proposition 1 implies, as the fixed learning cost of entrepreneurship service declined, there will be more flexibility and space to charge cheaper price for this service, yet the real income level is still increasing. It further proves Schumpeter's description, which regards the entrepreneur as a creative innovator and an innovation is as the commercialization of innovation. These entrepreneurs would be driven, in a given institutional system, by the desire to creatively bring about new products, new production processes, new business patterns and new economic institutional systems to increase the per capita real income. It also helps to explain the reason why along the commercialization and modernization of human society, there are substantially increasing amount of professional entrepreneurship service available for business world, and it has become more affordable for more business companies. Besides, Proposition 1 also indicates that with the improvement of transaction efficiency, the professional entrepreneurship service is more preferred and profitable, which is probably the reason why so many companies are presently enthusing about purchasing the professional entrepreneurship service from the consulting firms or by hiring the professional entrepreneur. Moreover, also with the improvement of transaction efficiency and commercialization, the professional entrepreneurship service will bring about new business patterns and new economic institutional systems to improve the well-being to the members of society. Besides, the improvement of the level of globalization and the general transaction efficiency coefficient will increase the level of division of labor and also the per capita real income level.

Since the general equilibrium in our model is always Pareto optimal, the policy implication of our model is straightforward. If the entrepreneurship in a competitive

market under globalization is efficient, it will ensure that network effects of division of labor can be fully exploited when the gains from the division of labor outweigh the costs of exchange between individuals of different specialization patterns with the different fixed learning costs. Hence, the entrepreneurship service in a competitive market under globalization can promote aggregate productivity by enlarging the scope for trading off network effects of the division of labor on aggregate productivity against transaction costs.

CONCLUSIONS

This paper develops a Walrasian general equilibrium model based on transaction cost and specialization to investigate the evolution and role of entrepreneurship in a competitive market under globalization. Since the general equilibrium in our model is always Pareto optimal as long as nobody can block free entry into any sector and nobody can manipulate relative prices and numbers of specialists. It further proves Schumpeter's description, that the entrepreneurship service would be driven by the desire to creatively bring about new products, new production processes, new business patterns and new economic institutional systems to increase the per capita real income. It also explains the reason why along the commercialization and modernization of human society, there are substantially increasing amount of professional entrepreneurship service available for business world, and also becoming more affordable for more business companies. With the improvement of transaction efficiency, the professional entrepreneurship service is more preferred and profitable, and the professional entrepreneurship service will bring about new business patterns and new economic institutional systems to improve the well-being to the members of society. If the entrepreneurship in a competitive market under globalization is efficient, it will ensure that network effects of division of labor can be fully exploited when the gains from the division of labor outweigh the costs of exchange between individuals of different specialization patterns with the different fixed learning costs. Hence, the entrepreneurship service in a competitive market under globalization can promote aggregate productivity by enlarging the scope for trading off network effects of the division of labor on aggregate productivity against transaction costs. To business practitioners, this model suggests the entrepreneurship service is a key element of business viability during that a major transition took place in human activity. The improvement of

the level of globalization and the general transaction efficiency coefficient will also increase the level of division of labor, as well as the per capita real income level and well beings among participants.

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Global Administrative Law and Globalization: From the Perspective of International Trade Administrative Litigation¹

Shudi Zhu

(Fudan University, Law School, Shanghai, 200433, China)

Abstract: Administrative litigation in international trade is a specific type of lawsuit, which comes into being during the process of the blending of international law and domestic law, and of the integration of public law and private law. In terms of legal system in China, administrative litigation in international trade refers to the specified, foreign, international lawsuits and systems that are admitted and judged by the court, so that the aggrieved parties' international trade interests would be protected and remedied under the framework of the WTO regime. By analyzing the structure of the regime, the subjects, and interests to study their impact, administrative litigation in international trade embraces such functions as having international legal obligation fulfilled, having administrative disputes in international trades settled, and achieving remedies for international trade interests, etc.

Key Words: WTO laws, the blending of Laws, administrative litigation, international trade administrative litigation

Introduction

The blending of laws and the appearing of international trade administrative litigation

Contemporarily, China is a big developing country in the process of reforming and society transition. Driven by the force of economic globalization², the government and the market are both adjusting to each other, and their relationship consist the mainstream rhythm in the period of society transition. Under the influence of all these realistic forces, the situation for our country to face changes, and also, the legal system in such international environment is undergoing a change of time, the main aspect of which is presented by the blending of international law and domestic law, and the blending of public law and private law. Affected by these above two aspects, international trade administrative litigation in our country has been formed and will continue to develop.³

First of all, the blending of international law and domestic law in the process of

economic globalization is an external factor to promote international trade administrative litigation in our country. In the process of economic globalization, economic integration is increasing day by day, and most countries, intentionally or unintentionally, tend to protect their own domestic industry through adjustment of foreign-related economics by their governments, which will sometimes leads to the failure of regulation of domestic law. Hence, under these circumstances, it is quite necessary to turn to the regulation of international law, while international law has its own requirements to regulate domestic affairs in these related areas. The interaction between these two aspects of blending provides a realistic driving force for international law and domestic law to merge with each other. With such an overwhelming trend, the blending process includes two sides – on the one side, when countries are concluding an international law, or treaty, the concepts, principles and systems in the domestic laws of sophisticated western countries, such as the United States and Britain, which have stronger economic strength than others, will be transformed into an integral part of international law. On the other side, in order to join the world political circle, and to line with other sophisticated countries, developing countries find it necessary to get involved in the system of existed international law, and thus they are tended to formulate domestic laws because of the burden they bear to fulfill its international legal obligations. In this way, the content of international law becomes an integral part of domestic law of those developing countries, the process of which is called by us as domestication of international law.⁴ The conclusion of WTO law and its implementation is a typical example of the blending between international and domestic law. Not only does our country create, modify and repeal a series of laws in the area of legislation in order to fulfill WTO obligations⁵, but should also maintain or set up a corresponding system of international trade legal remedy in accordance with the requirements of WTO law (such as GATT1994 Article X, etc)⁶. In this context, the three judicial interpretations issued by Supreme People's Court are a typical introduction of international trade administrative litigation system.⁷

Secondly, in the process of optimizing the relationship between the government and the market, the blending of public and private law is a key domestic factor to promote international trade administrative litigation in our country. Throughout hundreds of years history of economic development, two opposing forms of social organization, the state and the market, are intertwined with each other. During this course, the "market failure" phenomenon and the "government failure" phenomenon appeared one after the other, which compelled them to more and more complement and affect each other. Government,

which is used to act as “Night Watchman” with regard to market management, has to enhance the regulation in some field of market economy, due to the fact that market economy bears inherent defects, and these defects are gradually appearing.⁸ Public power gets involved in the private field when the government imposes regulation on the market. On the one hand, the legal result for government to intervene into the economy can be interpreted as “the publicization of private law”. For example, the freedom of private contracts can be restricted by public law, and the absolute private property can be bound by public law. On the other hand, the law requests that the government should implement public administrative management through private means such as contract, which is called by us as “the privatization of public law”. The private law, which adjusts the market economy, and the public law, which regulates government behaviors, are intervene and blending with each other.⁹ In modern rule-of-law society, laws possess the highest authority; both of the economic entity and the government should abide by law and function within legal framework. Therefore, when the government exerts its public power to intervene in economic activities, its activity should be in accordance with the provisions of the law, which is called, namely, “Administration according to Law”. From a legal point of view, international trade administration in modern society is essentially a kind of legal management, which means public administrative power regulates international trade administrative activity according to the authority of law. Among these laws, international trade administrative law consists of laws and regulations involved in the management of international trade. Based on the legal principles that read “no remedy, no right”, “there is no power free from supervision”; international trade administrative law is accompanied with international trade remedy law. These legal norms are embodied in the three judicial interpretations of the Supreme People's Court, and other legal provisions with regard to administrative remedy such as Administrative Litigation Law, Administrative Reconsideration Law, and so on.

As stated above, the blending of international law and domestic law, and the integration of public law and private law give rise to the appearing of international trade administrative litigation; international trade administrative litigation is a key component of administrative litigation system in terms of legal practice and legal system in our country. International trade administrative litigation has gradually appeared. The related research in the regime of international trade administrative litigation boomed when our country got its accession to the WTO, and the works are beyond calculation.¹⁰ However, after a preliminary statistical analysis, we found that although these studies provided a

wealth of opinion and materials, we still have a lot of work to do –not only can we conduct a systematic, comprehensive and in-depth research into the administrative remedy system, but we can also fulfill the demand of providing a theory to guide legal practice which is of substantive complexity and diversity. Apart from the above-mentioned analysis of the basis for the generation of international trade administrative litigation, this thesis mainly focuses on outlining a whole overview of international trade administrative litigation in the existing legal system of a administrative litigation in our country, so that we can have a overall ontological view of international trade administrative litigation. To achieve this purpose in the limited time and space,

This article mainly lays emphasis on defining the meaning of international trade administrative litigation, recognizing multiple properties of international trade administrative litigation, describing multi-dimensional structure of, and grasping various functions of international trade administrative litigation.

I. The Concept of International Trade Administrative Litigation

When referring to the influence of the blending of laws on the remedy system of our country, on the change of the three judicial interpretations issued by Supreme People's Court, and on the reforming of the administrative litigation system in our country, some scholars may interpret this topic from the view of "judicial review", other may recognize it from aspect of "international trade administrative lawsuits", and the rest may elaborate it from the perspective of "administrative litigation", etc. The different interpretation results from the various understanding of related legal system and basic theory, such as the concept of "judicial review" and "administrative litigation", etc. From my point of view, if we choose to analyze the topic from the angle of administrative litigation, we should highlight the particularity of such a special kind of administrative litigation, and thus it is more reasonable for us to adopt the perspective of "international trade administrative litigation". It is because, firstly, if we conceive that "administrative litigation" is an integral part of "judicial review"¹¹, then it does not prevent the communication between the international trade administrative litigation and the "judicial review" at home and abroad. Secondly, in the realm of administrative litigation in our country, the "international trade administrative lawsuits" are definitely an integral part of international trade administrative litigation. Thirdly, based on the system of administrative litigation in our country, the usage of "International Trade Administrative

litigation" is coordinate with the whole system of administrative litigation, and associated with other administrative litigations as well. Then unnecessary conversion of usage can be avoided between the theoretical field and the practical field. So, it is quite essential to adopt the term "international trade administrative litigation" to reflect social reality. At this point, in the context of legal system in our country, international trade administrative litigation refers to the activity and system for People's Courts to try and rule international trade administrative lawsuits so as to protect and remedy the international trade rights and interests of aggrieved party under the framework of WTO regime.¹²

In view of the rigid binding effect of WTO rules on the member governments, and the compulsory jurisdiction of WTO / DSB (dispute settlement mechanism); In order to protect the benefits of our country and related economic entities earnestly and settle international economic and trade disputes legally and reasonably, the status of a new dispute resolution mechanism under the global administrative law regime — international trade administrative litigation, is becoming more and more obvious.

In China, international trade administrative litigation is a special type of administrative litigation. First of all, international trade administrative cases are tried in international trade administrative litigation. According to Article 1 of *Provisions of the Supreme People's Court on Several Issues Concerning the Hearing of International Trade Administrative Cases*, four kinds of international trade administrative cases are heard by people's court; they are: administrative cases relating to international goods trade; administrative cases relating to international service trade; intellectual property administrative cases relating to international trade; other international trade administrative cases.¹³ Secondly, as an international trade remedy system for WTO members, the international trade administrative litigation, which is subject to the impact of WTO regime, appeared after China's accession to the WTO.¹⁴ Thirdly, international trade administrative case are reviewed during the international trade administrative litigation; that is, the main type of cases in this proceeding is administrative cases occurred in the field of international trade according to the provision of *Foreign Trade Law*. Fourthly, the purpose of international trade administration litigation is to protect the free rights and interests in international trade. These rights and interests about freedom are mainly protected by foreign trade rules and regulations in our country, and are also subject to the impact of international law, such as WTO law. In addition, international trade administrative litigation is comparatively particular in terms of law application and

ruling.

Legal norms of international trade administrative litigation based on the domestic level can be divided into two parts, procedure norms and entity norms. The former includes "*PRC Foreign Trade Law*", "*PRC Customs Law*", "*PRC Administration of Foreign-funded Financial Institutions Regulations*", "*PRC Customs Protection of Intellectual Property Rights Regulations*", "*PRC Provisions on the Merger and Division of Enterprises with Foreign Investment*", "*Anti-dumping Regulation of The People's Republic of China*", "*PRC Anti-subsidy Regulations*", "*PRC Safeguard Measures Regulations*" and other relevant provisions; the latter includes "*Administrative Litigation Law*" and the judicial interpretations of Administrative Litigation Law, as well as the above-mentioned three judicial interpretations issued by Supreme People's Court, and so on.¹⁵

Indirect norms on the international level are constituted mainly of the WTO law, including *1994 General Agreement on Tariffs and Trade (GATT 1994)*, *Agreement of technological barrier to Trade*, *Anti-Dumping Agreement*, *Agreement on Subsidies and Countervailing Measures*, *Agreement on Safeguards*, *General Agreement on Trade in Services (GATS)*, *Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)*, *Understanding on Rules and Procedures Governing the Settlement of Disputes*, as well as *Protocol On The Accession Of The People's Republic Of China*, etc. Apart from statutes, case law of WTO dispute settlement body (DSB) should also be identified as sources of law on the international level due to its indirect influence on domestic ruling of international trade administrative litigation.

II. The Multiple Natures of International Trade Administrative Litigation

As a product of blending of laws, the reason and background for international trade administrative litigation to come into being are different from those of other administrative litigations;¹⁶ in addition, all these facts give international trade administrative litigation multiple natures. An accurate understanding of these attributes is of great significance for trial practice and improving the legal system.

A. the Specialized nature of International Trade Administrative Litigation

Modern government is administrative government; most part of modern life can be

seen as the product of the executive authorities' activity.¹⁷ Legal norms and principles about the regulation of specialized administrative agencies' activity constitute various departments of administrative law; and the administrative law theory on it constitutes a sub-administrative law. Hence, the theoretical system of administrative law can be divided into two parts: the general theory of administrative law and sub-theory of administrative law. The general theory of administrative law mainly focuses on the general system of administrative law, while the sub-theory of administrative law dwells on specific fields of administrative law matters, such as educational administration law, district administration law, and customs administration law, and so on.¹⁸ In civil litigation law, there exists special procedural law in maritime litigation. Then, what about administrative litigation law? The three judicial interpretations issued by Supreme People's Court consist of a special administrative litigation system, and international trade administrative litigation is a particular type of administrative litigation in our country. This is determined by the specialized nature of international trade administrative litigation. Under the present framework of Administrative Law and Administrative Litigation Law in our country, this nature is obvious through the comparison with other kinds of administrative litigation.

International trade administrative cases are tried and ruled in the procedure of international trade administrative litigation. *Provisions of the Supreme People's Court on Several Issues Concerning the Hearing of International Trade Administrative Cases* points out the scope of review of international trade administrative cases, which includes the three types of administrative cases, that is, international trade in goods, international trade in services, and international trade-related intellectual property right cases, as well as "other international trade administrative cases" determined in combination with other necessary legal documents. This makes international trade administrative litigation special in character due to its scope of review, which is thus clearly different from other administrative litigations.¹⁹

Under the decisive influence of scope of review, courts turn to laws, regulations and rules that adjust international trade relationship to protect and supervise administrative authority in the field of international trade, and to protect rights and interests of administrative relative person in the field of international trade. All these characters, whether concrete or abstract, constitute the specialized nature of international trade administrative litigation together, which means that the Courts hear this special kind of

administrative litigation and resolve disputes under the regime of WTO rules.

B. the Foreign-related nature of International Trade Administrative Litigation

In general sense, the foreign-related nature of "foreign-related administrative litigations" refers to the subject / object of a certain legal relationship or the fact that causes the legal relationship, in essence, involves the impact of other international entity; or in other words, above-mentioned elements was rated as "foreign" due to the fact that these elements are related with some other international law subjects and are entitled with some positive international legal significance, that is, for example, the entity is subject to some other state's jurisdiction. The executive branch of our country should respect other country's sovereignty and laws.

The foreign-related nature of international trade administrative litigation refers to the subject or object of international trade administrative litigation relationship, or the fact that causes the international trade administrative litigation relationship are involved with provisions of other international law entity, or entitled with some positive international legal significance by other international law entity. All these elements entitle the international trade administrative litigation with a different fundamental nature from other general administrative litigation.

First of all, the interested parties of international trade administrative litigation legal relationship are foreign-related.²⁰ Let's analyze the structure of the subject of international trade administrative litigation at first. International trade includes import and export. Combined with the realistic practice, international trade market entities can be logically divided into domestic importers and domestic exporters; foreign importers and foreign exporters; domestic import competitors and domestic import beneficiaries; foreign import competitors and foreign import beneficiaries. According to P.R.C. foreign trade law, administrative litigation law and related provisions of judicial interpretations, domestic importers, domestic exporters, foreign exporters domestic import competitors and domestic import beneficiaries have the potential to become interested parties of international trade administrative litigation. Among them, the most significant foreign-related parties are domestic import competitors and domestic import beneficiaries, when they bring about lawsuit against foreign exporters as competent foreign trade administrative authority, and as well as other complex specific situation to be determined

in the international trade practice.

Secondly, the content of international trade administrative litigation legal relationship, i.e. the rights and obligations, are foreign-related. The background, causes, objectives, contents, functions, etc. of international trade administrative litigation in our country are closely related to the China's statutory obligation with her accession to WTO. Courts in my country can not rule international trade cases directly according to WTO law as the vast majority of WTO members, but can only apply the relevant domestic legal provisions after transformation instead; however, the WTO law concept of due process, principle of non-discrimination, as well as the cases of WTO Dispute Settlement Body, has special influence over the rights and obligations of interested parties in international trade litigation when our domestic legal system is far from perfection, and when there exists fuzzy area in the provisions of domestic law.²¹ Although the parties of international trade administrative litigation can not directly invoke WTO law to advocate their own interests, considering the impact of WTO law, we can conclude that the entire body of international trade market is under the protection of WTO law, which means that a weak foreign-related nature can be found everywhere.²²

C. the International nature of International Trade Administrative Litigation

The international nature of international trade administrative litigation refers to the fact that the scope of its influence is beyond country, which means that international trade administrative litigation possesses international nature in the relationship between our country and other countries, our country and other international organizations. At the level between our country and other countries, international trade administrative litigation deals with international trade relationship between market entities in our country and market entities in other countries. When determining the status of subjects and the application of laws, courts should still consider the legal system of foreign parties' host country. In an environment of economic globalization, there exist close contact in the area of national economies and markets among countries; when our country sets down to regulate and adjust international trade and economic relations at the domestic level, the influence will spread to economic status of other countries. It is just for this reason that related countries tend to take trade protection measures against international trade administrative litigations of our country so as to achieve their own national economic interests. At this point, the international nature of international trade administrative

litigation can not be found in other type of foreign-related administrative litigations.

At the level between our country and other international organizations, international trade administrative litigation in our country is a system designed to meet with the commitment due to the accession of our country to WTO. Of course, it is also because WTO requires our country to set up an international trade judicial remedy system that international trade administrative litigation system in China comes into being. Thus, from the very beginning, international trade administration litigation system in our country is subject to the decisive influence of international level. In addition, in the practice of international trade administrative litigation, even if the dispute settlement mechanism of WTO doesn't make a binding review like the trial of second instance, still the decision of WTO dispute settlement body can not be ignored by legal practice of a rational and mature international trade administrative litigation system. The attention paid to the decision of dispute settlement mechanism reflects the international influence of WTO on international trade administrative litigation, which entitles this special kind of administrative litigation with unique international nature.

III. Multi-dimensional Structure of International Trade Administrative Litigation

Multi-dimensional structure of international trade administrative litigation is formed in the course of blending of laws, and reflects the nature of international trade administrative litigation. Such a structure can be recognized from various perspectives, including the perspective of system structure, of subject structure, and of benefit structure; thus, we can have an ontological view over the basic architecture of international trade administrative litigation.

A. the System structure of International Trade Administrative Litigation

The system structure of international trade administrative litigation refers to the overall structure of all the provisions on international trade administrative litigation. The system structure of international trade administrative litigation is consisted of domestic level system and international level system, direct system and indirect system, and so on.

The domestic level of direct international trade administrative litigation system is

consisted of two parts: the substantive part and the procedure part. The former includes "PRC Foreign Trade Law", " PRC Customs Law", "PRC Administration of Foreign-funded Financial Institutions Regulations", "PRC Customs Protection of Intellectual Property Rights Regulations ", "PRC Provisions on the Merger and Division of Enterprises with Foreign Investment", "Anti-dumping Regulation of The People's Republic of China", "PRC Anti-subsidy Regulations", "PRC Safeguard Measures Regulations", etc; while the latter includes "Administrative Litigation Law" and the judicial interpretations of Administrative Litigation Law, as well as the above-mentioned three judicial interpretations issued by Supreme People's Court, and so on.²³

The international level of indirect international trade administrative litigation system is consisted mainly of WTO law²⁴, which includes 1994 General Agreement on Tariffs and Trade (GATT 1994), Agreement of technological barrier to Trade, Anti-Dumping Agreement, Agreement on Subsidies and Countervailing Measures, Agreement on Safeguards, General Agreement on Trade in Services (GATS), Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Understanding on Rules and Procedures Governing the Settlement of Disputes, as well as Protocol On The Accession Of The People's Republic Of China, etc.²⁵

All these provisions bear the characteristics of administrative law, i.e. dispersion and diversity, which reflects the broad coverage area of international trade administrative litigation, and the complexity and diversity of international trade administrative litigation. Yet we still need to further a systematic and in-depth research into the international trade administrative litigation.

B. the Subject structure of International Trade Administrative Litigation²⁶

As stated above, international trade administrative litigation falls into a special type of administrative litigation. When talking about the subject structure of international trade administrative litigation, we can have a better understanding of it by referring to the general theory of administrative litigation subject. The subject of administrative litigation includes the court, the plaintiff, the defendant and the third person.

The trial court of international trade administrative litigation in our country includes intermediate people's courts and the higher courts, which is determined by the foreign-related and specialized nature of international trade administrative lawsuits.

The defendants of international trade administrative litigation are usually international trade administrative agencies. At the level of central government, the defendants can be the Ministry of Commerce, the State Council Tariff Regulation Committee, and so on. Other potential defendants can be customs, local governments, etc.

The plaintiffs of international trade administrative litigation are various, and their benefits and interests can spread to the whole industry, which give rise to the groupization of plaintiff. These characteristics are determined by the influence patterns, the targets, and the range of dumping, subsidies, trade protection safeguard measures. This feature means a lot to the prosecution of international trade administrative litigation. According to the type of international trade administrative litigation subject, the plaintiffs of international trade administrative litigation can be domestic importers, domestic exporters, foreign exporters, domestic import competitors and domestic import beneficiaries, etc.²⁷

C. the Benefit structure of International Trade Administrative Litigation

From the perspective of benefits, law is the regulator of benefit, and the court is the authority to apply it. Both of the WTO dispute settlement mechanism and the system of international trade administrative litigation aim at the fair distribution of economic benefits in a rule-oriented manner. Therefore, the benefit that flows under the operation of law is the most powerful propulsion to promote the international trade legal remedies, including international trade administrative litigation. Under the impetus of international trade benefits, the international trade administrative litigations of various countries are interacting with each other in the framework of international trade administrative litigation legal system, which jointly creates a benefit structure of international trade administrative litigation. This structure is composed of an ascending two-tier level of benefit system.

The first level is the benefit level of international trade market entities. The domestic import competitive manufacturers are in a complex interest relationship with foreign exporters and domestic import beneficiaries; their interests can either complement or conflict with each other.²⁸ If the interested parties are not satisfied with the resolution provided by the market or their conflicts in interests are not settled, they tend to seek the

benefit in the provisions of international trade law, and then turn to international trade management authorities for protection.

The second level is the benefit level of public interest in domestic trade. On the one hand, in order to achieve and maintain normal order of foreign trade, and to safeguard national economic security and economic interests, at the request international trade market entities, or by executing its own functions and powers, international trade administrative management authorities tend to intervene to adjust the benefit pattern of the first level through measures of anti-dumping, counter-veiling, and so on. On the other hand, in order to prevent the international trade regulatory authorities exercise his powers unlawfully for various reasons, international trade administrative litigation, as an international trade judicial remedy system, provides a way of remedy parties to those who are not satisfied with the international trade administrative action. In international trade administrative litigation, courts resolve international trade administrative disputes according to legal provisions, adjust the benefit pattern of first level, bring them back into international trade order, and thus achieve the goal of protecting public interest of domestic trade.

IV. The Various Functions of International Trade Administrative Litigation

As a special type of administrative litigation in the blending area of laws, international trade administrative litigation shows its various functions due to the interaction among international trade relationship, international trade administrative relationship, and international trade litigation relationship, which leads to the characteristics that reflects the multi-dimensional benefit structure. This benefit structure is not static, but interacts with the relevant system and field variably. These interactions are called “the functions of international trade administrative litigation”.

A. the Function of Fulfilling International Legal Obligation

From the perspective of the localization of international law, the international trade administrative litigation is the product of our country's fulfilling the commitment with the accession to WTO.²⁹ After the setup of international trade administrative litigation, although courts can not directly apply WTO law to the trial of international trade administrative litigation, the applicable laws in the international trade administrative litigation are mainly domestic law transformed from WTO law or consistent with WTO law.³⁰ The function of international trade administrative litigation includes resolving international trade administrative disputes, which is the effective implementation of the WTO obligation of our country. In view of this point, international trade administrative litigation bears the function of fulfilling international legal obligation.³¹

This function not only shows that international trade administrative litigation is of significant international political importance, but also indicates that the required international trade legal remedy system has been established. “As for China, this measure is not just for fulfilling the WTO obligations, but also conforms to the requirements of the development of modern rule of law, which is premise and guarantee for the benign interaction among member countries regional economic and trade organizations in the WTO multilateral trading system.”³²

B. the Function of Settling International Trade Conflicts

From the process of international trade administrative litigation, the subject matter determines that the prominent feature of this litigation is to settle international trade conflicts. According to the three judicial interpretations issued by Supreme People's Court, such conflicts are mainly scattered in the field of international trade administration in goods, international trade administration in service, and international trade administration in intellectual property rights, as well as other areas of international trade administration.

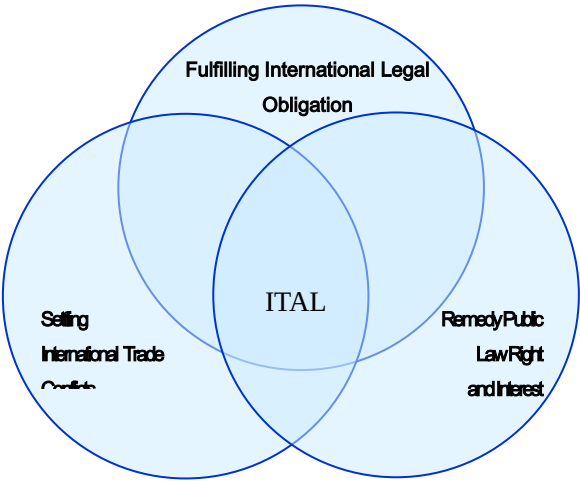
When faced with a variety of potential dispute settlement mechanism to "set up or designate and maintain a review tribunal, focal points and procedures", our country choose to resolve disputes in international trade administration by strengthening and improving international trade administrative litigation. However, this does not mean that other solutions are completely ruled out. In order to settle international trade disputes, according to Chinese legal system, interested parties may choose from the two legal remedy paths, i.e. administrative reconsideration and administrative litigation; nevertheless, the international trade administrative litigation is the final resolution of the dispute, which is significant of its finality. At the same time, due to the specialty of administrative affairs, administrative agencies may focus on the applicable laws related to their own duties and overlook legal provisions in other areas when they are making administrative acts. However, the legal system is an organic body; an administrative act is reviewed from the whole legal system in the process of international trade administrative litigation. In this way, international trade administrative litigation plays a role of uniting the application of law, and of the coordinating the legal system. The judicial impartiality of judicial authority and the position of judiciary provide the courts stronger neutrality, impartiality. Therefore, international trade administrative litigation is fairer and more authoritative than administrative procedure remedy, and meets the parties' need of pursuing justice as well. So, it's important to strengthen the function of settling international trade conflicts of international trade administrative litigation.

C. the Function of Public Law Right and Interest Remedy in International Trade

Public law right and interest in international trade refers to the public law rights and interests entrusted to international trade economic entities by international trade legal system. The reason why the plaintiff brings about international trade administrative

litigation is to get remedied in its public law rights and interests, which is the goal of international trade administrative litigation. These functions are determined by the establishment, the background and the operating mechanism of international trade administrative litigation.

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Function of International Trade Administrative Litigation

V. Analysis of a Customs Valuation Case: from the Perspective of International Trade Administrative Litigation³³

A. Case Brief

November 27th, 2002, Zhaoqing Foreign Trade Development Corporation in Guangdong Province (hereinafter referred as “foreign trade corp.”) declared to the Zhaoqing customs, People’s Republic of China that it imported 3 batches of single-chip analog (non-digital) integrated circuits via general trade way. The declaration showed that the receiver was foreign trade corp., the buyer was Zhaoqing Aosi Technology Co., Ltd. (hereinafter referred as Zhaoqing Aosi), and the seller was Hong Kong Aosi Technology Co., Ltd., (hereinafter referred as Hong Kong Aosi). There existed a principal-agent relationship between foreign trade corp. and Zhaoqing Aosi; foreign trade corp. was in charge of declaring to customs and so on.

Zhaoqing Customs held that the buyer and the seller shared a special relationship, which affected the transaction price. The materials provided by foreign trade corp. could not prove that the special relationship between the seller and the buyer had not affected the price, and thus Customs decided not to accept the declared value. Later, foreign trade corp. applied to Guangzhou Province Customs for reconsideration. After the reconsideration, Guangzhou Province Customs decided that the procedures of Zhaoqing Customs to determine the duty-paid price, to make taxation decision, and to issue the valuation notification, were all legal. Hence, the “valuation notification” and “VAT Payment collected by Customs certification” should be maintained. Foreign trade corp. brought about an administrative litigation (international trade administrative litigation) to Zhaoqing Intermediate People’s Court, and requested that “valuation notification” and “VAT Payment collected by Customs certification” should be revoked, with the “over-collected tax” returned.³⁴

B. Related Legal Provisions

1. Customs Law of the People's Republic of China, Article 55:

The Customs valuation of import and export goods shall be determined by the Customs on the basis of the transaction value of the goods. If the transaction value cannot be ascertained, the Customs valuation shall be determined by the Customs according to law.

The Customs valuation of import goods shall include the value of the goods, cost of transport, charges associated with transport of the goods and cost of insurance occurred before the goods are unloaded at the entering point of the territory of the People's Republic of China; the Customs valuation of export goods shall include the value of the goods and cost of insurance occurred before the goods are loaded at the leaving point of the territory of the People's Republic of China, from which the amount of export duties shall be deducted.

The Customs valuation of inward and outward articles shall be determined by the Customs according to law.

*2. Rules of the General Administration of Customs of the People's Republic of China for Determination of the Dutiable Value of Import and Export Goods (2001)*³⁵, Article 3:

The consignee of import goods, the consignor of export goods or his or her deputy (hereinafter referred to as "the declarant"), shall be responsible for submitting to the Customs all documents reflecting the transaction activities to prove that the price of import and export goods declared to the Customs are the normal transaction value or other fair value.

The Customs has the right to inspect related contracts, invoices, accounts, bills, business letters, documents and other data to confirm the truthfulness of the declared value.

3. Rules of the General Administration of Customs of the People's Republic of China for Determination of the Dutiable Value of Import and Export Goods (2001), Article 7:

In case the provision of Article 6 should not be applicable to the goods in question, the duty-paying value shall be assessed in the light of the wholesale price of the identical or similar import goods on the domestic market, less the import duties levied and other taxes collected in the process of importation, the normal charges for transaction and storage after importation. The aforesaid business expenses and profits may be calculated at 20 percent of the duty-paying value.

4. Rules of the General Administration of Customs of the People's Republic of China for Determination of the Dutiable Value of Import and Export Goods (2001), Article 48:

Where Custom has doubts about the truth or accuracy of the value declared by the duty payer, or considering the special relationship between the buyer and the seller did influence the price, Customs shall issue Notice to Query Declared Value by Customs of the People's Republic of China (hereinafter referred to as Notice to Query Declared Value; see Attachment 2) and notify the duty payer or his agent of the grounds for doubts in written form. The duty payer or his agent shall, within 5 working days as of the date of receipt of the Notice to Query Declared Value, provide related documents or other evidence in writing that could demonstrate the truth or accuracy of the declared value or the declared value not being influenced by the special relationship between the buyer and seller.

If having due cause for not being able to provide the above-mentioned information within the time limit, the duty payer or his agent may, in written form, apply to Customs for extension prior to the expiration of the time limit.

Except under special circumstances, the extension shall not exceed 10 working days.

5. Rules of the General Administration of Customs of the People's Republic of China for Determination of the Dutiable Value of Import and Export Goods (2001), Article 49:

Once the Notice to Query Declared Value is issued, Customs shall, after having a process of consultation over the price with the duty payer, determine the dutiable value of the import or export goods with the application of the methods listed in Article 6 or Article 45 of these Rules, under any of the following circumstances:

- (a) the duty payer or his agent fails to provide further explanation within the time limit;
- (b) Customs, after examining the document or evidence provided by the duty payer or his agent, still has reasonable doubts about the truth or accuracy of the declared value; or
- (c) Customs still, after examining the document or evidence provided by the duty payer or his agent, has reasonable doubts that the special relationship between the buyer and the seller did influence the transaction value.

C. Legal analysis

The case above is a customs valuation dispute administrative litigation. Customs valuation refers to the administrative act of the Customs to determine the duty-paid price of imports and exports in accordance with the statutory criteria and procedures. Customs valuation is a powerful measure to combat price deceiving, which involves significant economic interests of importers and exporters. Therefore, Customs valuation disputes have become a hot topic in the field of international trade administrative cases / litigation.

1. Rules of the General Administration of Customs for Determination of the Dutiable Value of Import and Export Goods from the Perspective of International Trade Administrative Litigation

The *Rules of the General Administration of Customs for Determination of the Dutiable Value of Import and Export Goods* are composed of the main text, three annexes and a resolution, among which the three annexes are explanatory notes about the Customs Valuation Committee and the preferential treatment for developing countries. The above-mentioned resolution includes four parts, also, 24 terms; the first part introduces customs valuation rules and six methods for Customs to evaluate prices; the second part is about the management, consultation and dispute settlement of customs valuation; the third part dwells on principles of special and differential treatment; the fourth part is some

final clauses.

"Rules on Customs Valuation" established a system of judicial review, which is mainly embodied in Article 11: "1. The legislation of each Member shall provide in regard to a determination of customs value for the right of appeal, without penalty, by the importer or any other person liable for the payment of the duty.2. An initial right of appeal without penalty may be to an authority within the customs administration or to an independent body, but the legislation of each Member shall provide for the right of appeal without penalty to a judicial authority. 3. Notice of the decision on appeal shall be given to the appellant and the reasons for such decision shall be provided in writing. The appellant shall also be informed of any rights of further appeal." The customs valuation judicial review system established by these provisions mainly includes the following aspects: Firstly, different from the principle established by WTO legal system that there should be a diversity of judicial review subjects, the subject of customs valuation judicial review should be the judiciary; secondly, the scope of judicial review should be "the administrative acts of determining the dutiable value". However, it is not illustrated clearly in the provision whether such an administrative act is a concrete administrative act, or an abstract administrative act. Thirdly, article 11 of *"Rules on Customs Valuation"* points out clearly that right to appeal is held by "the importer or any other taxpayer".

2. Qualifications of the Customs Valuation Judicial Review Plaintiff from the aspect of International Trade Administrative Litigation

According to the article 12 of *"Explanation on some issues relating to the utilization of 'administrative procedural law of the People's Republic of China'"* promulgated by the Supreme People's Court, the competence of administrative litigation plaintiff is determined by the standard of legal interest, which can be measured from three main aspects: the first one is the actual or potentially actual affect; the second is the affected legal interest; the third is that the criteria is not limited in the relative party of administration.³⁶ The major impact of Customs valuation is mainly demonstrated in the aspect of tariffs, so the import receiver and the export receiver are competent to become plaintiff of customs valuation judicial review according to the provision of Chinese *"Customs Law"*, *"Rules on Customs Valuation"*.

3 . The Determination of "special relationship" of Buyer and Seller in International Trade Administrative Litigation

According to “*Customs Law*” and “*Rules on Customs Valuation*”, when the Customs has justified reason to believe that there exists a special relationship between the seller and the buyer, the declared prices of imported goods can be rejected, and then re-assessed in due procedure. In the above-mentioned case, the key issue is to decide whether there was a “special relationship” between the buyer Zhaoqing Aosi and the seller Hong Kong Aosi, and whether their relationship affected the price. According to “*Rules on Customs Valuation*” Article 16, the criteria for special relationship are based on how to determine the word “control”.

Nevertheless, “*Rules on Customs Valuation*” didn’t provide further explanation to identify the word “control”. But Article 15 of ANNEX I of “*Rules on Customs Valuation*” reads as following: “4. For the purposes of this Agreement, persons shall be deemed to be related only if: (a) they are officers or directors of one another's businesses; (b) they are legally recognized partners in business; (c) they are employer and employee; (d) any person directly or indirectly owns, controls or holds 5 per cent or more of the outstanding voting stock or shares of both of them; (e) one of them directly or indirectly controls the other; (f) both of them are directly or indirectly controlled by a third person; (g) together they directly or indirectly control a third person; or (h) they are members of the same family.” Then, according to Article 9 of Provisions of the Supreme People’s Court on Several Issues Concerning the Hearing of International Trade Administrative Cases, “If there are two or more reasonable interpretations for a specific clause of the law or administrative regulation applied by a people's court in the hearing of an international trade administrative case, and among which one interpretation is consistent with the relevant provisions of the international treaty that the PRC concluded or entered into, such interpretation shall prevail, with the exception of the clauses on which the PRC claims reservation.”, which assures us that it is justified to determine the definition of “control” according to “*Rules on Customs Valuation*”.

D. Realistic Countermeasures

The above-mentioned case involves a series of problem in international trade administrative litigation such as the sources of law, the competence of plaintiff, the scope of review, and the criteria of review, etc. From the above legal analysis, we can conclude some basic features of international trade administrative litigation:

Firstly, from the aspect of legal sources, domestic laws and regulations are required to reflect the legislative intent of WTO rules and specific provisions; otherwise, judicial review in our country will lost the legitimacy of international law level.

Secondly, from the aspect of the scope of review, the requirements of WTO legal system are relatively broad, which includes the principle of “finality of judicial review” and the principle of “affected” interest, etc. The “finality of judicial review” principle requires that all relevant administrative acts, including abstract administrative acts, should be subject to judicial review (in a broad sense). Hence, it is significant to improve the scope of judicial review under the principles of the WTO, which is also an important issue of legal reform.

Thirdly, from the aspect of the standards of review, WTO members are required to ensure that their laws, regulations and administrative procedures are consistent and unified with WTO agreements, and are carried out in a rational, objective, fair and transparent manner. In fact, these requirements are general and vague, which engages judges in our country to have an in-depth understanding of specific administrative areas, perform the duties according to the unified, rational, objective, fair and transparent WTO principles.

Conclusion: The Developing Vision of International Trade Administrative Litigation

During the blending of international law and domestic law, public law and private law, the international trade administrative litigation system has formed. With the economic development and growth in our country, and with the prosperity and growth of international trade in our country, the number of international trade administrative cases will certainly increase. This is because the international trade relationship in the domestic

level will gradually get more and more diversified and complicated; the corresponding international trade administration relationship in a country will also get more and more diversified and complex; disputes in the field of international trade administration will multiply as well. Thus, international trade administrative cases to be tried by people's courts are certainly going to boom.³⁷ In other words, the number of international trade administrative activities gets added day by day.

Around accession of China to WTO, there came an upsurge of the study of judicial review; after the establishment of international trade administrative litigation system, we should realize that compared with the United States, the EU and other mature countries or districts ruling of law³⁸, the international trade administrative litigation in our country are far from mature or perfect in terms of theory, legal system or practice technique. This thesis only deals with the basic content of "international trade administrative litigation"; we still need to refer to abroad theory, systems and technology, combined with trial practice of international trade administrative litigation, so as to achieve a depth, detailed and pragmatic research from various aspects.

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About the author: Shudi Zhu(1958 -), Professor, Law School of Fudan University, JD, specialized in International Law, Fox International Fellow at Yale University.

2 As Charles H. Koch, Jr has pointed out, "conceding the undeniable advantages of free trade, U.S. lawyers must be alert and prepared to deal with the formative stage of the trade movement or find themselves uncomfortable with the legal regime which increasingly insinuates itself into their practice. This symposium provides a few examples of how the free trade movement has expanded, and will continue to expand, into a broad range of national policy. These examples demonstrate that U.S. lawyers outside those in trade specialties must be sensitive to the sweeping impact of the global trade regime and become active players in every aspect of the shift to that regime, from the founding negotiations to the "legislative" and "judicial" processes, whereby supranational institutions will extend global law and regulation. Economic globalization requires 'legal

globalization.” See, Charles H. Koch, Jr: INTRODUCTION: GLOBALIZATION OF ADMINISTRATIVE AND REGULATORY PRACTICE, *Administrative Law Review*, Winter, 2002. Charles H. Koch, Jr., Dudley W. Woodbridge Professor of Law, William & Mary Law School. B.A., University of Maryland, 1966; J.D., George Washington University, 1969; L.L.M. University of Chicago, 1975.

3 With regard to the term "International Trade Administrative Litigation" and its related contents, you may refer to works as follows: 1. Jinlai Xia, Bifeng Ye, Thoughts on International Trade Administrative Litigation Under the WTO Regime, *Law Review* 2003 Vol. 3, P68-72; 2. Shudi Zhu, Xiaoyu Li, International Trade Administrative Litigation under a Multi-Perspective View, *Political Science and Law* 2006 Vol. 2, P100-108.

4 See, 1. Jingwen Zhu: Framework and Methodology of Comparative Sociology of Law—Legalization, Indigenisation and Globalization, Beijing: Renmin University Press, April 2001 1st edition, p. 567-570; 2. Wenjing Liu: Implementing WTO regulations in China: its influences on Chinese administrative law, Beijing: Beijing University Press, September 2004 1st edition, p. 212.

5 See Yuan Yong, Shudi Zhu: The new type of administrative legislation heaved in the process of WTO Laws translation: Foreign economic administrative legislation, in *Public Administration & Law* (Whole Paper Included in “Journal Copies” by Information Centre for Social Sciences, Renmin University), 2005 vol. 11, p. 70-73.

6 For more information about the relevant WTO agreements and the judicial review provisions of the Protocol of China's accession to WTO commitments regarding judicial review, see Chuanli Wang: WTO agreements and judicial review, in *Chinese Law*, 2003 Vol. 2, p. 23-31.

7 See: 1. Provisions on Certain Questions Concerning the Hearing and Handling of International Trade Administrative Cases; 2. Provisions of the Supreme People's Court on Several Issues Concerning the Application of Laws in the Hearing of Anti-dumping Administrative Cases; 3. Provisions of the Supreme People's Court on Several Issues Concerning the Application of Laws in the Hearing of Countervailing Administrative Cases

The three provisions above are referred to as “the three judicial interpretations of the Supreme People's Court” hereinafter.

8 For more about the principles and modes of government regulation, you may see Stephen G. Breyer, Richard B. Stewart, Cass R. Sunstein, Matthew L. Spitzer, *Administrative Law and Regulatory Policy: Problems, Text, and Cases* (Fifth Edition) ,

Aspen Law & Business, New York, 2002; PP. 5-15.

9 For more about the related theory on the relationship between the government and the market, see Gongde Song: On institutional structure of economic administrative law - from spectrum of transaction costs, Beijing: Beijing University Press, January 2003 1st edition, p. 1-13.

10 This conclusion is derived from our special search in <http://www.cnki.net> and www.ssreader.com, and we also adopted other Web search tools to reach this conclusion.

11 See Yin Yang: The Relation of Administrative Procedure and Judicial Review Within Administrative Law, in Journal of East China University of Political Science and Law, 1999 vol. 1, p. 56.

12 Although we lay emphasis on the term “under the WTO regime”, it does not mean that we completely deny other kinds of international trade administrative lawsuits apart from the “international trade administrative litigation”, inter-district trade administrative lawsuits.

13 For more detailed understanding of this provision with regard to the current judicial practice, you may refer to 1, Nanshen Sun: The Theory And Practice for the Scope of Judicial Review Under WTO Mechanism, Journal of Comparative Law, 2006 No. 4, p. 73-76. 2. Hongliu Gong: Analysis on International Trade Administrative cases associated with judicial interpretations, Beijing: Law Press, July 2003, 1st edition, p. 77-79.

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16 The “judicial review” and administrative litigations represent an important aspect for our country to fulfill its commitment due to the accession to WTO, you may see, Daguang Zhao: several questions in judicial review after our country’s accession to the WTO, Application of Law, WTO special issue. (赵大光: “‘入世’后我国司法审查工作的若干问题”, 载《法律适用》, WTO 专号版。)

17 Stephen G. Breyer, Richard B. Stewart, Cass R. Sunstein, Matthew L. Spitzer,

Administrative Law and Regulatory Policy: Problems, Text, and Cases (Fifth Edition), Aspen Law & Business, New York, 2002; PP. 5-15.

18 See, Jianmiao Hu: Administrative Law, Beijing: Law Press, February 2003, 2nd edition, p. 38-39.

19 “Accessibility is a crucial issue with international regulatory bodies. Accessibility is concerned with the extent to which affected individuals can participate in the proceedings of public international organizations and transgovernmental networks and exert influence over their policies and decisions. In conventional administrative law theory, the availability of public participation in administrative proceedings is a great source of democratic legitimacy for administrative processes. Indeed, it compensates for associated concerns about the democratic legitimacy of administrative agencies that make important policies and decisions despite the lack of political election or judicial appointment.” See, Eleanor D. Kinney: THE EMERGING FIELD OF INTERNATIONAL ADMINISTRATIVE LAW: ITS CONTENT AND POTENTIAL, Administrative Law Review Winter, 2002.

20 The “interested parties” here mainly refers to the plaintiff and the third person. The defendant of international trade administrative litigation is corresponding foreign trade administrative authority in our country, which is of no “foreign-related” legal significance.

21 Our country promises solemnly in Paragraph 2 (A) of PROTOCOL ON THE ACCESSION OF THE PEOPLE'S REPUBLIC OF CHINA, paragraph 66, 67, 78 of REPORT OF THE WORKING PARTY ON THE ACCESSION OF CHINA: China should fulfill its" WTO Agreement "and" Protocol" obligations fairly and reasonably even if administrative rules and regulations are not timely issued at the time limit.

22 Such a weak foreign-related nature is resulted from the WTO dispute settlement mechanism (DSM) and Trade Policy Review Mechanism (TPRM), which play a supervisory role to review international trade dispute settlement mechanism of WTO members (i.e. international trade administrative litigation in China) and trade- related legal system.

23 For other domestic legal provisions or potential provisions on international trade administrative litigation, you may refer to Legal Affairs office of the State Council: Collection of the Legal Instruments on China's Accession to the World Trade Organization, Beijing: China Legal Publishing House, January 2002, 1st edition.

24 Here the “WTO law” refers to the legal system consisted of Agreement

Establishing the World Trade Organization and its attachment.

25 For more about the legal documents regarding China's accession to the World Trade Organization, please refer to the document translated by the Ministry of Foreign Trade And Economic Cooperation: *Compilation of the Legal Instruments on. China's Accession to the World Trade Organization*, Beijing: Law Press, December 2001, 1st edition.

26 "There are many public international organizations that endeavor to address global problems through regulation much in the same way that administrative agencies address domestic problems. These agencies are generally created by international treaties between nations. However, as noted above, much of international regulatory activity that affects individuals is done by so-called 'transgovernmental networks.' These entities includes: A. Public International Organizations; B. International Courts and Tribunals; C. Transgovernmental Networks." See, Eleanor D. Kinney: *THE EMERGING FIELD OF INTERNATIONAL ADMINISTRATIVE LAW: ITS CONTENT AND POTENTIAL*, *Administrative Law Review* Winter, 2002.

27 According to the *COURT OF INTERNATIONAL TRADE PROCEDURE* in United States, the plaintiff can be: 1, foreign manufacturers, producers, exporters, US importers or trade associations, most members of which are being investigated; 2, the government of the countries where production or manufacture locates; 3, similar products manufacturers, producers or wholesalers in the United States; 4, legally established trade union or workers organizations, whose production are representative in the similar product industry in the United States; 5, business and industry trade associations, the majority members of which are manufacturers, producers or wholesalers of the similar products. Generally speaking, those parties who are legally eligible for the above-mentioned qualifications and conditions can join others into the litigation, and the party who brings about the litigation should notice other interested parties. See, 28 USCS prec § 2631. There are no such detailed provisions of the qualified individuals or organizations who can become plaintiffs in the legal system of international trade administrative litigation. Comparatively speaking, the scope of third person is also rather narrow in the legal system of international trade administrative litigation in our country, which puts our national economic interest in a less favorable condition.

28 In such a conflict, the consumers, the workers of import competitive manufacturers, and etc, are also affected

29 See *PROTOCOL ON THE ACCESSION OF THE PEOPLE'S REPUBLIC OF*

CHINA, article 2. Administration of the Trade Regime, item (D) Judicial Review: 1. China shall establish, or designate, and maintain tribunals, contact points and procedures for the prompt review of all administrative actions relating to the implementation of laws, regulations, judicial decisions and administrative rulings of general application referred to in Article X: 1 of the GATT 1994, Article VI of the GATS and the relevant provisions of the TRIPS Agreement. Such tribunals shall be impartial and independent of the agency entrusted with administrative enforcement and shall not have any substantial interest in the outcome of the matter.

30 See Marrakesh Agreement Establishing the World Trade Organization, Article XVI, Item 4. "Each Member shall ensure the conformity of its laws, regulations and administrative procedures with its obligations as provided in the annexed Agreements." And the Item 5 reads that "No reservations may be made in respect of any provision of this Agreement. Reservations in respect of any of the provisions of the Multilateral Trade Agreements may only be made to the extent provided for in those Agreements. Reservations in respect of a provision of a Plurilateral Trade Agreement shall be governed by the provisions of that Agreement." As a member of WTO, our country should implement the obligations according to the solemn commitment she has made, such as the Article 67 of REPORT OF THE WORKING PARTY ON THE ACCESSION OF CHINA, which reads that "67. The representative of China stated that China had been consistently performing its international treaty obligations in good faith. According to the Constitution and the Law on the Procedures of Conclusion of Treaties, the WTO Agreement fell within the category of 'important international agreements' subject to the ratification by the Standing Committee of the National People's Congress. China would ensure that its laws and regulations pertaining to or affecting trade were in conformity with the WTO Agreement and with its commitments so as to fully perform its international obligations. For this purpose, China had commenced a plan to systematically revise its relevant domestic laws. Therefore, the WTO Agreement would be implemented by China in an effective and uniform manner through revising its existing domestic laws and enacting new ones fully in compliance with the WTO Agreement." This means that our country fulfill the WTO statutory obligations by the way of transforming.

In light of the practice of other WTO members, courts cannot apply WTO law directly in the course of international trade administrative litigation, but can only apply the "transformed" domestic law.

31 Xiangjun Kong: The Influence of WTO Convention on the System of Chinese Judicial Review, *Tribune of Political Science and Law*(*Journal of China University of Political Science and Law*), 2002 Vol. 1, p. 16.

32 Hongliu Gong: Analysis on International Trade Administrative cases associated with judicial interpretations, Beijing: Law Press, July 2003, 1st edition, p. 65-66.

33 Special thanks to the contribution of Feng Liu, judge of Higher People's Court of Guangdong Province, who provided primary Chinese version of this part.

34 This case was published in the Official Gazette No. 5. of Supreme People's Court in 2006, which was referred to as "the first administrative case of Chinese customs valuation" by media, and attracted attention from all walks of life.

35 The Rules of the General Administration of Customs of the People's Republic of China for Determination of the Dutiable Value of Import and Export Goods (as revised), which were adopted after deliberations at the Executive Meeting of the General Administration of Customs of the People's Republic of China on March 8, 2006, were promulgated and effective as of May 1, 2006.

36 See Wen Gan : Comment on Judicial Interpretation of Administrative Litigation, China Legal Publishing House, Pp. 62~64

37 At present, the Guangdong Provincial Higher People's Court has tried anti-dumping cases in the field of international trade administrative litigation. After the course of judicial review concludes, these cases can be used as typical examples for empirical study.

38 Detlev F. Vagts, William S. Dodge, Harold Hongju Koh, *Transnational Business Problems* (third edition), Foundation Press, P. 99

Globalization and Education

Khosrow Bagheri-Noaparast

University of Tehran

INTRODUCTION

In the recent years, the concept of globalization has been extended from the realm of economics to other realms including education. In spite of the wide usage of this concept it has still some ambiguities (Green, 1997).

In order to clarify the concept, some have distinguished between globalization and globalism (Kly, 1999). Globalization refers to a more or less natural situation that inevitably appears due to the development of phenomena like computers and the internet. On the other hand, globalism refers to an intentional activity by means of which a particular ideological or socio-economic system is woven into the natural process of globalization and is globalized in this way. This kind of globalism has been regarded to be intensified since the collapse of the Soviet Union.

This distinction is similar to the distinction made between globalization as a process and as a project. Globalization as a process indicates a more or less natural phenomenon whereas it, as a project, refers to an intentional activity. Giddens (1990), for instance, regards globalization as the result of the project of modernity. He denies the existence of objective criteria for nation-states; however, he believes that since “the nation-state which exists in a complex of other nation-states, is a set of institutional forms of governance maintaining an administrative monopoly over a territory with demarcated boundaries (borders), its rule being sanctioned by law and direct control of the means of internal and external violence” (Giddens, 1985, p. 121) – it cannot exist in isolation and should be regarded and seen as a complex in other nation-states interwoven into a world system (Giddens, 1987). Habermas (1975) has also discussed the project of modernity, a consequence of which would be globalization in which the nation-state system will be replaced by a post-national political system. He has condemned the surfacing of a ‘post-national constellation’ as the main cause of legitimacy crisis which stems from Globalization. In his opinion, democracy has been created to ally the nation-state and, thus, the demolition of the latter will endanger the former (Habermas, 2001). In a globalized community, Habermas stresses on human rights as the foundation of legitimation as he holds that “human rights provide the sole recognized basis of legitimation for the politics of the international community” (Habermas, 1998, p. 162). The advocates of this view hold that Globalization weakens the nation-state “not merely by softening the economic boundaries of the nation-state but, more insidiously, by eroding the belief that the tensions globalization is creating can be tackled by concerted democratic action.” (Jha, 2006, p. 97)

However, so far as these distinctions are concerned, it should be emphasized that there could not be a clear-cut distinction between the features of globalization. The distinction of natural/intentional or process/product should not be taken as an accurate distinction because it could not be claimed that the natural or process side does not involve intentions.

Globalization has been contrasted with internationalism as well. Internationalism “with its intrinsically democratic foundation, looks to a world ordered by structures supportive of that functionalism which is embedded in accountability” whereas Globalization “implies few logical imperatives in favor of accountability, but rather looks to the pursuit of interest on the global level through the operation of unfettered capitalism.” (Jones, 1998, p. 143) While Globalization is often considered as a threat to cultural diversity and the local, it should be noted that “such debates often neglect to consider the possibility of local practices coexisting with, and benefiting from, global processes.” (Reinke, 2004, p. 485) As Reinke has mentioned, not only there is no essential threat in globalization towards local communities (in this specific case the indigenous people of Mexico), but also local communities can benefit from this process. However, it is of great importance to pay attention to the use of ‘global processes’ in the quotation above. Considering globalization as a process facilitates its recognition as a non-threatening phenomenon. Naturally, the term ‘project’ can be associated with threat, conspiracy, and destruction more easily. Meanwhile, through Reinke’s considerations of Mexican society, it becomes evident that was it not for the reform projects that were carried out in the 1970s and 1980s, the local community could not have gained from globalization. (Ibid, p. 488) In another instance, McLaughlin (1999) has considered the effect of internet on Japanese culture and language. Although English language was dominant on the net along with the projects that the Japanese administrators at Ministry of Post and Telecommunications carried out, the Japanese use of Internet has increased. Also, considering the case of North and South Korea, we find out that that the latter has pursued globalization as a project and it may be cogent to propose that because of this ‘project’ the Northern neighbor has called it treason and invited the South Koreans towards independence from globalization. (Reed, 1997, p. 172)

In the present paper, globalization is not regarded as merely a process; rather an integration of the both sides of process and project is presupposed. Globalization will be discussed in terms of its epistemological challenges to education in which knowledge has a central position. It should be noted that even though the phrase of ‘epistemology’ might not be tenable for post-modernists in general, and Jean Francios Lyotard in particular who is going to be the focus of this paper, it is used here just for its well-known indications to knowledge.

Globalization and the nature of knowledge

The first epistemological challenge of globalization is on the very concept and nature of knowledge. The Information Revolution, being an important factor in globalization, has provided some grounds for thinking about the nature of knowledge. Some have positively taken the notion of information as a key to understanding the nature of knowledge, while others have referred to information in relation to knowledge negatively. It goes without saying that policies would alter according to either of the two

positions. In case information is left out of our emphasis, we should be aware that “in a knowledge-based society, educational policy needs to be ‘evidence-based’ or ‘research informed’ if it is to be credible.” (Power, 2007, p. 94)

Taking the positive stance, Foray and Lundavall (1995) have tried to provide a deeper understanding of the development of knowledge in the information age. Relying on Lundavall and Johnson (1991), Polanyi (1967; 1958), and Nonaka (1994), Foray and Lundavall have talked about four realms of knowledge: know-what, know-why, know-how, and know-who. Know-what refers to facts, know-why is about the scientific knowledge on cause-effect relations, know-how refers to practical skills, and finally know-who is on the knowledge of social relations. Within these four realms, it is also possible to talk about different forms of knowledge.

Polanyi has distinguished between tacit and explicit forms of knowledge. The former, being taken for granted even though it is not conscious, plays an important role in guiding the activities of individuals as well as organizations. This kind of knowledge is context-dependent. On the other hand, the explicit knowledge is acquired consciously and is stated with a clarity that makes it understandable for others. Nonaka (1994) uses two concepts of ‘externalization’ and ‘internalization’ to refer to transformations of knowledge. The former is meant to indicate the transformation of implicit knowledge to the explicit one and vice versa in the case of the latter. These successive transformations that have a spiral shape are regarded to explain the expansion of new knowledge. In other words, when an implicit knowledge is defined and explained in an explicit form, it is combined with other explicit knowledge and when these new combinations become successful, they are taken for granted and lead the activities of individuals and organizations in an implicit way. Again, by the emergence of inadequacies of this leading tacit knowledge, its explicit form is noticed and this, in turn, leads to providing new combinations between it and other kinds of explicit knowledge. This process, in turn, leads to a new tacit knowledge and so on and so on in a spiral way.

Nonaka (1994) uses this spiral movement of knowledge from implicit to explicit and vice versa to explain the situation of knowledge in the information technology (IT). Accordingly, the ability of producing knowledge in IT stems from its facilitation for providing combinations of explicit knowledge. This becomes possible by means of codification of knowledge. In this way, complexities of knowledge data are reduced and by this reduction the possibility of combination of different pieces of knowledge increases. Nonaka admits that the capacities of different realms of knowledge for accepting codification are by no means the same. Know-what and know-how kinds of knowledge have more capabilities in this regard so that the former leads to providing databases and the latter to expert systems.

However, the same characteristic of codification has been the target of criticisms in the negative stance to the information revolution in giving an adequate account of knowledge. Lyotard (1979), in his well-known book, “The Postmodern Condition”, has taken such a position. According to him, since the appearance of post-industrial societies from the 1950s, the concept and position of knowledge has been changed in an essential way. This change has strong relationships with technological developments that appeared in the process of information revolution. Accordingly, the concept of quantitative information has taken a central position so that it could be

predicted that any kind of knowledge which is not translatable into quantitative information will be put aside.

Lyotard wrote his book in 1979 and after that he has criticized some of his viewpoints. For instance, he has referred to his overestimation of the importance of 'narrative knowledge' in comparison to the 'scientific knowledge' (Lyotard, 1992, p. 31). However, his analysis of the inadequacy of information revolution in giving an account of knowledge is still well worth noting. Lyotard (1993a, p. 27) holds that we still need to criticize "the shallow notion of information". According to him, the equation (knowledge = information) which is a product of the information revolution will lead to a crisis in the legitimation of knowledge. When the quantitative information is regarded as the exclusive basis for knowledge, the result will be that knowledge will always be external in relation to the knower no matter in what point of the process of knowledge the knower be. This process of externalization of knowledge leads to regarding knowledge as a product the value of which could only be related to its external functions or benefits. Knowledge as an informational product which is not separable from the production power becomes an essential condition for the universal rivalry of power. In other words, when knowledge turns into information, it will have political functions in addition to its economic functions. Lyotard's warning is reasonable since, although there is a higher consensus regarding the economic functions of 'information=knowledge', "Knowledge and innovation are now at the core of economic development accounting for over 50% of growth... to the degree that the production of the world's 'cultural exports' is dominated by a handful of media barons, we face the homogenisation of education and the world's rich cultural heritage... Education and training are now big business among the developed countries." (Power, 2007, p. 98). Yet the political functions do not go unacknowledged since "most of the reforms being introduced stem from shifts in political and economic ideologies rather than from research or practical experience relating to difficulties facing teachers and learners." (Power, 2007, p. 88)

Lyotard believes that the legitimation crisis to which this concept of knowledge leads has two dimensions. Firstly, the externalized knowledge which has no longer a satisfying inner significance for the knower (a characteristic which Lyotard believes the narrative knowledge has) will have an alienating effect and will lose its basic meaning unless there will be benefits. The phrase of 'knowledge-based economy' presupposes such a meaning for knowledge (e.g. Foray & Lundavall, 1995).

Secondly, this externalized knowledge could be an instrument in the hands of powerful authorities to provide normative grounds as to what should be considered as knowledge. Hence, Lyotard (1979) states that in the computer age, the problem of knowledge is, more than ever, a problem related to the state. According to Lyotard, the information view provides the background for the legitimacy of knowledge in terms of 'performance' and its criterion, namely 'efficiency'. In other words, knowledge or information is legitimate on the ground that it has performance and could be exchanged like goods. However, since performance and efficiency are technological terms, they cannot give us a rule for judgment on what is true, just, or beautiful. The logic of performance is hegemonic because it does not tolerate the difference of language games; rather it tries to reduce everything, namely true, just, and beautiful things, to information. The order of informational knowledge is: "be operational or perish." (Lyotard, *ibid*, Introduction)

Lyotard holds that the technological nature of information makes it unable to provide legitimacy for knowledge. Knowledge with regard to their different forms could not be reduced to information. In addition, the informational knowledge is even unable to give legitimacy to itself. This is because it regards its main characteristic, namely efficiency, as the justification for itself. In other words, it tries to justify itself. However, this kind of justification and legitimation in terms of immediate effects has been always inadequate. That is why, according to Lyotard, 'meta- narratives' have usually been appealed to in order to provide a persuasive justification. 'Inner value' of knowledge in metaphysical attempts such as what Plato suggested and the role of knowledge as emancipator for providing a good end for the human history as, for instance, Marx put forward, are examples of such meta-narratives. According to Lyotard, in the postmodern era that meta-narratives have lost their significance and, on the other hand, where the logic of performance is also impotent, the crisis of knowledge legitimation becomes a big issue for the information revolution.

The Case of Language

Language is knowledge itself. Each person in a different culture and society learns a different language and hence is equipped with a different form of knowledge. In case of globalization which is often associated with imposing English as a universal language onto people with other languages, the distinction of knowledge and information arises. English as a foreign language can be identified as information rather than knowledge and various people who are learning this language are learning it because of its operational characteristics and rarely drown themselves in the Anglo-American culture. The negative face of 'being operational' has tried to camouflage itself to a great extent. While 'imperialism', 'colonialism', and 'cultural dominance' have been associated with the operational nature of knowledge for other cultures and economies, more recently the 'cultural dominance' aspect is being foreshadowed with emphasis on 'economic operational aspects'. For instance, Vaish (2005) states that the use of English language has shifted from imposing 'British cultural imperialism' to 'economic purposes' or Huntington (1996) states that English language is not associated with any particular culture. Although the British colonialism over India has ceased officially, it should be noted that if, for example, India had been colonized by a Francophone country and would have used French for economic purposes, then it would have served primarily the francophone culture and economy. Especially today - in the age of media and advertisement - economic success is essential for exporting, expanding, and revitalizing a culture. The English language is the 'be operational or perish' for India as well as many other countries. What Huntington states, is definitely not acceptable. Any language comes out of a culture and is accompanied by that culture and the changes it experiences. It is even hard to accept that British English used by the English and American English used by the American share the same culture let alone the English other nations mainly use as a foreign or second language. In other words, the English language has become operational in an economic sense and therefore other languages are sidelined in the realm of international economies. This does to a large extent imply that the culture of non-English speaking countries - especially the non-developed ones - will be sidelined as well. All the other languages will be neglected despite possible superior qualities over

English in fields of economics, industry, science, art etc. The English that is learnt by foreign learners of English language does not amount to knowledge and as a type of information merely serves the Anglo-American hegemony. Derrida protests the very use of the term 'globalization' because of this Anglo-American term's indication of English language's universality as a means for linguistic exchange as well as an increasing Anglo-American hegemony as a result of adoption of this term (Derrida, 2002, p. 373). The hegemony that Derrida is referring to can be witnessed in some real life examples. Some schools in Africa install signs on the school campus reading "Speak English" or fine the students who speak a language other than English (Roy-Campbell, 2001, p. 271).

Globalization and the social aspect of knowledge

One of the important consequences of globalization will be seen in developments in the structures of societies. Since knowledge basically has a social aspect, changes in the structures of societies will have consequences for knowledge.

First, we should notice the possible impact of globalization on the increase or decrease of harmony among societies. Some think that globalization would lead to the increase of harmony at the level of globe so that the standards would be accepted throughout the world. Giddens (1990), for instance, holds that globalization is nothing but the extension of modernity at the global level. Modernity led to the appearance of societies in the shape of nation- state with capitalist economy, national industry, and national military system. According to Giddens, the nation-state model of society would continue to exist in the globalization age but due to close social relations at the global level, the capitalist economy, the military system, and the division of labor would take international characteristics. Thus, Giddens believes that what post-modernist thinkers suggest as the new developments are not but radicalized modern developments. On a political scale, "a state within a federation will agree to something even though it will lose out because it wants to maintain harmony within the federation, and it expects that in a fraternal feeling it will later derive benefits at the temporary expense of other states on some other matter. There is a sense of give and take, and a belief that temporary losses should be sustained because the federation is generally worth belonging to. This worldview is missing when governments operate at the global level." (Suter, 2003, p. 83)

Unlike Giddens, Habermas (1975) holds that the nation-state model of society would disappear and would be replaced by a post- national system. Still like Giddens, he regards the products of modernity as the basis of global order. According to Habermas, democracy as the most important product of modernity would be the basis of legitimation at the global level. Thus, the individuals will be the global citizens who act on a global responsibility. The basis of this new global order, according to Habermas, will be an "ideal speech situation" with the characteristic of logical dialogue between the individuals, which would lead to a consensus among congruent people.

Derrida insists on the use of *mondialisation* (a French term used instead of Globalization) since this term encompasses history while Globalization is not so. Thus, the world that is addressed by *mondialisation* – not Globalization - "begins by designating, and tends to remain, in an Abrahamic tradition... a particular space-time, a certain oriented history of human brotherhood, of what in a Pauline language. . . one calls *citizens of the world* . . . brothers, fellow men, neighbors, insofar as they are creatures and

sons of God.” (Derrida, 2002, p. 375) Derrida (2004) considers a true *mondialisation* capable to free itself from the nation-state limits and de-historicize itself.

Some have taken Globalization as an already initiated process which needs to be dealt with as progressive: “The process of globalization is not reversible. It is not possible to reinvent the era of nation-states. Coming to terms with the new era and seeing how we are to cope with it is necessary. Therefore, there has to be a search for a new order rather than an attempt to patch up the system of nation-states which would only waste time.” (Suter, 2003, p. 2)

The economic effects of Globalization can also have impression on social cohesion since “more people feel that society provides them with fewer opportunities and that social protection for the less wealthy is diminishing.” (Hugonniner, 2007 ,p. 149) In addition to the belief that people would grow towards the inequalities that stem from Globalization, the actual inequality can move the society towards economic, cultural, and educational disharmony.

In spite of the thinkers who understand globalization in terms of harmony, some emphasize on difference. Lyotard holds that there are two basic concepts on society. One concept (e.g. used by Durkheim) regards society as an organic system that works on the basis of the cybernetic model and feedback effects. The other concept (e.g. used by Marx) considers society as including contrastive forces. Lyotard who has had a Marxist background tends to look at the society from the glasses of the second concept but under the influence of Wittgenstein understands it in terms of language games. According to Lyotard (1979), national societies would disappear but not toward the appearance of a grand and global society, rather toward an atomization. In other words, by the disappearance of national societies, individuals would contribute in small communities and a language game of rivalry would appear among them. The information age is one of the important backgrounds for this atomization because the individuals, having access to universal information, are not under the control of governments of national societies. This background is suitable for the emergence of small communities as rivals. These small communities, as rivals to each other, would provide new ideas. What is referred to by some authors (Turkle 1996; Abbott 2001) as ‘virtual communities’ within the sphere of communication networks is understood by Lyotard in this way. According to this view, Lyotard regards the consensus and harmony at the global level as an illusion. In his ‘Postmodern Fables’ (1993b), he supposes that there is a mega-police at the level of the globe. In this situation, all people have their own rights and all their needs are satisfied. However, Lyotard regards this situation as a ‘dystopia’, rather than a utopia, on the ground that there is no ‘other’ in it. According to him, for this situation to exist, it is needed to be a private ‘second existence’ and a ‘silence’: “If humanity does not *preserve the inhuman region* in which we can meet this or that which completely escapes the exercise of rights, we do not merit the rights that we have been recognized. Why would we have the right to expression if we had nothing to say but the already said? And how can we have any chance of finding how to say what we know not how to say if we do not listen at all to the silence of the other within? *The silence is an exception to the reciprocity of rights, but it is its legitimation.* The absolute right of the ‘second existence’ must be well recognized, since it is that which gives the right to rights. But as it escapes rights, it must always be content with an amnesty.” (Lyotard 1993b, pp. 121-122)

Lyotard uses the concept of 'silence' where there is a necessary and important thing to be said albeit it is not expressible. In such situations, the silence is itself an 'other' and a rival for what is being said. According to Lyotard, in the mega-police there should be a silence prior to the expression of rights and without that it would be senseless to talk about rights. He regards this silence as the source for the legitimation of the rights discourse. Lyotard regards silence and attention to the private inner 'other', which is different from the climate of mega-police, as a background for legitimation of the discourses of rights. Thus, his 'différend' (Lyotard 1983), referring to an incommensurable difference, is present in the mega-police and is regarded as the condition for identity and rights.

In this way, Lyotard seeks the legitimacy of knowledge not in consensus but in difference and contrast. That is why he says that the postmodern science is going to change the meaning of knowledge. In this sense, knowledge does not deal with certainty, rather with providing doubts in what is already known. 'Paralogy', referring to breaking the unified logic for knowledge, can account for legitimacy of knowledge. This is because it provides the background for creativity of individuals and groups in a just way. Justice, as it is understood by Lyotard, is also based on difference. That is to say, the plurality of different groups should be accepted and respected (Lyotard, 1979).

Globalization and education

Epistemological and social challenges of globalization will have considerable implications and effects on education. This is because education has intense relations with both categories of knowledge and society.

Lyotard's view on externalization of knowledge due to the information revolution leads him to the conclusion that knowledge has no longer an inner significance for *Bildung* or education. In other words, when knowledge is reduced to quantitative information, it would have only a value in terms of benefits. In what follows, the challenges of globalization for education along with the suitable treatments with them will be discussed.

1. Recognition of different types of knowledge

The first point is that knowledge should not be reduced to information or the statements that could only be true/false. Lyotard himself has tried to provide a richer conception of knowledge against the reductive tendency of informational knowledge. According to Lyotard, knowledge refers to a capacity that shows different functions in relation to different types of discourse like descriptive, prescriptive, and evaluational ones. He emphasizes that knowledge is not limited to using the criteria of truth, rather it deals also with the criteria of efficiency, justice and/or happiness, beauty and the like (Lyotard, 1979).

In other words, it could be said that Lyotard replaces the equation (knowledge = information) with the equation (knowledge = wisdom). When knowledge is considered as wisdom, what is meant is a suitable treatment with the situation concerned. The suitable treatment with a proposition will be an evaluation of it in terms of truth/falsity, whereas in the case of a practical situation, justice and virtue would concern us and in an

aesthetic situation the appreciation of a piece of art work is required. Given such a wide meaning of knowledge, the duty of education could be regarded as the cultivation of knowledge capacity during which the capability of suitable treatments with different situations is to be developed.

2. Cultivation of imagination and creativity

In the information age, the access to different kinds of information becomes available for everyone. Thus, 'the death of teacher' appears as a challenge to education. This challenge threatens education because the traditional role of teacher has been the transformation of information.

The suitable treatment with these challenges is to redefine the role of teacher. In fact, education should attempt, particularly through the teacher, to provide for the pupils the ability of organizing and reorganizing information and suggesting new combinations of information and ideas. This requires that cultivation of creativity be regarded as one of the ideals of education. Lyotard (1979) believes that in the information society, the language game is the game of complete information, that is to say, everyone knows everything and in this way communicates with others. In this state, imagination shows its important role. When everyone knows everything, it is only imagination that could provide new movements or rules for play. In this way, seeking the unknown becomes an ideal for education.

3. Extending inter-subjective studies

A further strategy for extending knowledge in the information age is to provide interdisciplinary studies. Seeking possible relationships among different subjects or disciplines can provide new horizons for thinking. Referring to this point, Lyotard (1979) says that the transformation of knowledge should not be limited to information transformation; rather it should include all processes and procedures that can increase the individual's ability in providing relationships among the realms and disciplines that are separated from each other by the traditional system of knowledge.

By providing relations among the disciplines, Lyotard means a horizontal, rather than a vertical, relationship. He gives the system of Berlin University in Germany as an example in which philosophy is regarded at the top of the pyramid of knowledge. Lyotard's post-modern tendency requires that a vertical relationship is avoided on the ground that it leads to providing meta-narratives and undermining the plurality of the realms that have autonomy, to some extent, from each other.

4. Responsibility of Individuals and Sets of Value and Morality

Values and morality are of great concern in the Globalization era. In the case of acceptance of world powers' hegemonies in various fields, their values and codes of morality would be exported to other countries, cultures, and religions. This would not be a desirable result for any country, culture, or religion. Values should not be as solid codes designated to specific geographic-cultural-religious spheres. When confronted with all the various types of values from different parts of the world, one should have the chance

to consider each value and moral code with an eye on its validity. Globalization can be a great opportunity to become acquainted with different sets of values and morality - unlike the people of pre-globalization era who mostly inherited values and morality and if discontent with the values and morality available to them, they have very few alternatives to choose. If projects of integrating and imposing values would cease and it would be allowed for values and moral codes to present themselves to people in a natural process, fear of losing the plurality and differences of people would diminish. It should be noted that globalization is more associated with Unitarianism rather than radical pluralism since the former assumes a common nature or essence for human beings. This point further indicates that Globalization has the tendency to neglect the differences among people and moves towards loss of values and identities among various people. For the co-existence of different values, identities, moral codes, and religions Globalization should be cleansed from Unitarianism and move towards a pluralistic stance.

In addition to abandoning the value integration projects, the role of human agency should not be undermined. It might be argued that a stabilized project or process of Globalization would end in unity and lack of difference. Such an image implies a kind of determinism in which people are already destined to certain jobs, religions, and language(s). However, in contrast to what was the dominant perception about our era that human agency would fade away, we witness that “as a result of the weakened role of procedures, rules, and regulations in the workplace, individual freedom and autonomy have increased, and people are relying more on their own opinions, values, principles, and ethics in decision making. In other words, in lieu of the tight monitoring that was warranted in an industrial setup, the workplace, and indeed the entire society, now depends much more on individual personalities to achieve harmony, integrity, and dignity. There are much higher expectations of individual self-management, self-confidence, self-restraint, self-respect, and self-reflection.” (Cheng, 2007, p. 186)

5. Connecting virtual communities to real communities

As mentioned above, in addition to knowledge, the development of society in the globalization era leads also to challenges for education particularly because knowledge has a basic social feature. Thus, the notion of virtual community will have educational consequences. In addition, this notion leads to the notions of virtual self and virtual identity that have educational significances (Turkle, 1996; Abbott, 2001). In fact, to have a relationship with each virtual community puts the individual in a certain atmosphere of knowledge and this atmosphere, parallel to its intellectual content, provides a certain type of identity.

Since the individual, particularly in the age of adolescence, is in the process of identity formation, the kinds of his or her relationships with virtual communities could lead to virtual identity formation. With regard to this kind of identity, some (e.g. Gergen, 1991) have talked about the postmodern self.

Virtual communities could have threats for the educational process. Without doubt these communities have advantages in providing different new relationships and a kind of society with certain plasticity. However, these communities would have their own disadvantages in providing fragmentation in identity. Postmodernists, including Lyotard, might not be in agreement with a unified notion of identity parallel to their disagreement

with a unified human nature. However, from an educational point of view it is important to regard a particular position for the coherence of identity. Even though minor inner conflicts are necessary for seeking coherence, the overall fragmentation in identity is not educationally desirable.

A strategy for dealing with this possible threat could be sought in providing connections between virtual and real communities. While in the virtual communities there is a wider range for identity variations, like taking the role of the opposite gender during an internet chat, in the real communities this variation has a limited and more realistic range. A good balance between taking part in virtual and real communities can prevent the pupils from fragmentation of identity. The connection between virtual and real communities should be dynamic, that is to say, it must be possible within the real communities to talk about what goes on within virtual communities. The pupils should be able to talk about their communications within the virtual communities. The characteristics of real communities like shame provide the ground for controlling the undesirable variations of identity.

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GLOBALIZATION AND RECOGNITION CULTURE

Anton CARPINSCHI

“Al.I.Cuza” University of Iași, Romania

INTRODUCTION

In an increasingly globalised world, could a culture of recognition still be possible? The aim of this study is to propose a comprehensive approach on contemporary processes of globalization and multiculturalism. The culture of recognition is a suggested answer provided in this paper's conclusion. Synthetic and multidimensional, the concept of culture of recognition may concentrate the resources and demands of a research project or an educative program, as it contains the possibilities of comprehension and dialogue. Beyond the illusions of the modern historicism and the postmodern relativism, we believe it is possible to create a meaningful openness, a proper state of mind that is able to reason and find solutions. At the same time open to ration and belief, the road to the culture of recognition is the road to assimilating the lesson of coexistence in a world of contrasts and challenges, which demands innovations with therapeutic conclusion. In this context, we promote a comprehensive model of political based on recognition culture, and accordingly, a model of controlled globalization processes based on comprehensive politics.

COULD A CULTURE OF RECOGNITION STILL BE POSSIBLE IN TODAY'S WORLD?

The world we live in today is divided between multiple cleavages of economical, political, ethnical, religious, and generational diversities or the ones of gender. This is the world which Michel Foucault described as „a great asylum, where the governors are the psychologists and the people are the patients”¹; a world in which due to ever increasing role of those who study human behaviour, „the political power is about to get a new, therapeutic function”². Beyond this painfully accurate diagnosis, the French philosopher's words suggest a potential remedy – the therapeutic function of political power. However, a therapeutic function exerted solely through the political power and political figures would bring fears and doubts. The history of mankind provides us with sufficient testimonials regarding the devastating effects of the various political adventures and experiments, regardless whether they were conducted in the name of class, race, nation or even the abstract concept of humanity. Reflections on the socio-therapeutic aspect of political power, but also including aspects and influences of other factors, such

¹ Michel Foucault, *Lumea e un mare azil (The World is a Large Asylum)*, Ideea Design & Print, Cluj-Napoca, 2005, p.12.

² *Ibidem*.

as family, education, church, civil society, mass-media, and so on, may be constructed from various angles and points of view. At the end, it can be suggested to initiate the research starting out from the following question: *Could a culture of recognition still be possible in today's world?* Even if this question does seem to indicate the title of a well-known text³, the claim of the text herein is different. The purpose of this paper is to present, or to model a culture of recognition and to reconstruct its concept by setting awareness of the paradigm of *transmodernity*.

It is a well known fact that modelling is a current intellectual activity in the scientific and philosophic research. The systemic-interdisciplinary modelling has been chosen as a research strategy since conceptual reconstruction of the culture of recognition involves a series of mental processes deriving from various areas of reflection. Potential educational projects seek to detach all feasible systems and subsystems relevant for the research from the complexity of the real life. Within this context we should bear in mind the following warning of Jean-William Lapierre: "the one who builds the model must not forget that it has to do with a methodical artifice. He must not, all the same, forget that its model is a point of view among others concerning the complexity of the analysed object or system. It does not exist, therefore, one < true > model, or the best model. The quality of a model can be appreciated only in rapport with the problems of the research"⁴. One should derive from this postulate that, as the mental operation to re-create a phenomenon through symbolic reconstruction, the systemic modelling of the culture of recognition does not only entail the plurality of conceivable models of the same phenomenon, but mostly the plurality of methods for research and modelling. This is a natural epistemological consequence deriving from the freedom of choice and specificity of professional development, from the diversity of cognitive strategies and the variety of expressed problems.

The current attempt is of course based on certain epistemological operations. It is also known that in the socio-human accomplishments of late modernity an ever increasing ground was won by hermeneutical exegeses, relativist-contextualist undertakings, and the systemic epistemology of complexity. In an anti-positivist intellectual atmosphere, the comprehensive approaches win the ground. *The comprehensive paradigm* could be perceived or shaped as an adequate reflexive model, all the more so in this age of postmodern challenges, a model characterized by a nuanced manner of thinking, conscious of the consequences and slips of hyper-rationality, determinism or historicism. The factors contributing to the shaping as such, are the heterogeneity of the meaning-bearing socio-human acts, the interdependence of the object and subject of knowledge and action, knowledge by synthetic intuition and life experience; the empathic attitude and responsibility of the subject, sensibility towards the ecological, historical and multi-cultural contexts, the analysis of contradictions and assumption of the socio-human paradoxes' complexity, as well as the pre-eminence of qualitative analyses.

This paper conceptually reconstructs the culture of recognition by awareness of what may be called *the paradigm of trans-modernity*. If post-modernity is, as it has been asserted, a

³ Isaiah Berlin, *Mai există oare teoria politică?*, in: Isaiah Berlin, *Adevăratul studiu al omenirii. Antologie de eseuri (Does Political Theory Still Exist? in The Proper Study of Mankind: An Anthology of Essays)*, Meridiane, Bucharest, 2001.

⁴ Jean-William Lapierre, *L'analyse des systèmes. L'application aux sciences sociales (The Analysis of Political Systems. Its Application on Social Sciences)*, Syros/Alternatives, Paris, 1992, pp. 55-56.

modernity freed from illusions⁵, the awareness of trans-modernity accredits the idea that the release from illusion must mean neither the decrease of trust in rationality, nor the loss of religious faith. With no illusions, but not without belief! From this derives a certain potential of recognition and trust that favours the culture of recognition. A necessary distance from the historicist illusion of the modernity, but also from the dissolutive relativism of post-modernity, might allow the trans-modern conscience to be situated on the position of a reasonable synthesis. Beyond the determinist rationalism of modernity and the relativist deconstructivism of post-modernity, the trans-modern conscience, may attempt to reconcile ration and belief, physics and metaphysics, being and existence, unity and diversity. The “mistrust in metanarrative”⁶ and the prophetic historicism of modernity, may not always be opposed solely by irony and the estheticism of semantic games. In fact, after the consummation of the motivated and spectacular intellectual exercises of post-modernity a *trans-modern reconstruction* is needed, one that is able to valorise the acquisitions of modernity in the context of contemporary globalism and multiculturalism.

Therefore; is a culture of recognition possible in today's world - an eternal and forever today's world? What “routes” may there be towards a society whose members, educated in the spirit of comprehension and recognition, would make the world more understandable and, implicitly, more acceptable? Beyond an apparent idealism that might seem naive, these questions lead to a reflection topic reposed held down by its own weight of cohabitation problems in the world today. Indeed, globalization, multiculturalism and the reappearance of identity movements confront us with existential issues which claim matching solutions. *The culture of recognition* is the answer that might bring the confrontational issues to an end; as recognition and comprehension - systematically cultivated on an intellectual and empathic level for every being and the society as a whole- may provide a change regarding the liberation from prejudice and subjectivity, but also regarding an improvement of the human-way-of-being.

The culture of recognition is not an accidental topic. The need for recognition has always been present and is still claimed in the contemporary world. The latter decades, marked by the recrudescence of globalization and multiculturalism, have provided immense quantity of literature covering the topic, while all living in the mentioned period acquired certain amount of experience on this issue as well. For instance, it has been observed that the great ideological-political families approached the above mentioned processes in much the same way, as they primarily regarded the national and international economical and political interests of globalization, and far less its ontological and spiritual dimension. From the point of view of the “free market” and economical and political elites that favour the great corporations, the neoliberalism acts as the advocate of globalization and the supporter of the global economy. The populism-nationalism is opposed, counter-arguing with negative effects, economical inequities and the unemployment in industrialized countries, the collapse of the statute of general welfare and social programs, the disappearance of national cultures and the loss of the national states' political autonomy. Ecologism and communitarianism estimate, in turn, the unfairness of the world order created through globalization, its hierarchical, exploitive and pollutive character. The conceptual-analytical reflex of ideological positions is felt in the schools of thought. The hyper-globalist deems globalization to be a real, irreversible and

⁵ Zygmunt Bauman, *Etica postmodernă (Postmodern Ethics)*, Amarcord, Timișoara, 2000, p.7.

⁶ Jean-François Lyotard, *Condiția postmodernă. Raport asupra cunoașterii (The Postmodern Condition. A Report on Knowledge)*, Editura Babel, București, 1993, p.15

inevitable phenomenon, which represents a new era in the history of human civilization, while the sceptic describes globalization as a mere mythical-ideological structure with destabilizing effects on a global scale, and finally the transformist proposes an ambiguous line of thought, globalization being the engine of rapid transformations, which are contradictory, contingent and unpredictable, in society, economy and politics. Unlike the hyper-globalist and sceptic approaches which in fact, deal with economical globalism, the approach of transformists does not judge over the trajectories and finality of globalization, believing that the phenomenon in itself is neither good nor bad, but only contradictory and conjectural, and, taking into account the current circumstances, inequitable and expensive.

GLOBALIZATION AND GLOBAL CONDITION OF HUMANITY

What more is there to be done under such circumstances? Could globalization and multiculturalism become more equitable and comprehensive? One of the aims of this undertaking is to compensate the moral deficit of economical and financial globalization through an *ontological* opening. Indeed, we do need an *ontological* point of view on globalization, a conception able to manage recognition in a multicultural world. This topic was in fact suggested by the need of recognition as a potential spiritual therapy in a world increasingly global and multicultural, and, because of this, increasingly expedite and tense. Engaged, from various positions, in the texture of globalism and globalization we confront a series of problems regarding the dynamics of our own identities on an ethnical, socio-professional, generational, gender, cultural or religious level. As regular people we witness *globalism* that, from the predominantly economical perspective of neoliberalism, internationalizes production, distribution and merchandising of goods and services, integrates the markets of capitals and labour force, contributing to the expansion of the global market to the disadvantage of the nation-state. However, globalism cannot be understood outside *globalization* and *globality*⁷. Even though at first sight they suggest the involvement of the entire globe, the concepts of globalization and globality contain, as it can be understood, a profound ontological meaning. In order to prove this idea let's start from Jan Aart Scholte's opinion, according to which globalization means not so much the generalization or uniformization of certain conditions of existence on a global scale, but the fact that in this world of informational technologies of today, more and more things happen regardless of the geographical distances and the territorial borders⁸. By breaking the boundaries and spatio-temporal distances we are not only closer to one another; by the closeness, intersection and concentration of our personal, determined and finite existences we come closer to becoming aware of the *unity* and *continuity of our being*. Naturally, the following question remains to be answered: Is the living of the unity and continuity of being, in a sacred and/or profane manner, an argument sufficiently powerful to reasonably manage globalization and multiculturalism?

Globalization has accompanied, at least in the past 5000 years, the written history of human civilization, but the matrix of contemporary globalization is the result of a

⁷ Valid distinctions between *globalization*, *globalism* and *globality* are operated by Ulrich Beck in *What is Globalization?*, Cambridge, Polity Press, 1999; also, the Romanian translation: *Ce este globalizarea? Erori ale globalismului - răspunsuri la globalizare*, Editura Trei, Bucharest, 2003.

⁸ Jan Aart Scholte, *The Globalization of World Politics*, in John Baylis and Steve Smith (eds.), *The Globalization of World Politics. An Introduction to International Relations*, Oxford University Press, 1997, p.18. Also, Jan Aart Scholte, *Globalization. A critical Introduction*, Macmillan Press Ltd., London, 2000.

particular social-economical, political and cultural-technological conjuncture. The faster assimilation of *the global condition* of humanity⁹, favoured by the compression of space and time can generate the conscience of the super-spatial and super-temporal *continuum* of the being. This is why, from an ontological perspective, globalization is *the growing aware of "the becoming into Being" of the diversity of human existences*. Let us remember that for Romanian philosopher Constantin Noica the conscience of the becoming into Being defined ration not as a simple formal game, but as an indicator towards self-realisation. "The consciousness of the becoming into Being coverts to the becoming conscious into Being; the reason sends to its own embodiment. And then appear, as concrete expressions of the becoming into Being: the person, the historical community, the humanity as a whole and the Logos of dialectics. The reason is in everything, it brings-into-being all this scales of reality: yet, in the first three scales it embodies into the human-individual, human-historical and human-absolute matter, while on the final scale it is its own object"¹⁰. In other words, *the ration of globalization as a conscious converting into Being provides the disorienting existential diversity with an ontological meaning*. The problem that rises is the transposition of the ontological conception of globalization into specific historical contexts. However, in order to accomplish this, we require an adequate conceptual and theoretical frame.

THE CULTURE OF RECOGNITION, A MEANINGFUL OPENNESS

Synthetic and multidimensional, the concept of *culture of recognition* may concentrate the resources and demands of a research project and an educative program, as it contains the possibilities of comprehension and dialogue. It is not by chance that the substance of this essay is a *thematic interrogation* on the culture of recognition. Beyond the illusions of modern historicism and the *taedium vitae* of the postmodern relativism I believe it is possible to create a *meaningful openness*, a state of mind proper to reasonable and founding solutions. Opened, at the same time, to ration and belief, the road to the culture of recognition is the road to assimilating the lesson of coexistence in a world of contrasts and challenges, which demands innovations with therapeutical finality.

Used in various contexts, the word "culture" induces different meanings. One of the meanings speaks of high and mass culture, refined culture and media culture, television, or more recently, internet culture, urban and popular culture, folk culture, political, economical, religious, classical, modern culture and so on. Partial and disorienting, this enumeration poses a series of questions and, of course, the issue of necessary delimitations. In fact, there have been numerous attempts to define the term "culture" during the time. The 18th century thinkers emphasized the Enlightenment meaning – the culture was understood as the "education of spirit" through the schooling of children, or better said through the instruction of the young and the circulation of knowledge. Following decades – so called positivist century defined culture as a social fact, opening the way for the ethnological researches of culture as "a manner of living of a people", that

⁹ Anton Carpinski, *Globalization and Multiculturalism. Towards A New Paradigm: The Comprehensive Politics*, in: *The Challenges of Multiculturalism in Central and Eastern Europe*, Provopress, Cluj-Napoca, 2005, pp. 22-33. Also, *Globalization and Governance. Is the Welfare State Going to Be Replaced by the Neoliberal One?*, in: *Globalization and Policies of Development* (P.Dobrescu, A.Țăranu, A.Bărgăoanu eds.), National School of Political Studies and Public Administration, Bucharest, 2007, pp.167-177.

¹⁰ Constantin Noica, *Devenirea întru ființă (The Becoming into Being)*, volume I: *Încercare asupra filosofiei tradiționale (Essay on Traditional Philosophy)*, Humanitas, Bucharest, 1998, p.186.

was passed on between generations through teaching. Unfortunately the ethnic, nationalist and racist slips immediately produced horrible effects in the imperialist, fundamentalist and segregationist policies of the so-called “superior cultures” and thus inscribed the concept of “culture” with dangerous semantic mutations.

What about the culture of the 21st century? Could it be relatively guarded from the political manipulations which controlled it at times in the past? And, accordingly, could we use a “cleaner” concept of culture, one that is in no way ideologically and propagandistically biased? Even though such project might seem over-ambitious, the moral stake of culture and the social stake of living in common communities oblige. Politically and economically involved in the structure of society, the culture is by no means an “ivory tower” and neither should be one. It is a necessary social phenomenon, not only because of its scientific or artistic potential, but mostly because of its practical and moral virtues. Under these circumstances, the assault on culture are attacks on humanity. This is why it is necessary to express that the moral wellbeing of the culture, and humanity respectively, lies in the opportunity of understanding of any social, economical, political or cultural phenomenon, as well as any personal or public event through the attitude-filter of *the recognition of the other*, as well as *assuming one's own fallibility*. Hence the systematic effort, individual and collective, toward cultivating the recognition. Clearly this opinion subsequently triggers other questions. For instance, how much would we be able to educate our comprehensive-recognitive potential and thus become able to assimilate a culture of recognition as fallible beings? How may we obtain a culture of recognition of identities and the right to difference in the context of globalization of information, the competition of interests, and the interference of cultures? What might be the human type, the mental model, and the behavioural system convenient to a culture of recognition in current societies? The previous questions are not the only ones that need answering, as the world today is being confronted with new challenges that generate a new series of questions, among which: With respect to difference, do the ethnic-cultural minorities have the right to a separate political identity, as a group, or to a representation by means of civic (civil?) and democratic inclusion similar to the national majority? Is the political multiculturalism in “inexperienced immigration countries” a homogenous and universal phenomenon that must be perceived unvaryingly and unconditionally by countries with a different historical evolution and different cultural traditions? Might the disequilibrium of the rapport between civilization and nature favour a culture of recognition based on global safeguarding; or might it deepen potential polarizations with catastrophic consequences? Are there limits to political recognition?

QUESTIONS AND HYPOTHESES. AN ANALYTICAL FRAMEWORK

The difficulty of these questions triggers various research strategies. An analytical grid composed of a set of questions and answers functioning as a hypothesis have been analyzed. Starting from the question: Who is able to assimilate the culture of recognition? The first hypothesis, an ontological one, states that *predisposed to the culture of recognition are the ones who are able to assume fallibility through comprehensive being*. Inquiring about the meaning of Being, we, fallible humans of the daily existence, succeed understanding, to some extent, the meaning of Being and its modulations. The series of horizon-opening questions brings forth that “privileged Being” is able to pose such questions; a being to which Martin Heidegger gave the famous name, *Dasein*. Pertaining to the ontological structure of the *Dasein* is the understanding of being. As the German philosopher has proven, understanding the meaning of Being determines the meaning of

the being involved in this undertaking¹¹. Intrinsically comprehensive, the human being seeks to understand the sense of Being and that of the diversity of beings projected in the universe of existence. This is why I named this privileged being that is able to profoundly and comprehensibly understand the Being through guiding questions a *comprehensive being*. In fact, the etymology of the word “comprehension” emphasizes, alongside its proper meaning (to grasp, to comprise), its figurative meaning: to grasp with the soul and mind, to feel together with someone, to understand from within something. Like the Latin *in-tell-igere*, meaning to “enter the purpose”, “to see into the purpose of something”. However, in order to understand the Being from within, we must indeed be privileged beings. The best manner in which one may be privileged in rapport with the Being is to take part in it. By taking part in the Being, the fallible man becomes able to *understand participatively* and, implicitly, to *recognize the Being*. This means that one must not look upon the people and things of the surrounding reality simply as subjects and exterior objects reflected in our minds, as we are not only subjects/objects in the process of knowledge and action. Through the *existential fulguration* that transcends our condition as subjects we are beings participating in the Being, and, through this, beings „articulating and understanding the Being”¹². Placed on a privileged position beyond the subject-object cleavage, the human being becomes aware that other subjects around us are, or might become, comprehensive beings, thus able to recognize and understand the Being as the-universal-and-unconditional-act-of-being.

Unlike the Being understood as the pure-act-of-being, universal, unconditional and infallible, the existence involves various manners-of-being: conjectural, conditional and fallible. Inspired by the “ontological difference” between the universal, infallible *Being* and the conjectural fallible *existence*, this concept of infallibility proves that the possibility to err or not to err, as well the impossibility to not err, belong to us naturally. Evolving between these coordinates, the man succeeds in assuming his fallibility by managing it through constructive actions, if he reaches the state of *comprehensive being*. But why would the comprehensive being be able to assume its fallibility? Each of us may reach, through a reflexive-volitional effort educated in time, the state of participation to the pure-and-universal-act-of-being. This is experienced as a profound and complete understanding of the fact-of-just-being, of being-in-itself, beyond the spatial-temporal determinations in which we are the subject and/or the object of a random action. Neither possessive subject nor possessed object, the comprehensive being is an *eco-systemic* and *transindividual-manner-of-being* that provides each of us with the chance of feeling ontologically integrated in the natural and social environment, as a transindividual and ecosystemic manner-of-being. By taking part into the infallible Being, the comprehensive being allows the fallible man to assume fallibility. The comprehensive being is that state of deep understanding and openness of the intellect through which the fallible man gains a more profound and complex understanding of the conversion of fallibility from a universal *datum* into the personal act of assumed fallibility.

The comprehensive being is the state of deep understanding of assumed fallibility, and implicitly, a way to the culture of recognition. It remains to be seen what one understands under the concept of awaken state and how that state is accomplished in the fallible man’s mind. Anticipating the second hypothesis, I must say that the trans-actualization of the immediate experience is possible through the emergence, in the hypostasis of

¹¹ Martin Heidegger, *Ființă și timp (Being and Time)*, Humanitas, Bucharest, 2003.

¹² Gabriel Liiceanu, *Excurs asupra câtorva termeni heideggerieni din „Ființă și timp” (Appendix on Some Heideggerian Terms in “Being and Time”)*, postscript to Martin Heidegger, *Being and Time*, the quoted edition, p.584.

comprehensive being, of the transcendental conscience. This is able to become aware of the connections between the *ontological levels, manners of thought and the structure of conscience*. Through the specific manners of rapport on the two ontological levels – the discontinuity of fallible existences and the continuity of the infallible Being – the comprehensive being triggers two complementary manners of thinking: *the extensional-divergent thought* on existence and *the intensional-convergent thought* on the Being. Both manners of thought involve particular recognitive-comprehensive processes and generate intentional states for the conscience and the transcendental conscience, respectively.

By giving an answer to the question “How does the comprehensive being think and feel?” the second hypothesis maintains that: *through the transcendental conscience, the comprehensive being may accomplish a transmodern cognitive perspective with a recognitive potential. The recognitive potential of the comprehensive being is derived from the transcendental conscience and its ability to become aware of transmodernity.* The ontological and onto-theological questions become understandable and guiding for the fallible man if he succeeds the *trans-actualization* of immediate experiences. Trans-actualization involves the overcoming of the conscience, of that fundamental conscience that updates the sensorial and motor, orientated and calculated experiences of the self in its extensionally determined existence. But how may one overcome the conscience? The answer is through the *transcendental conscience*, that form of self conscience able to dig deep into the continuous and unconditional being. The transcendental conscience is the conscience of one’s own comprehensive being. The affirmations above remind me of what Edmund Husserl wrote some decades ago, in a famous article dedicated to phenomenology, when he referred to the return to conscience as the return to a pure domain of the psyche reduced to the own self in which the being of all that is knowable may be reconstituted. „In precisely this way the psychic ego is transformed into the transcendental ego, which, in each of its self-disclosing reflections (transcendental reflections), always rediscovers itself in its own transcendental peculiarities, just as the psychological ego, in keeping with the change in reductive focus, always rediscovers itself in its own psychological peculiarities. In this way there comes to light this wondrous parallelism of the psychological and the transcendental, which extends to all descriptive and genetic determinations that can be worked out on either side in the respective systematically maintained attitude”¹³.

Constructive and therapeutic, the intentional convergent thought on the Being structures the transcendental conscience. Why the transcendental conscience? Because it is the conscience of Being as a-pure-and-universal-act-of-being, thus of the Being in all things, the universally predicable Being. Because it goes through all the Aristotelian categories and beyond them toward their primal cause, the Being maintains a “transcendental relation”¹⁴; it is a *transcendental predicate*. The conscience of this Being can only be a transcendental conscience. Throughout time specialized as philosophical thought (metaphysics, ethics) and religious thought (theology), the transcendental conscience means, in my opinion, *the acknowledgment of the continuity of Being*. The transcendental conscience is the “antenna” of the comprehensive being towards the Being and towards

¹³ Edmund Husserl, *Fenomenologie (Phenomenology)*, an article for the Encyclopedia Britannica, project of a second work, in: *Filosofie contemporană (Contemporary Philosophy)*, texts selected, translated and commented by Al. Boboc and I. N. Roșca, Garamond, Bucharest, f.a., p.138.

¹⁴ Paul Foulquié, *Dictionnaire de la langue philosophique (Dictionary of Philosophical Language)*(6-ème édition), Presses Universitaires de France, Paris, 1992.

itself, the interface through which the comprehensive being communicates with the world and with oneself. The transcendental conscience is the transindividual and ecosystemic experience from whose inspiring perspective the “physical processing” of the information flux is revealed as a neurobiological basis of a rich inner life, filled with mental representations. To sum up, the psychological conscience *activates the inner self* by the processing of information and the grammar of mental representations, and the transcendental conscience *connects the self to the Being* thus generating the comprehensive being.

Through his psycho-cognitive and transcendental horizon the man takes note of his ontological coordinates. The consciousness operates in the extensional-existential register of the diversity of becoming. The-Being-in-itself-as-a-pure-act-of-being demands from the fallible man, aside from the indispensable conscience, the comprehensive being, a hypostasis unconceivable outside the transcendental conscience. This distinction cannot rule out the indispensable functional connections between the two forms of conscience. As I have pointed out before, on the level of determined and discontinuous existences, the extensional-divergent thought models the psychological conscience and, at the same time, rapports itself to the transcendental conscience (metaphysical, moral-spiritual). The universal and indeterminate Being appeals the intentional-convergent thinking which gives consistency to the transcendental conscience, but this cannot happen in the absence of the psychological conscience (consciousness). As Henry Ey revealed, “to be conscious means to live the peculiarities of own experience, transposing it into the universality of its science”¹⁵. By the transposing of the “own experience” into the “the universality of its science”, I understand the intuition of the Being-in-the-universality-of-the-own-act-of-being through the “own experience” of the comprehensive being. Essentially, we have to deal here with the relations between the existential discontinuities and the continuity of Being; relation assuming the permanent correlation of the psychological and transcendental conscience. In order to understand the continuity of Being, the psychological conscience permanently needs the power of the comprehensive thought of the philosophical reflection, and the strength of the religious belief; both being specific for the transcendental conscience. In following text and discussions, it will be insisted on the power of the comprehending thought of the comprehensive being. Beyond these attempts and reflections of an assumed fallibility there are to be found, yet, the mystery of conscience and the power of belief. For now I propose to explicate the mental representations of the fallible man, the cognitive evaluation of the emphatic-intellectual processes of the comprehensive being in the horizon of the transmodern paradigm.

The very interrogation from the beginning of this chapter – *Is a culture of recognition still possible in today's world?* – suggests the perception of “today” through the awareness of transmodernity. Being preoccupied with the change and renewal, modernity and post-modernity confer to the world “today” the common sense of: “in this day”, “during this day”, “right now”. A mostly discontinuous today, is at stake here. The transmodern perspective supposes the awareness of a “beyond today”, “over today”, both from and towards the past and from and towards the future. What relation, on a historical and cultural level, can there be between “today” and “beyond today” if not one of continuity and discontinuity? On the one hand, the “beyond today” from transmodern perspective is not that modern “today”, yet on the other hand it cannot exist in the absence of “today”. Therefore, “beyond today” is something else than “today”, but it is its

¹⁵ Henry Ey, *Conștiința (Consciousness: A Phenomenological Study of Being Conscious and Becoming Conscious)*, The Scientific and Encyclopedic Publishing House, Bucharest, 1983, p.33.

continuation nonetheless. Paradoxical as it is, this assessment grasps, I believe, the specificity of the transmodern positioning through the double continuous-discontinuous rapport towards modernity. Reminding somehow of the Nietzschean aphorism, *the man can keep dreaming knowing that he/she dreams*, the transmodern conscience transposes us beyond the post-modern contestation of modernity. It is as we would *keep* doing, somehow *different*, something that was done before by someone and criticized by someone else. It is a conscious doubling, sometimes ironical/self-ironical, yet not lacking curiosity and innovation, which valorises, beyond the playful aspects, the constructivism and a remodelled need of foundation. In my opinion, this very double rapport towards modernity and, implicitly, the double recognition of continuity-discontinuity in relation with modernity is valuable as a premise for a possible *transmodern culture of recognition*. I attempt, therefore, a possible conceptual reconstruction of the culture of recognition *in a world and for a world of a permanent today, a today perceived as eternal and forever*. If modernity is an “unfinished project”¹⁶, then it is not the dissolutive and disorienting relativism of post-modernity the one assigned to walk towards the culture of recognition.

Finally, the third hypothesis attempts to answer, within the coordinates of a “politics of recognition”¹⁷, to the question: “how does the comprehensive being operate?” Praxiological corollary of the first two hypotheses, the third one claims that *the socialization of recognition supposes the reciprocity of recognition*. A culture of recognition socially implemented is a *culture of mutual recognition* due to understanding and assimilation of cleavages; their gender, race, age, social-economical status, ethno-cultural background, confessional-religious, etc. The understanding and assimilation of cleavages, in other words, the accommodation and familiarization with the divergent positions and interests of the parts to be found in a cleavage - men or women, white or coloured collectivities, young or old, employees or employers, owners or workers, Romanians or Hungarians, Jews or Palestinians, Mosaics or Muslims, Muslims or Hindu, Christians or Muslims, Orthodox, Catholic or Reformed, etc., etc. – would be possible, in my opinion, by modelling the “*human face*” politics. Focused on humanizing the power rapports, civic-democratic inclusion, separation of public sphere from the private one, equitable managing of resources, the right to cultural difference and conservation of identity, the “human faced” politics would be a vector of democratic consolidation. By regulating the rapports between the constitutional state and the civil society, the “human face” politics meets the “culture of recognition” of the diversity of cultural codes and of the conversion of antagonist ways of living into alternative ways of living. Becoming a project of the moderate and reformist ideologies of social-democratic, Christian-democratic, demo-liberal facture, the democratic inclusion manifested as a fight for recognizing the diverse minorities – African-American, Jews, immigrants - or non-minority but disadvantaged entities: women, workers, youth. African-Americans, workers, women, youth, etc. have fought for being recognized as political entities and becoming citizens with equal rights and obligations in rapport with the other citizens. Their political success represented, therefore, the mutual recognition of all the parts involved. Democratic inclusion does not mean, nevertheless, assimilation, but the respecting of the different ethno-cultural identities, the acceptance of the pluralism of

¹⁶ Jürgen Habermas, *Discursul filosofic al modernității. 12 prelegeri (The Philosophical Discourse of Modernity: 12 Lectures)*, All Educational, Bucharest, 2000, p. 17.

¹⁷ Charles Taylor, *Politics of Recognition* in the volume: *Multiculturalism. Examining the Politics of Recognition* (edited and introduced by Amy Gutmann), Princeton University Press, Princeton, New Jersey, 1994.

values, the recognition of the existence of multiple cultural models, life styles, religions or confessions. The tight connection between the right to difference and democratic inclusion confers consistency to the political recognition. If there is to be found a *complementary relation between civic-democratic inclusion and the cultural right to difference*, we can talk about recognition and the respecting of the right to identity, regardless of its subject: autochthon or foreign, majority or different categories of minorities, elders or young, men or women, Christians or non-Christians, etc. When civic-democratic inclusion and the cultural right to difference do not recognize each other in their specificity and complementarities, the culture of recognition is at long distance.

In this theoretical context, our model of culture of recognition and “human face” politics, tries to open new perspectives on contemporary globalization and multiculturalism. Consequently, in the next part of this chapter, we'll seek to offer *a model of regulating globalization as global governance, a model elaborated by setting out the comprehensive politics based on recognition culture*.

RECOGNITION CULTURE , COMPREHENSIVE POLITICS AND REGULATING GLOBALIZATION

Contemporary globalization has contributed to the transformation of the nature and prospects of political democratic community in a number of distinctive ways. First, the locus of effective political power can no longer be assumed to be national governments - effective power is shared by diverse forces and agencies at national, international and regional levels. Second, the idea of a self-determining collective can no longer be meaningfully located within the boundaries of a single nation-state alone. Third, the present period is marked by a series of new types of "boundary problems" which challenge the distinctions between domestic and foreign affairs and the sovereign concerns of the nation-state and international considerations. Basically, in the contemporary world we observe a two-fold process: an integrating process and a disruptive one, which take place simultaneously. The disruptive forces are constituted of the arms race, the international financial system with its destabilizing crisis, the widespread chronic unemployment, the decline of timeworn religions, the spread of violence and terrorism. The integrative forces were identified as being: the confluence and interaction of peoples, a common educational curricula, global commerce and business, a global system of communications, the end of nation building, global solutions to common problems, a shared global consciousness, acceptance of new international agencies.

In this context, there are many theoretical and practical questions. So, despite of globalization and multiculturalism, the notion of state sovereignty is one that still arouses the passions of many politicians and theorists. Even in regions with intensive overlapping and divided political structures, national sovereignty has not been wholly undetermined. While massive concentrations of power remains characteristic of many states, these are frequently embedded in, and articulated with, other domains of political authority - regional, international and transnational. Is the globalization, under these circumstances, and especially global governance, a challenge to the state sovereignty? How can we reconcile the desire for the preservation of the state's independence with the need for cooperation and for global prosperity and security? In tackling this dilemma, we singled out a few correlations between the processes of globalization and multiculturalism, on one side, and the coordinates of the political, on the other, to offer such a reconsideration by setting out a *comprehensive conception of political*. In this way, we try to build a model of *regulating globalization based on comprehensive politics*.

Our comprehensive concept of political as a category-based synthesis, sets out the correlation between the hypostases of the human and the coordinates of the political. Conceived as an essence of the human, the political is a fundamental category of the socially-conditioned man. The political essence of the human is identified by implying the application of certain criteria which are able to extract this essence out of the multiple aspects that define human activity. Ethics, aesthetics or economics, for example, have their own identification criteria – and so does the political. Good and evil, beautiful and ugly, profitable and non-profitable are respectively, criteria for ethics, aesthetics, and economics. Similarly, the political assumes a couple of opposites: command-compliance, force-authority, competition-association, public-private, friend-enemy, etc. for a given social order. In other words, the political is essentially *a power relation in a public environment, communal organization by means of power relations, and a competitive-conflictive manner of communal life*. The term “political” refers to the asymmetric power relations expressed by a set of regulative devices between command and compliance, which order the heterogeneous and conflictive public space. Consequently, by its very nature, a comprehensive political is the public power permanently regulated by the dynamics of the relations between group interests and the general interest, seeking to provide a partisan management of the common good. *This way of being proper to the comprehensive political – competitive, associative, multicultural and organized – is in fact an anticipation of the regulating globalization. In our view, the regulating globalization supposes the corroborating of the hypostases of the human - individual in terms of natural life, citizen in the political life, human person in terms of moral condition - and the projections of the political.*

For us, the regulating globalization assumes the global governance. In general, governance is defined as different to the concept of government. While the latter implies activities that are regulated by an official authority, the former refers to activities that are not necessarily the result of a legal or sovereign power. The spectrum of the concept of governance is wider and somehow looser, due to the fact that it involves both governmental institutions and "regulatory mechanisms less official that exist in the absence of a central authority"¹⁸. We could say that governance is the sum of the many informal arrangements and formal institutions managing their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative actions may be taken in a process which attempts of incorporating both government and civil society with their agencies and actors, in a dynamic interaction that constitutes the fabric of a democratic state.

There are a few models of global governance one of which constitutes a synthesis of the best elements of different recognized systems of government; a system that combine both overall global coordination and the need for local and national autonomy. We need the freedom of lots of small, autonomous unities, and at the same time, the orderlines of large-scale, possibly global, unity and coordination. It is also undeniable that global governance implies a fundamental shift from the static thinking of governance which focused on the sovereign entities which ruled people, to a dynamic one, where the focus is placed upon the basic form of sovereignty: *the sovereignty of the individual as a human person*. The fundamental interests of humanity must prevail over the ordinary rights of particular states, and in certain circumstances, the right of people supercede the rights of the state. When recognizing a government as a political body with the authority to take decisions that would affect his life, he - the individual - gives up his sovereign status or at least part of it to the delegated body. This is a fact accepted by most individuals as a

¹⁸ *The Penguin Dictionary of International Relations*, Penguin Books, 1998, p.219.

natural arrangement for the well-being and security of all. Such an attitude does not appear in the case of sovereign states however. This acquiescence of giving up part of their sovereignty to a supranational institution simply does not exist. National sovereignty is something that they cling on to, in spite of the urgent need for cooperation and in spite of the acceptance that the nation-state can no longer handle many issues by itself, which have become global concerns.

One of the main arguments against the idea of the state giving up part of its sovereignty, is the appearance of a centralized world-government that would take in its hands matters that might be better handled at the national level. But experience has proved throughout the years, through international and grass-root projects, that it is possible for a form of global governance to emerge without taking away the state's autonomy and without robbing the state of its sovereign status. The progress of humanity towards a new form of social and political system, that is towards world unity, is something that can be discerned from various aspects of life, both at national and international level. A real comprehensive politics states that the new step of humanity, if it wants to bring the present anarchical state of things to an end, is to surpass "emotional obstacle", which is the idea that the ultimate form of governance resides with the nation-state and to accept the need to limit the state's sovereignty when the interests of humanity demand it. The issue of "humanitarian intervention" brought into attention by the comprehensive politics is one of particular relevance with respect to the limitation of sovereignty. In the situations where people in certain countries suffer tremendously, it is vital to weigh the suffering of the people against the claim of state to sovereignty and non-interference in its internal affairs. In such circumstances, the external intervention of international forces is justified, provided such action is approved by the United Nations.

In the context of the comprehensive politics, the current global issues that need to be tackled by various means for better global governance are basically the following: *the common values for a global neighbourhood, global security and disarmament, managing economic interdependence, promoting the rule of law world-wide, the democratic reform of the United Nations*. With respect to the common values for the global governance that need to be embraced, the comprehensive politics advocates the need for a global ethic that should comprise notions like respect for life, liberty, justice and equity, which constitute core values that humanity as a whole shares. The maintaining world peace in a multicivilizational world is the rule of common points, which means that people around the globe should seek for and extend values, institutions and practices they have in common. These *minima moralia* transcends the notion of state, of national borders, of religious, political and cultural differences, bringing the peoples of the world together under the common banner. Regarding the problem of global security and disarmament, the stubbornness of the states to cling on their sovereignty can only end in a global disaster for the planet as a whole. The comprehensive politics pleads for the global security and disarmament controlled by the international community and suggests the necessity to limit the sovereignty of the states and a shift *from the states to the people*, namely to the *comprehensive persons*.

INSTEAD OF CONCLUSIONS

As a *cvasi* conclusion, using the interrogative-hypothetical arrangement we proposed, we set ourselves to realize the following objectives: the *ontological engagement* of the project for a culture of recognition, the *identification of the mental models* of recognition and comprehension and the *sketching of the strategies* of the "politics of recognition". By supporting these hypotheses, we attempted to put forward a concept for the culture of

recognition defined ontologically (the culture of recognition: an ontological grounding), epistemologically (the culture of recognition in the horizon of conscience) and praxiologically (the culture of recognition and the “politics of recognition”). This concept is multiply-conditioned because the culture of recognition is built on recognition and comprehension, attitudes of profound individual and communitarian experience, modelled by ontological engagements, cognitive options, spiritual milestones and political will.

In defining politics - as the exercise of power, the art of government, the elaboration of collective decisions, the authoritative allocation of values - , as well as in defining the science of government or political science, the common wisdom assigns a noble meaning to political action: the pacification of society and to its guidance in accordance with some higher ends bearing names such as “the common good”, “the public affairs”, “the civic ethos” etc. Noble at its end - to create civility building on the spiritual values of the human condition – politics is compelled to make recourse to the explanatory-interpretive powers of the meta-political account. Relating to the needs and potentialities of the proto-political, but also to the reflexive-interpretive powers of the meta-political, daily politics must be a comprehensive politics based on multifaceted and dynamic activity. *Functionally*, it points to the organization and direction of the various specialized systems and sub-systems of the global society; *structurally*, to the relations of power, force and influence among individual and collective actors; and finally, *spiritually*, to the ideas, views and mentalities of those actors. Summarizing, it can be argued that *human essence is brought into the light through the comprehensive politics related to the organization and direction of the global society, i.e. through the distribution and redistribution of resources and values by the legitimate political power*. As a competition among group interests, a game of power relations, and, at the same time, management of the common good, politics regulates the social order by holding “the monopoly of legitimate physical violence” (Max Weber) and by the implementation of public policies.

In this theoretical context, our comprehensive concept of the political tried to open new perspectives on contemporary globalization and multiculturalism. Consequently, in this chapter of the book, we tried to offer *a model of regulating globalization as global governance, a model elaborated by setting out the comprehensive politics based on recognition culture*.

The Lacunae of Neoliberal Higher Educational Reform: Ethnicity and the Problems of Horizontal Inequality and Merit

James Campbell

Deakin University

Email: jamesca@deakin.edu.au

INTRODUCTION

Contemporary neo-liberal theorizations of globalization view it as a process of interconnecting, ‘people and businesses across the world that eventually leads to global cultural, political and economic integration.’ (Fox and Hundley 2011, p.3) One of the core ideas that animate neo-liberal globalization is the promise that with increased integration there will be a concomitant decline in the power of the nation state and a decline and dissipation of issues such as ethnic hatred, nationalist extremism which can be overcome by the spread of enlightened self interest. Competition based on individual merit and the prevalence of markets over politics signals a new neo-liberal order. According to its supporters neo-liberal globalization heralds a new era of cosmopolitanism individualism, choice and the breakdown of barriers to the peoples of the world. Freedom, free markets, open competition, democracy and development are said to follow in the wake of neo-liberal globalization. The powerful discourse of competition and economic development provides neo-liberal globalization with a critical and central driver (Babic 2007; Bamyeh 2000; Beeson 2001).

Reflecting the idea that the meritocratic individual can advance themselves through competition and ‘reject the immediately given and closed world of particularistic attachments’ (Delanty 2006, p.26) the ideology of neo-liberalism reflects a desire for individuals to overcome particularistic and political attachments in order to realise their true capacities as consumers and competitive beings in a world whose essential principle is the realization of market based competition (Coronil 2000). At root the neo-liberal agenda rests on a vision of individuals as unencumbered selves. Stripped of all social relations, disadvantages, advantages, loyalties and non-tradable beliefs the unencumbered self of liberal theory provides the basis for the competitive idea of meritocracy and competition which informs neo-liberal ideology. The arguments for liberalization of higher educational institutions, rationalization of procedures and functions within such institutions and the need for them to compete and be measured against ‘international’ benchmarks and ‘tables’ is also all part of the dominant discourse of higher education (Campbell 2010). Thus a globalizing discourse of rationalization, institutional convergence to dominant ‘global’ norms and practices and an individualistic competitive and meritocratic normative philosophy underlie the dominant neo-liberal vision.

However, the unencumbered individual of neo-liberal theory is an insufficient reference upon which to base the aims and direction of higher educational reform (Sandel 1982).

Mostly missing from this multivalent discourse is any sense of the importance of higher educational institutions for nation building and national intent (Haque 2003; Shamsul 1996). In other words there is little sense in such a reform ideology of understanding the role and mission of higher education that is in any sense not reducible to increasing a nation's competitive position internationally based on the unleashing of the potential and merit of unencumbered selves. The central importance of education in ethnically pluralist societies to ensure that forms of horizontal inequality; inequality between groups, is addressed and ameliorated does not figure as a driving consideration in mainstream discussions over increasing competitive position and questions of merit and educational outcomes (Mukherjee and Wong 2011). While the dominant discourse of higher educational reform gives a nod to the needs of social justice and equity the essential way in which social justice is understood within this discourse is from the viewpoint of the safety net where individuals can be protected from the excesses and tribulations that inequality produces. Underpinning this concept of social justice is an individualistic and vertical analysis of inequality and exclusion which does not address the issues of horizontal inequality especially in ethnically pluralist societies (Frances Stewart 2005).

The essential argument mounted in this chapter is based on a threefold critique of the universalism, instrumentalism and individualistic economic view that characterizes neo-liberal arguments. Specifically these characteristics of neo-liberal theory are manifested in an underestimation of the continued importance and divergent interests and paths that different states and national polities possess and pursue in relation to higher educational objectives as well as an almost complete lack of appreciation of the problems of social cohesion, ethnic tension and integration in nation states. Finally the simplistic rationalism and universalization of *homo economicus* and principles of individualistic merit and competition professed by neoliberals lacks a grasp of how pluralist nations must balance competition with addressing the problems of horizontal inequality (Stewart 2002; Stewart 2010; Stewart, Brown and Langer 2007) and the role of the state in articulating national intent (Sani 2008; Shamsul 1996) in conditions of neoliberal globalization.

Specifically the arguments in this chapter will seek to challenge the idea that globalization (in its neoliberal guise) is creating a borderless higher education system in which universal rationality expressed through the expansion of possessive individualism and competition will be the final end result (Comaroff 2001; Gill 2003; Giroux 2002; Giroux 2005; Harvey 2007b). The essential argument of neoliberals is that the spread of the principles of competition and market integration when coupled with the decline of political forms of interference which stymie the ability of institutions to advance themselves on the principles of liberal meritocracy, will lead to fuller development and growth in higher educational institutions and human development. If only the dead hand of the state could be lifted from higher educational institutions and politics replaced by merit and competition, higher education would prosper. Implicit in the neoliberal vision is a belief that globalization will lead to a diminution of states power and political

interference in higher education and a recognition that to compete and prosper globally requires convergence to the principles of neoliberal governance.

Craig Calhoun captures the limitations of liberalism (the essential basis of neo-liberalism) in the following: 'Liberalism has been pervasive in democratic theory — enough so that its blind spots have left the democratic imaginary impoverished. This shows up in thinking about (or thinking too little about) solidarity, social cohesion, collective identity, and boundaries.' (Calhoun 2007b, p.154) The impact of the discourse of neo-liberal globalization has had an important effect in driving the agenda of national education systems and influencing the higher education sector in how it views itself and its mission (Alderman 2001; Alexander 2000; Altbach, Reisberg and Rumbley 2009) (Douglass 2005, p.2) . However, neoliberal theory when applied to nations such as Malaysia in its debate over higher education suffers from the problems Calhoun cites: very little regard for problems of 'social cohesion', 'collective identity' and 'boundaries'.

In this chapter we will draw upon the arguments articulated in publications from the World Bank in reference to their prescriptions for Malaysia and its higher educational system (Bank 1994; Bank 2007). The reason for this is firstly that any limited piece of writing needs to focus in order to maintain coherence. Secondly, the arguments of the World Bank are reasonably well known and their advocacy in regards to Malaysian higher education is articulate and classically representative of the basic neo-liberal position. It ought to be recognized that there is considerable diversity among authors who write for World Bank publications, and that bracketing all of these publications under the rubric of neo-liberalism suffers the same problem that the use of the term neo-liberalism has: its imprecision and the multifaceted ways in which the term is used (Harvey 2007a; Saad-Filho 2005; Touraine 2001). However, the publications of the World Bank do provide an important focus for the arguments in this chapter and the critique this chapter pursues will be based on some central themes which are found in World Bank publications and which also have strong synergies with the underlying principles and theories associated with neo-liberalism.

While the argument in this chapter is informed by a theoretical position at odds with neo-liberal globalization this position is not dismissive of the way that neo-liberalism and powerful economic and technological forces have influenced the terrain of policy possibility in important ways. K.S. Jomo captures this in his observation that, 'one cannot deny that even partial liberalization has limited the range of options as well as the variety of possible economic arrangements'.(Jomo 2003, p.33) In other words there has been an effect and influence of neo-liberal pressure on the eco-system of public policy development. However recognising this is not the same as accepting the arguments of 'mythic'(Jomo 2003, p.33) convergence theory nor does it entail uncritical acceptance of the reductive and short-sighted theories of 'meritocracy' which neo-liberals propose as the solution to Malaysia's higher educational needs. It is the contention of this chapter that the universalistic pretensions of neo-liberalism are simplistic, misleading and ultimately dangerous.

The arguments of neo-liberals in regards to higher educational reform in societies such as Malaysia are characteristically informed by a theoretical perspective that is narrow, universalistic and unrealistic. This perspective when applied to ethnically diverse societies can actually lead to increased social conflict and breakdown in social cohesion. Four critical issues are attended to in the following discussion: firstly, the over simplistic advocacy by neo-liberals and organizations such as the World Bank of the need to converge with the forces of economic marketization and neoliberal globalization. Secondly, the problematic emphasis on globalization at the expense of national interest and the difficult issues of ethnicity and ethnic cohesion, thirdly, the problematic nature of the notion of meritocracy and competition pursued by the World Bank and neoliberals and finally the way in which the failure of neoliberal theory to address and grasp the problems of horizontally unequal societies can lead to policy which is dangerous and conducive to social conflict.

The essential rhetoric of neoliberal globalizers rests on the simple opposition between illiberal, local and politically manipulated forms of institutional practices and the liberal global and merit oriented processes of global competition and neo-liberal theory. Like a simplistic Western movie narrative neo-liberals and the World Bank wearing the white hats represent the forces of secular progress and global rationality against the rest who must be brought into line or eliminated as unprogressive, parochial, or corrupt. This narrative may suit the self image of elites. It does not represent the realities and aspirations of actually existing polities and the real difficulties they face in dealing with horizontal inequality, social cohesion and peaceful development.

In other words the arguments of contemporary globalization theory as advanced by contemporary scholars some of whom write for in World Bank publications and echoed in the broader discourse of neo-liberalism is that the way to ameliorate conflict and advance development is to overcome and reduce the influence and significance of particular political boundaries and interests replacing politics with merit and competition as the key definer of one's place in the world. This is simplistic and misguided. The idea that neoliberal globalization will lead to the spread of universal freedom and accentuate the rational logic of the market to replace the oppressive logic of particularistic interests is a powerful narrative is best articulated by thinkers such as Thomas Friedman (Friedman 2000) and institutions such as the World Bank. This kind of argument when applied to higher education is particularly seductive and egregious since it fails to grasp the empowering and democratic role that states play in articulating public purpose and resolving actually existing social conflicts and inequalities (Chua 2002; Chua 2003). The effect of neo-liberal reforms on actually existing polities with complex and ever present issues of ethnic division and inequality may in fact accentuate the very negative qualities that neo-liberals claim they are opposing. Indeed the pressures of globalization may in fact be a major contributor to increased ethnic and national consciousness as people seek 'ontological security' in times of flux and uncertainty (Kinnvall 2004). More precisely neo-liberalism may accentuate and exacerbate the problems of extreme ethnic division, social conflict and a retreat to communalism that are supposedly the kinds of things neo-liberals oppose.

The argument that animates this chapter is in opposition to neo-liberal ideological persuasion and draws upon the considerable research which argues that neo-liberal globalization broadly understood can lead to accelerated conflict, increased ethnic and national tensions and is ill suited to ethnically plural societies with significant ethnic tensions and inequalities. The essential tension in this chapter between positions best exemplified in World Bank publications and the view that shall be outlined here is found in a fundamental disagreement over the way neo-liberal globalization affects and impacts on ethnic strife, and the significance of nation states and the way social justice, educational development and social cohesion is best advanced in actually existing national communities with complex plural constituencies and cultural aspirations. Educational institutions are the pivot point for these issues.

CONVERGENCE AND HIGHER EDUCATION

The argument for convergence in higher education to neo-liberal norms and forms of managerial rationalization is part of the broader argument for convergence found in discussions over liberalization and economic development. A good example of arguing the virtues of convergence to global norms of liberalization is found in the following. In arguing the case for a comparison of the policies of the National University of Singapore with the University of Malaya, Hena Mukherjee and Poh Kam Wong argue that:

‘the NUS story provides UM and other universities in emerging economies an exemplar of “development . . . as a process of integration *within* the world economy—rather than a process of parallel or separate development”’(Mukherjee and Wong 2011, p.162)

In other words convergence with the norms of neo-liberal marketization, deregulation and ‘using world and national rankings and internal incentive mechanisms as sources of motivation for laggards’(Mukherjee and Wong 2011, p.163) is the key according to these authors to achieving higher educational development in developing countries. The essential argument of the World Bank authors is that Malaysian universities should follow the Singaporean lead. The way in which this discourse posits Singapore as a beacon of meritocracy seems rather blind to the way a comparison between universities in Singapore and those in Malaysia based on a discourse of meritocracy may serve to fuel ethnicized comparisons. Such a point of view is arguably an example of how according to A.B. Shamsul; ‘social science knowledge about Malaysia has become highly ethnicized, ... By this I mean that knowledge, irrespective of philosophical and theoretical grounding, has been used directly or indirectly as an instrument to advocate an ethnic cause or to launch purportedly ‘an objective, scientific critic’ of an ethnic group or to justify the interest of an ethnic or sub-ethnic group.’ (Shamsul 1996, p.343) Indeed it is doubtful that the underlying ethnicization of meritocracy is lost on Malaysians. Arguments for meritocracy and the dominance of market rationality in societies such as Malaysia which are post-colonial societies still deeply influenced by the legacy of the ethnic division of labour and the existence of market dominant minorities are a potentially dangerous mix. A discourse of meritocracy and market reform articulated in societies which are developing and still suffering the historical results of colonialism and

its impact on ethnicity and economic advantage may have untold consequences (Chua, 2002).

Indeed while the more recent publications of the World Bank do recognise the needs of social justice (World Bank, 2005) and that pure marketization needs to be tempered by commitments to social justice the essential 'Washington consensus' discourse is still the dominant discourse. Broadly speaking when we talk of convergence the process of convergence (in terms of institutions and nations) is driven by several active forces. Firstly it is driven by the needs of competition (Johnstone, Arora and Experton 1998). The need to compete in the contemporary world economy forces institutions and nations to adopt similar policies and structures. Secondly it is driven by a need to rationalize which is itself part of a global logic (Dowrick and DeLong 2003; Milanovic 2003). Competitive pressures and rationalization of institutions on a global scale are critical drivers of convergence (Dowrick and DeLong 2003).

A central example of convergence in the case of Malaysian higher education lies in the process of corporatization of the public sector and the growth of private higher education as a business (Lee 2004). Conventional views on modernization and globalization hold that there is a rapid process of convergence toward homogenous organization 'best practice' and 'optimal efficiency' within current globalization (Lazear 1999; Pagano 2007). This discourse of neo-liberal globalization as convergence towards a homogenous efficiency oriented world finds expression in numerous reports scholarly arguments and media opinion. For neoliberals globalization is radically transforming national societies to the extent that the nation state and its parochial and narrow political interest are in decline. In this sense the idea of a public interest based on the institution of the nation state is increasingly under challenge. The process of globalization or 'mondalisation' is envisaged by its supporters as a force which will inevitably lead to a fully integrated global market. If we accept this thesis then the implications for higher education are ominous indeed. The underpinning faith in the necessity for nation states to dovetail their public policies to the principles of convergence with the norms and requirements of neo-liberal global economy is still a key feature of prescriptions for institutional reform advocated though organizations such as the World Bank. The influence of arguments for convergence in terms of institutional strategies for reform has powerful supporters. The idea that neoliberal globalization and convergence of public institutions to its norms and practices is the path to success is most articulately put in the World Bank report titled: 'Malaysia and the Knowledge Economy: Building a World-Class Higher Education System. According to the authors of this publication:

'The international league tables show that the highest ranked universities in the world are the ones that make significant contributions to the advancement of knowledge through research, teach with the most innovative curricula and pedagogical methods under most conducive circumstances, make research an integral component of undergraduate teaching, and produce graduates who stand out because of their success in intensely competitive arenas during their education and, more importantly, after graduation. The rise of tertiary education graduate unemployment in Malaysia and the productive sectors'

complaints relative to shortages of qualified labor, suggest that the higher education system has some significant limitations to overcome.’ (World Bank 2007, p. xiv)

In this extensive and well argued report the key problem that Malaysian higher education faces is the tension between, ‘between two competing objectives: expanding the system and improving quality.’ (Bank 2007p.xiv) The aim of neo-liberal reform is to, ‘promote competition and increase efficiency in the sector’ (World Bank 2007p.xiv). While the theoretical arguments and practical prescriptions of the World Bank are more complex than some critics may acknowledge the essential discourse of the World Bank is still dominated and informed by a focus on increasing competition and a tendency to a one size fits all approach to economic development. The essential argument of neo-liberal theorists and their institutional supporters emphasises the importance and salience of convergence to the principles of neo-liberalism. According to this view those countries and institutions within countries that do not adapt and transform to fit this homogenous world view are doomed to irrelevance and failure.

Some globalization theorists such as Kenichi Ohmae (Ohmae 1990; Ohmae 1995) and Susan Strange (Strange 1997) have argued for a retreat in the role and power of the state due to the forces of globalization. This argument suggests that higher educational policy makers need to focus on building educational systems that can compete and prosper in a post-national environment. While these views are not necessarily neo-liberal; neo-liberalism dovetails neatly with this kind of view. The argument of those who desire to pursue a homogenous and market driven future for higher education is that neo-liberal convergence is the path to prosperity and efficiency. The strong economic basis of the argument is based on the simple models of neo-classical economics and its basis in the primacy of *homo economicus*. The gradual erosion of differences between national and regional varieties of capitalism and their respective ideological institutions (such as universities) and the concomitant growing hegemony of neo-liberal capitalism is for neo-liberal advocates a positive aspect of globalization (Levidow 2002). However this discourse needs to be critiqued. K.S. Jomo reminds us that, the economic convergence promised by neo-liberal economic globalization is unlikely – not only because it is mythical, but also because there can never be the truly level playing field promised by liberalization ‘(Jomo 2001, p.45)

DIVERGENCE AND VARIATION: THE STATE

One of the interesting themes that comes through the neo-liberal discourse and can also be found in the publications of the World Bank involves the way the nation state and nationalism is framed within a discourse that privileges marketization, competition and individualism. According to the World Bank report ‘Globalization Growth and Poverty’, the ‘retreat into nationalism’(Collier and Dollar 2002) triggered a decline in the efficacy of markets, an increase in anti immigrant sentiment and ethnic tensions, increased inequality and ultimately increased conflict. In this discourse nationalism is viewed in a pejorative light and globalization is viewed as the basis of development and growth and a reduction in conflict. However before we accept uncritically the arguments in favor of

convergence and its isomorphic pretensions we must grasp the reality that nations *do exist* and that the way nations articulate their national interest possesses at least relative autonomy from the forces and interests of neoliberal pressure and the ‘Washington Consensus’(Jomo 2006; Jomo 2005). The interests of nation states and their polities will not simply wither away and the abstract ideology of the ‘free’ market and the unencumbered individual which it proposes as its driving avatar needs to be re-interrogated and challenged(Calhoun 2007a; Calhoun 2007b; Calhoun 2007c). Craig Calhoun writes:

‘we need to break with the ideology of an abstract market and see global markets—even those in arcane derivatives and those managed in part by computerized trading programs—as relationships among actors: people, places, institutions (including states)(Calhoun 2008, p.112).

One of the ways to appreciate the structural limitations on isomorphic convergence and the limits of the neo-liberal project is to grasp how Malaysian higher educational institutions exist within a specific national framework (Ralston et al. 1997). Within such a framework considerations and commitment to culturally appropriate social justice and national cohesion are paramount. If a strong emphasis on neo-liberal economic ideology drives advocates of convergence (Eisenstadt 1973; T.Pascale and Maguire 1980) then a strong emphasis on culture, the specific nature of social stability, a recognition of the importance of social justice and a sober assessment of the way globalized neo-liberal discourse marginalizes peripheral nations may drive divergence. Indeed, ‘proponents of the divergence approach argue that national culture, not economic ideology, drives values’ (Ralston et al. 1997, p.4).

This notion that a ‘retreat into nationalism’ with its ‘protectionist’ policies and a propensity to nativism is the alternative to neoliberal liberalization and its version of globalization provides the neoliberal project with its driving modernist binary and discourse(Calhoun 2008). The idea that the nation state and local interests is the dark underside to the positive alternative of progressive liberalization of trade and globalization is a critical discursive trope and binary that characterizes neo-liberalism. Its influence on the discourse of the World Bank is significant. This binary which both tends to posit the nation state and issues of nationalism in pejorative terms also tends to assume that the only way to integrate with the world economy in an effort to increase development and growth lies in liberalization and the policies of competition and marketization. This conflation of integration with the world economy as being concomitant with marketization or liberalization is partly what informs the discourse which opposes the nation state and the issue of nationalism with policies of globalization, liberalization and integration. Take away this conflation and the binary between the nation state and nationalist developmental policies and globalization is no longer so solid. This kind of reductive and misleading binary also characterizes the discourse of higher education.

The argument of this chapter is that unrestrained neo-liberal globalization is not an alternative to ‘nationalism’ understood in a pejorative way nor is neoliberal marketization

an antidote to ethnic strife and conflict and inequality. Rather neoliberal policies are an important contributor to these problems. Secondly, the arguments of neo-liberals in regards to the nation state and local issues of social inclusion and bonding in nation states radically underestimate the importance and centrality of the nation state to development and social cohesion and the critical importance of nation states to address the real problems of horizontal inequality and national cohesion (Williams 1994). Craig Calhoun makes the essential point clearly that the argument for the decline of nationalism and the nation state is overstated and that the advocates of convergent globalization overplay their hand. According to Calhoun, globalization is not, 'simply the course of history, the mandate of necessity to which individuals and states must adapt or perish.' (Calhoun 2007a, p.237) Calhoun makes the critical point; 'Nationalism is not a moral mistake' (Calhoun 2007c, p.1)

The state has responsibilities in higher education which are not limited to improving competition or market position and are deeply related to building and protecting the national aspirations of its people. This remains so despite the arguments of neo-liberals and advocates of convergence and globalization in higher education. Education is a key institutional conduit for the state to realize its policies of national integration, social cohesion and social-economic development. Given its critical role in social and political cohesion, economic development and cultural integrity one would think that prescriptions for reform in education would be cognizant of the complexity of issues involved and aware of the perhaps unintended consequences of reform initiatives which have very real impacts and import on large numbers of people.

Arguments with respect to globalization are usually couched within a framework that views the nation state as a declining institution in relation to the forces of global integration and convergence. Problems of social cohesion, restraint of ethnic conflict are given short shrift in neoliberal theory. The problems of ethnic conflict and aspirations, national intent and the continued need of the state to address and formulate 'political' responses to the needs of its citizens is seen from the vantage of neoliberal theory as something on the wane under current conditions of globalization. In regards to higher education the traditional university with its focus on meeting the needs of the nation state is viewed within such a paradigm as increasingly anachronistic. Peter Drucker's warning that ' "old" universities will soon be relics of the past' is one of the more well known articulations of this position (Douglass 2005, p.2). Furthermore prescriptions for reform couched in the language of neo-liberalism fail to take into account the problems and characteristics of ethnically diverse or plural societies and the diverse 'nations of intent' that characterize the dilemmas opportunities and threats to these societies (Shamsul 1996; Shamsul 2001).

However the public policy of the Malaysian state understands these problems clearly. Take as an example the policies of Malaysia's New Economic Model. The emphasis on 'inclusive growth' suggests the salience of cultural values of inclusion and cooperation that are products of a more group oriented and solidarist culture (Council 2010b, p.90). The implicit cultural influences on how economic, social and educational development is articulated differ from national culture to national culture. The synergies and

complementarities between Malaysian higher educational institutions and the Malaysian state and society are important influences on how Malaysian higher educational institutions adapt and engage globalization. Thus culture, social and political traditions as well as specific missions that higher educational institutions play in Malaysian society plays a role in determining the extent to which higher educational institutions converge or diverge from global neo-liberal power. Molly Lee makes the point clearly:

‘The Malaysian state demonstrates with its national policy initiatives that it is not a shrinking welfare state but rather a strong interventionist state. Although the Malaysian case has many features of the global trends in terms of privatisation and corporatisation of higher education as well as transnational education, it is important to pay attention not only to global trends but also to national and institutional responses to them.’(Lee 2004, p.32)

Discussions of higher educational reform need to take into account the specific organizational and cultural dynamics within institutions and between institutions and their respective societies. Pointing this out is in no way idealizing the role that governments play. There is always a need to address democratic deficits on public policy. However the key point is that neo-liberalism does not provide the solution to these problems. Convergence globalization theory tends to be top down rather than bottom up in its analytic framework. In this way it tends to ignore the local, cultural, political and social characteristics of particular nexus’ between higher educational institutions and their respective societies. One way of theorizing the specificities of Malaysia’s diverse or varied institutional arrangements and cultural practices at a national level is to recognize what many scholars refer to as diverse or varied forms of ‘national capitalism’(Hall and Gingerich 2004; Hall and Soskice 2001).

In the Malaysian example the role higher education plays is related strongly to the role and way higher education is integrated within the needs of the Malaysian nation state and specific ‘variety’ of capitalism that characterizes Malaysian development (Hall and Gingerich 2004; Hall and Soskice 2001). The critical role of the state and the ‘state directed’ nature of many reforms in Malaysian higher education (Kell and Vogel 2007, p.4) is important to grasp. Indeed critics remind us that universities in Malaysia will maintain ‘some central direction owing to the politicised nature of the state building role of universities in Malaysian society.’ (Kell and Vogel 2007, p.5); (Abdul Razak Ahmad 2007; Pang 2007). This is so notwithstanding the World Bank’s observation that, ‘the role of the State could be reoriented in Malaysia’s economic development’ and that the ‘current mix of control, fiscal incentives, and preferential treatment is not conducive to Malaysia’s transformation to a knowledge-based economy.’ (Bank 2007)

If as many theorists have argued there are varieties of national capitalism, which are themselves culturally and politically informed then the way globalization impacts and asserts itself in diverse higher educational cultural milieus is also multilayered rather than homogenous (Hall and Gingerich 2004; Hall and Soskice 2001). The important point here is to remember that Malaysian capitalism (and its strong tradition of embedded mercantilism (Andriessse 2007; Jayasuriya 2004) and the specific institutional

relationships between the state and capital and between ideologically important institutions in Malaysian society (such as universities) are representative of a state-economy-society nexus that is nationally and culturally reflexive and adaptive to its cultural national and global milieu.

Mark Beeson puts the issue simply: 'contingent national circumstances continue to matter, even in an increasingly integrated global political economy' (Beeson 2000, p.10). The role the state plays in relationship to higher education and economic development in Malaysia in the context of social distribution of wealth and protection of cultural values compounds the genuine singularity of Malaysian economic and social development (Brown 2007; Kim 2003; Ridge 2004). The Malaysian example of what some theorists posit as a 'State Coordinated, Liberal Market Economy' explains at least in part the strong state hand and direction in Malaysian higher education (Ritchie 2009). Despite the difficulties of arriving at a succinct name for the Malaysian model of capitalism and state development (this is the critical context within which Malaysian higher educational institutions operate), a basic recognition exists that reforms and changes to higher education in Malaysia need to be formulated in cogency with national institutional and cultural values and interests. In short, the goals of Malaysian higher education do not exist in utter subordination to the objectives of a 'pure' liberal market economy (even though Malaysian policy must reflexively engage and advance its interests within a global market environment). Malaysian higher education still has significant state intervention and guidance. What then are some of the critical issues the Malaysian state faces that require its continued strong hand in higher education?

DIVERGENCE: THE LONG DUREE OF ETHNICITY

The failure to fully appreciate the moral purpose of the nation state and the binding and motivational importance of nationalist goals in the prescriptions of neo-liberalism generally and in the implications of much of the discourse of the World Bank compounds one further problem with this discourse. One of the more interesting and uncommented on lacunae in neo-liberal prescriptions for higher education is their almost complete avoidance of the problems of ethnic stability and the symbolic cultural importance of higher education. Neo-liberal arguments in higher education are presented in a way that either completely ignores the problems of ethnic stability in societies or implicitly assumes a kind of modernist and instrumentalist framework that is abstract and almost irrelevant to societies as they actually exist (Smith 2008).

Actually existing societies such as Malaysia are ethnically pluralist democracies which possess an important mission to maintain national integrity in the face of diverse and contending interpretations of what the intent of the nation ought to be. If we look closely at the neo-liberal arguments of the World Bank we find that informing them are philosophical commitments to modernism, instrumentalism and competitive individualism. The complete failure of neo-liberals to grasp that society is not simply the accumulation of individuals and that not all forms of action, policy and loyalty are

irrational if not informed by the principles of rational choice is a point that needs to be reiterated. Many if not the overwhelming majority of societies in the 'developing' world are national polities characterized by ethnic pluralism the search for national unity and the ongoing duration of ethnic identity and aspiration. Malaysia has dealt with these issues through public policy and through educational policy with a combination of affirmative action programs, cultural reassertion and an attempt to balance the interests of a pluralist society with the needs of establishing a nation state with a coherent core of cultural symbols and identity.

The success of Malaysian public policy in this regard is of real note and due to this success Malaysia has become somewhat of a model for many societies in the developing world seeking to maintain national independence, support economic growth and balance the tensions of a national polity which has a strong national and ethnic core, at the level of 'authority-defined social reality' (Shamsul,1996, p, 323) but which at the same time experiences diverse ideas of what its idea of nationhood ought to be (Smith 2008). In other words the problems and demands of nationalism and ethnicity and the specific cultural and social policies of nation states aimed at ensuring national cohesion and identity are considered by neo-liberal globalization theory as 'irrational', something to be overcome or ameliorated by the forces of liberalization. In such a discourse convergence with universal norms of competition and profit maximization are the proper and historically correct focus of public policies. In short the authority of neo-liberalism rests upon Eurocentric modernist presumptions which underpin the confidence of neo-liberal globalization. (Kaufmann and Conversi 2008, p.7) This Eurocentric modernism and instrumentalism informs neo-liberal prescriptions in subtle ways. This basic way of understanding ethnicity and nationalism as purposive and instrumentally motivated and 'invented' phenomenon (Gellner 1964, p.168) fits and meshes neatly with a liberal rationalist world view that finds its roots in the European enlightenment with its emphasis on secular reason, progress and the apparent universality of these characteristics. This kind of view of ethnicity and issues of nationalism fits neatly with a reduction of issues of ethnicity and national interest to a discourse which frames them as vehicles of the irrational, out dated, unprogressive.

The key argument of this chapter is that underpinning current neo-liberal prescriptions in regards to higher educational reform in societies such as Malaysia is either at worst a complete lack of any understanding of the importance of the continuance of ethnic identity and a lack of appreciation of the way nations are not simply invented or imagined but rather *intended* . Ethnic identities are linked in deep and sometimes complex ways to the ongoing hopes aspirations and intentions of diverse groups, within a given territory. Understanding the significance of ethnicity to the identity, policies and cohesion of the nation state and national intent is critical to understanding the very real cultural and symbolic and local forces and interests that are not necessarily reducible to 'self interest' 'instrumental reason' or simple invention. Why is this important? Why focus on this issue when discussing higher education?

We must understand the role and public policy aims and intent of the Malaysian nation state through grasping the problems and aspirations of balancing the need to root a

national identity in a core set of ethnic and cultural allegiances and maintaining inclusion and cohesion in an ethnically pluralist national environment. This is critical to grasp before we can truly understand the nature and motivation of public policy in pluralist states where the articulated 'ethnic core' is constantly feeling the need to assert its interests and its concept of the national purpose in conditions where this purpose is perceived to be threatened. Grasping the continuity and tradition of ethnicity and its political characteristics and the way it influences the idea of a nation of intent is critical. The state has an interest in social cohesion and balance in ethnically divided states; higher education is a critical institution to realise this interest.

MERIT

Convergence and homogenization of higher educational organizations and cultures is seen by some as a net positive since it allows competitive pressure to force higher educational institutions to focus on ensuring that those with merit can succeed. The growing external and internal pressures on national capitalism to adapt and adopt neo-liberal norms are significant and cannot be underestimated (Streeck 1996) (Wilks 1996) (Dore 1998). A key argument in regards to Malaysia is that it must concede to the forces of 'globalization' and move in the direction of 'meritocracy'. Affirmative action and political involvement in higher education inhibits countries such as Malaysia from being meritocratic in an individualist liberal sense. The principle of meritocracy which is espoused by the World Bank is essentially liberal individualist. According to this line of thought merit based processes are now considered central to economic growth and competition. This emphasis on meritocracy has driven World Bank analysis over time and is a critical part of the neo-liberal theoretical arsenal. The World Bank report, 'Higher Education in Developing Countries: Peril and Promise, Task Force on Higher Education and Society' makes the claim that

'An important ingredient in the public interest in higher education is its role in creating a meritocratic society that is able to secure the best political leaders and civil servants, doctors and teachers, lawyers and engineers, and business and civic leaders. These people are often selected from the most educated ...' (Rosovsky 2000, p.39)

Meritocracy is based on the expansion of processes of 'de-traditionalization and individualization of social life' (Gillies 2005, p.836) For neo-liberals lack of meritocracy is usually due to unnecessary political interference in public policy and institutions which can be balanced by a return to 'normal' decisions purely based on merit. In short the unencumbered self is the defining reference point for neo-liberal theory and 'politics' is seen as aberration from normality. The global competition for talent and the idea of a global meritocracy of higher educational institutions is fundamentally based on modernist assumptions that national political constraints are increasingly being washed away in the speed of globalization and the global meritocracy that this presumably brings. The unencumbered self of neo-liberal theory is thus able to compete equally unconstrained by 'irrational' and outdated 'political' influences rooted in national and state based considerations which according to this line of argumentation are outdated. In the

Malaysian example World Bank reports on Malaysia's 'Brain Drain' cite lack of 'meritocracy' and as a key reason for the flight of high quality Malaysians (World Bank 2011, p.75). Neo-liberal meritocracy is discursively set up in a binary opposition to politically based cronyism or corruption. According to the report titled: 'Peril and Promise: Higher Education in Developing Countries':

'Higher education can only function if the selection and promotion of faculty, administrators, and students is based on broadly defined merit. The particular goals of an institution may affect how it assesses merit, but ideology, nepotism, cronyism, or intimidation cannot be allowed to determine advancement.' (Rosovsky 2000, p.61)

The essential argument of neo-liberals is based on an unencumbered liberal self whose interests are driven by instrumentalism and competition. Issues of merit, identity and social solidarities are seen as shifting in conditions of globalization. Political structures must now increasingly accommodate to the new reality of competition and merit in a post-national era. National political considerations and the national intents of states must now be subsumed to the overriding project of the globalised competitive world where unencumbered selves compete without political constraints. Such is the mythic nature of neo-liberal philosophy. While World Bank publications espouse recognition of the importance of balance and recognize the importance of social goals and aspirations, the concept of what 'balance' entails is rather vague. A critical reason for this vagueness is because the discourse of neo-liberalism with its focus on the unencumbered individual the primacy of competition and the liberal concept of merit rooted in a social philosophy based on individualism and instrumentalism is completely blind to the encumbered and historical reality that informs how communities nations and the states which seek to represent them actually work.

Neo-liberal arguments with respect to Malaysian higher education focus on bringing the aims and policies of the Malaysian state into convergence with neo-liberal norms and espouse a strong commitment to an individualistic and competitive notion of meritocracy as a key aim in higher education. Such arguments which seek to increase Malaysia's competitive position advance so called meritocracy and move Malaysian higher educational policy in convergence with the norms and practices of neo-liberalism. This betrays an almost complete lack of engagement with the important national issues ethnic cohesion and stability and the problems which beset societies such as Malaysia. The blind side of meritocracy is that it may very well accentuate inequality and social exclusion. So what are some of the characteristics that encumber state policy? What issue presents as the critical lacunae of neo-liberal prescriptions?

DIVERGENCE AND HORIZONTAL INEQUALITY

Given the arguments put above in regards to the importance of the nation state, the binding and significant issue of ethnicity as an important issue in public policy formulation especially in our case of pluralistic societies and the problems associated with individualistic conceptions of merit and meritocracy how does all of this conflate

with regards to public policy in higher education? Addressing this brings us to another aspect of Malaysian society that needs to be grasped: the problem of horizontal inequality in ethnically plural societies. Horizontal inequality is a critical issue for social stability cohesion and cultural dignity (Frances Stewart 2005). In this chapter we will build upon this insight and extend it to argue that addressing horizontal inequality in public policy is like nationalism also not a moral mistake.

Pluralist societies that suffer the problems of horizontal inequality run the risk of significant social division and conflict (Stewart 2002; Stewart 2010; Stewart, Brown and Langer 2007). Societies where there is horizontal disadvantage and where the national story and sense of continuity with the past is challenged by globalization and diverse ideas or contending nations of intent provide the grounds for difficult public policy making decisions. Prescriptions of neo-liberal reform to public institutions such as higher education which fail to take into account or understand the deeper and ongoing issues of social cohesion and national intent, which is rooted in a desire to realise and express cultural dignity and independence as well as address social and economic justice are fraught with problems.

One of the most important issues in Malaysia national development and the mission of its higher educational sector is the constant tension between the effort to address horizontal inequality and the need to compete in conditions of global inequality. Horizontal inequality is defined as inequality between groups within a nation state. While most studies on inequality focus on vertical inequality between individuals within a society the significance of addressing horizontal inequalities in pluralist nations such as Malaysia needs to be understood both as a way of explicating the differences between Malaysia's path to capitalist development as well as a key focus for social justice and social stability. The essentially negative effect of an overemphasis on market principles to social equality acts as a sobering wake up call for those who would subordinate higher education completely to market logic. This is especially so in societies characterized by horizontal inequality where the effect of neo-liberal discourse, may, in fact, accentuate social division (Chua 2002; Chua 2003).

Addressing horizontal inequality in pluralist societies such as Malaysia is critical to social justice and sustainable social stability. Over the past thirty years, Malaysia's efforts at resolving horizontal inequality between different ethnic groups through programs such as the New Economic Policy (NEP) and engaging vertical inequality between Malaysia and the developed world through rapid economic development have provided a model for both social reform and economic growth which is singular in its achievements. The 'shackling' of Malaysia to a colonial legacy characterized by an 'ethnic division of labour' (Abraham 1997) and the resultant horizontal inequality in Malaysian society (Stewart 2002; 2007) provided the Malaysian polity with critical developmental problems (Brown 1997). Frances Stewart reminds us that addressing horizontal inequality is critical to addressing the needs of social stability and development (Stewart 2001). Frances Stewart, Stewart Brown and Mancini point out that addressing horizontal inequality has direct and indirect benefits for a society:

'The direct impact on members' well-being is one most important aspect. People's well-being may be affected not only by their individual circumstances, but also by how well their group is doing. This is partly because membership of the group is part of a person's identity, and partly because relative impoverishment of the group increases perceptions of members that they are likely to be trapped permanently in a poor position, or, if they have managed to do better than many in the group, that they are likely to fall back into poverty.'(Frances Stewart 2005, p.3)

The indirect benefits of addressing horizontal inequality also include the promotion of efficiency. This appears counter intuitive since efficiency gains are usually associated with neo-liberal notions of individual effort, and the expansion of market principles through educational institutions. Yet in fact the unleashing of talent by people within a group that has hitherto been marginalized in educational institutions may be the precursor to improving individual achievement. (Frances Stewart, 2005). Neo-liberal critics of Malaysian higher education often critique efforts to reduce horizontal inequality as examples of inefficiency. Such a view fails to grasp the efficiencies that are generated through addressing horizontal inequality. Frances Stewart argues:

'A common criticism of affirmative action policies is that they reduce standards (in the case of education) and efficiency (in the case of economic affirmative action). In theory, there are reasons for both negative and positive impacts. On the negative side, interference in normal competitive processes is said to prevent the allocation of resources in the most efficient fashion. On the positive side, countering discrimination and giving the whole population equal opportunities is likely to improve efficiency, by permitting greater realisation of potential. Even policies involving positive' discrimination towards deprived groups may improve efficiency, by offsetting the deep historic bias against such groups. ... There is no significant empirical evidence to suggest that such policies reduce efficiency, although careful evaluations are relatively rare.'(Stewart 2010, p.26)

In fact as Stewart reminds us, 'In Malaysia the high economic growth that accompanied affirmative action policies also suggests that they may have had a positive impact.'(Stewart 2010, p.26) In other words not only is the efficiency argument as articulated through advocates of the Washington Consensus neo-liberal model extremely simplistic in regards to how efficiency is generated in Higher Educational institutions in Malaysia, such a philosophy if applied to Malaysian higher education has possibly very troubling implications for broader social stability. Horizontal inequality between groups may if unchecked be the basis of violence and dispute between groups. This final effect of horizontal inequality in societies is of central concern for discussions over social justice, equality and social stability in nations such as Malaysia. Amy Chua's definitive work on the deleterious and dangerous results that neo-liberal agenda can have on ethnically divided societies, especially those characterized by horizontal inequality is instructive(Chua 2003). Chua captures the issue with characteristic frankness:

'There exists today a phenomenon- pervasive outside the West yet rarely acknowledged, indeed often viewed as taboo- that turns free-market democracy into an engine of ethnic conflagration. I'm speaking of the phenomenon of market-dominant minorities: ethnic

minorities who, for widely varying reasons, tend under market conditions to dominate economically, often to a startling extent, the "indigenous" majorities around them.'(Chua 2002, p.66)

The point that Amy Chua makes in regards to the dangerous effects that neo-liberal values may have on sustainable social stability and growth in Malaysia is not lost on policy makers. Finding the balance between the pressures of neo-liberalism and the specific needs of social stability and inclusion in the Malaysian context is no easy matter. Understanding the role of educational institutions in advancing social justice within a pluralist consociational polity(Lijphart 1969) and ameliorating horizontal inequality as a basis for sustainable social development and stability is the key to grasping the way higher educational institutions place themselves in relation to neo-liberalism. Neo-liberal higher educational reform is at odds with the fundamental way that higher educational institutions in Malaysia contribute to social justice and cultural growth. Indeed failing to understand the important role Malaysian institutions play in addressing horizontal inequality and accepting without temperance neo-liberal arguments with respect to meritocracy, efficiency, accountability and competition may lead Malaysian higher education down a path that is unsustainable and counterproductive to the national interest. Understanding the way that efforts to gain competitive advantage and increase the status of Malaysian universities within a globally hierarchical educational market may affect social justice in pluralist societies where horizontal inequality is salient and politically explosive needs understanding and elaboration. The issue is directly recognized in the New Economic Model:

‘Inclusiveness will enable all communities to contribute to and share in the wealth of the country. While perfect equality is impossible, an inclusive society will ensure that inequality does not worsen. Ethnically divided societies are more prone to violent conflicts. The multi-racial composition of the Malaysian population is still its outstanding feature and this ethnic diversity will always be with us.’(Council 2010a, p.10)

The problems of horizontal inequality in Malaysia is now accentuated through neo-liberal pressures which if left unchallenged, may overturn and negate the very real progress of social inclusion and equality that has occurred through the NEP (Hoong 1971; Hoong 1973) Malaysia is a good example of a nation where public policy has directly addressed the issue of horizontal inequality and where affirmative action programs have directly led to greater participation rates of hitherto excluded groups and thus greater equality between ethnic groups on the whole (Fauziah 1999; Rao 2009; Roslan 2001; Sabbagh 2004; Yusof 2006).. Neo-liberal globalization discourse with its emphasis on competition, and markets is a poor and ultimately dangerous substitute for an informed and sophisticated discourse about the directions and emphasis that public policy must pursue in ethnically divided societies and nations such as Malaysia. Higher education is closely connected to the problems of national intent and the diverse ways in which this is formulated in different societies.

CONCLUSION

The focus of this paper has been on specific tensions that informs Malaysian higher educational reform. The problems of taking on and accepting the necessity of institutional convergence to neo-liberal norms is dysfunctional to the objective national interest and to the interests of social stability and social justice in pluralist Malaysia. The effort to apply neo-liberal nostrums to Malaysian higher education potentially challenges the important role higher education plays in addressing horizontal inequality and social stability. The problem of horizontal inequality within Malaysian society and the need to ameliorate it represents a key brake on Malaysian higher educational institutions fully adapting to the neo-liberal discourse. Recognizing that market oriented reform in higher education can accentuate horizontal inequality, social division and conflict in Malaysian society is important since an uncritical espousal of neo-liberal reforms may in fact exacerbate inefficiencies, create division and hinder the advance toward excellence that is the critical aim of reform.

The discourse of neo-liberalism and an uncritically celebratory pursuit of meritocracy and the way this till deeply influences the policy positions of bodies such as the World Bank is ultimately an ideology, that if not tempered, will lead to a sense of social exclusion, unsustainable individualism, environmental catastrophe and quite possibly, social conflict. Not only is the concept of meritocracy in the context of societies such as Malaysia and many other developing nations, one that has the distinct potential to be ethicized and politicized, it fails the test of democratic inclusivity and equality based on the states responsibility to provide an education for all that is adequate to ensure democratic citizenship and participation (Gutmann 1988). The discourse of neo-liberalism in higher education disempowering, alienating and narrow, if applied in societies that are pluralist and characterized by horizontal inequalities and ethnic tensions may lead to the exacerbation of conflict exclusion and worse.

It bears reinforcing: individuals are encumbered by loyalties, commitments, beliefs and histories which bind them together into communities and groups. Structural inequality based on inequality between groups of people who share particular characteristics and histories is in this world an ongoing reality. While it may be argued that ethnicity for example is a social construction and thus not a static or perennial category, such a view if accepted uncritically can lend itself to the idea that issues of ethnic disadvantage can simply be ameliorated through individually based social justice mechanisms which are socially blind and focus on individual merit or level of individual inequality. However the tenaciousness of ethnic disadvantage and the downward stickiness and historical longevity of ethnically based forms of discrimination and exclusion suggest that basing social justice policies on vertical amelioration of inequality and simply assessing all decisions of access in higher education on individualistic merit may not fully address or attend to the very real way in which ethnically based discrimination and marginalization can continue in a society despite the best efforts of educators and public policy makers. Ethnicity is a tenacious concept matched in strength by the tenacity of continued horizontal disadvantage.

Ensuring that horizontal inequality does not undermine Malaysia's social and economic security is a critical role for Malaysian universities. A 'world on fire' is neither sustainable nor defensible. Balancing fears of social and cultural conflict and inclusion with the need to unleash maximum creativity and participation is the core problem of higher education. The problems of horizontal inequality in ethnically pluralist societies are a well known contributor to social conflict and instability. Public policy makers have a proper responsibility to ensure that higher educational policy takes into account this issue and that they are not simply swept up in a liberalized discourse which is unsuited to plural diverse societies as they actually exist. The myth of the unencumbered individual which underpins liberal concepts of merit and informs the neo-liberal sense of self is ill suited to addressing the reality that ethnic identity and belonging are tenacious in the contemporary world and that horizontal and structural inequality between different ethnic groups can be resilient even when public policy intellectuals and philosophers insist that our position in society ought to be the result of individually ascribed characteristics and capacities.

The deep and largely ignored problem of the ethnicization of social science knowledge is also something we need to engage with and understand especially in the way arguments couched in apparently abstract commitments to competition, merit and individualism and the comparisons used may in fact advance 'openly chauvinistic' (Shamsul, 1996, p.343) positions. A. B. Shamsul's observation 'that knowledge, irrespective of philosophical and theoretical grounding, has been used directly or indirectly as an instrument to advocate an ethnic cause or to launch purportedly 'an objective, scientific critic' of an ethnic group or to justify the interest of an ethnic or sub-ethnic group' (Shamsul, 1996, p.343) needs to be looked at closely. It is an insight into current debates and relates strongly to the position articulated in this chapter.

All public policy in regards to higher education must always be guided by a strong and abiding concern with national intent and social cohesion. Such concerns may not be easily articulated in a world dominated by the hegemony of liberal economics and liberal views of the individual. However the importance of national intent and the need to address and engage with group /horizontal inequalities necessitates a realist perspective in higher educational debates rather than an idealist one rooted in a misleading concept of the unencumbered self of liberal philosophy. Neo-liberalism constitutes the problem to be overcome not the solution to be applied to higher education (Gray 1998).

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Impacts of the Stock Market Liberalization in China: Evidence from the Foreign Institutional Investor Scheme

Chun-Da Chen

Chih-Yu Shen

ABSTRACT

The aim of this paper is to analyze the influence of the Qualified Foreign Institutional Investors (QFII) scheme announcement on the Chinese A- and B-share markets, using an event study method with the GARCH (Generalized Autoregressive Conditional Heteroskedasticity) process. The results indicate that the announcement of the QFII system did cause a rapid drop in stock prices and trading volumes for both the Shanghai and Shenzhen stock markets. The abnormal returns in the Shanghai A-share market are influenced the most by the QFII scheme and both stock markets experienced a sustained decline in the trading volumes. The results of cross-sectional variation further reveal that the number of board members, the shareholding ratio of block shareholders, the market capitalization of firm equity, and SOEs are all positively related to the abnormal trading activities. It is worth pointing out that stock listings in the overall Shanghai stock market and the both A-share markets exhibit a negative relationship with the abnormal trading behavior, implying that A-share stocks might be overvalued after the opening up of the B-share market.

INTRODUCTION

The rapid growth of China's financial markets has captured global investors' attention. China's recent remarkable aggregate economic growth rates, averaging 10% per year since 1992, have been accompanied by similar growth in its equity markets. China has two stock exchanges: the Shanghai Securities Exchange (SHSE) and the Shenzhen Securities Exchange (SZSE). There are two different types of shares, known as type "A" and type "B", that are traded in both stock markets. In the beginning, the Chinese government only allowed domestic investors to trade A-shares, while foreign investors could invest in B-shares only. The B-share market was set up for two purposes. The first purpose is to satisfy foreign investors' demand to invest in the China stock markets. The other one is to prevent foreign speculators from attacking the local stock markets.¹ According to previous studies, A-shares have a high price premium relative to the corresponding B-shares, although the owners of A- and B-shares have the same rights.² China's government also took note of this unique feature and believed that market segmentation and liquidity are possible explanations for the price differentials in these two different types of shares.

During the past few years, the Chinese government has launched several policies to reduce the price difference between A- and B-shares. In February 2001, the government (China Securities Regulatory Commission, CSRC) allowed domestic residents to invest in the B-share market.³ The next important innovation was announced on November 7, 2002, when the CSRC proclaimed the opening of the A-share market by employing a Qualified Foreign Institutional Investors (hereafter QFII) scheme. The QFII scheme is a transient that

¹ Data Resource: China Securities Regulatory Commission (CSRC).

² Fernald and Rogers (2002) addressed this anomaly in their "Puzzles in the Chinese Stock Market" and Bailey *et al.* (1999) referred to "The Strange Case of China".

³ The purpose of this policy is to eliminate the numerous arbitrage opportunities between A- and B-shares in both stock markets, because there is a large price discount for B-shares relative to A-shares (Bailey, 1994). Hence, a huge amount of domestic money should enter and improve the activities of the B-share market. The results show that after allowing domestic residents to invest in the B-share market, it definitely impacted the China A- and B-share markets (Chen, 2007; Chiu *et al.*, 2005), and the large discount has dramatically declined (from 80% to about 45%) as a result of this policy (Yang and Lau, 2005). It can be emphasized that the B-share market has been opened to the public through this deregulation.

facilitates the limited introduction of foreign capital and the opening up of China's financial markets. Similar schemes have been widely adopted in some countries, for example, Taiwan, South Korea, and India. The QFII scheme is likely to grow as the government searches desperately for ways to revive the moribund stock markets (Asiamoney, 2005). It follows from what has been said that these two reforms should diminish the price differential between A- and B-shares.

The CSRC expects that the A- and B-shares will become more efficient and attract more investors to invest in the stock markets by eliminating investment restrictions. When it comes to maturity, the Chinese government plans to combine A-shares with B-shares in the near future. More noteworthy is that China's financial markets are among the largest emerging financial markets in the world (Wang and Firth, 2004). Thus, there is more interest and research on China's stock market data due to the country's rapid growth and potential opportunities for investors (Cao *et al.*, 2005).

The issue now arises is that there are only a few research studies that have investigated the impact of the QFII scheme in China. Against such a background, if we focus on clarifying the impact of the QFII scheme in China, then the result helps interpret the influence upon adopting the QFII scheme. For foreign investors, if they plan to invest in China's stock markets, then the results of this paper could assist them in familiarizing themselves with this huge emerging financial arena.

To clarify our motivation, as a beginning, we examine whether trading activities exist between different shares and markets during the pre-event (before the QFII scheme announcement) and the post-event (after the announcement) periods and shall pay special attention to investigate whether there are abnormal returns and abnormal trading volumes of the A- and B-shares in the SHSE and the SZSE via an event study with the GARCH process. In other words, once the CSRC implemented QFII, we expect to uncover whether the prices of A-shares or B-shares generated abnormal returns and abnormal trading volumes surrounding the announcement date. To the best of our knowledge, just a few research studies have focused on the change in the trading policy. This is particularly true for previous studies which have examined the impact of implementing the QFII scheme. Unlike most previous papers, we model abnormal returns according to the GARCH

(Generalized Autoregressive Conditional Heteroskedasticity) estimation to control for time-varying volatility.⁴

The study is value added, because it fills a gap in the literature. However, a missing link in the literature remains in how the information transmits across share classes and sectors. That should be important to discover, as individual and institutional investors use A- and B-share indices and sector indices as benchmarks to track the performance of actively managed portfolios in China.

Examining the relative importance of the sectors in China's stock markets also allows for a better understanding of the dynamics of financial markets in an economy undergoing significant reforms and regulatory changes such as have occurred in China. We further analyze the pattern of information flow both across and within the classes of shares and sectors of the two Chinese stock exchanges. Adding to this point, there are also few research studies investigating whether a firm's properties will affect the abnormal trading behavior. We intend to uncover this literature gap via cross-sectional variation.

The plan of the article proceeds as follows. Section 2 provides a brief description of the related literature and some hypotheses. Section 3 outlines the characteristics of the data and the models. Section 4 presents empirical results. The paper ends with a brief conclusion in Section 5.

LITERATURE REVIEW AND FORMULATION OF HYPOTHESES

Literature Review

Studies on China's stock markets have grown rapidly especially during the past decade. Researchers have examined different aspects of these segmented stock markets, including asset pricing differences, return and volatility transmissions, and price-volume linkages. As seen in many emerging markets, China set up legal restrictions on the foreign ownership of domestic equity in order to control local firms, especially those companies that are of strategic and national importance.⁵ A major reason for this arrangement is to

⁴ See, for example, Corhay and Rad (1996).

⁵ See, for example, Taiwan, South Korea, and India.

attract foreign funds, yet avoid losing ownership control rights.

There is an unusual phenomenon that is inconsistent with the price premiums broadly found in other countries, which goes as follows (e.g., Bailey and Jagtiani, 1994; Domowitz *et al.*, 1997; Stulz and Wasserfallen, 1995; Bailey *et al.*, 1999; Li *et al.*, 2006): there exists a large price discount for China's B-shares relative to the A-shares. Numerous studies including Bailey (1994) and Ma (1996) document that the A- and B-share markets are segmented despite the expectation that the two classes of shares are likely to be impacted by the same factors.

One of the main reasons assigned to the B-share discount is that there might be more risk in the B-share market compared with the A-share market. One school of thought on B-share discounts believes that foreign investors have less information about Chinese firms, owing to the difficulty they face in accessing information about B-shares.

Bailey (1994) argued that the lower required returns of Chinese citizens due to limited investment opportunities might have an effect. Su (1999) expressed a one-period capital asset pricing model under ownership restrictions to explain the discounts on foreign-owned Chinese B-shares relative to the prices of domestic A-shares. Fung *et al.* (2000) provided supportive evidence for the argument for segmented A-share and B-share markets. Sun and Tong (2000) clarified the price discount of the B-shares by differential demand elasticity. They indicated that when H-shares (Chinese companies listed in Hong Kong) become more attractive than B-shares, the B-shares' discount becomes larger.

Chen *et al.* (2001) found that relatively non-liquid B-shares have a higher expected return and are priced lower to compensate investors for increased trading costs and B-share price movements that are more closely related to market fundamentals than A-share prices. Wang and Xu (2004) also explained that return differences among individual stocks are due to the different investment environments in China, asymmetrical information, and market efficiency.

Regarding the topic of information transmissions, Yang (2003) contradicted the arguments of no informational asymmetry (Chen *et al.*, 2001), better-informed domestic investors (Su and Fleisher, 1999), and the informational leading role of the Shenzhen market over the Shanghai market (Fung *et al.*, 2000). Their findings in China's stock

markets suggests that A- and B-share investors have distinct paths to information, and that information often reaches the B-share market before it reaches the A-share market. This is consistent with some research, for example, Froot *et al.* (2001) and Pan *et al.* (2001). Although the China stock markets have been the object of study for a long time, there is little agreement as to information transmissions.

All the situations that we mentioned above have led to the stock markets in China becoming separated. The Chinese government as a result tried to wipe out this segmentation in its stock markets. The CSRC first announced that domestic citizens would be allowed to hold and trade B-shares starting on February 19, 2001. Gao and Tse (2004) argued that this change eliminated the rigid segmentation between the A- and B-share markets. Chiu *et al.* (2005) also presented that the CSRC, by permitting domestic residents to invest in B-shares, will impact both the A- and B-share stock markets. In summary, the A- and B-share markets became more integrated after the deregulation.

Previous studies have indicated that the QFII scheme might help to open up China's stock markets. The widespread assumption that institutional investors play an important role in a stock market is based upon the concept that such liberalization is aimed at boosting foreign investment in a local securities market (Topic Magazine, 2004). Although sometimes institutional investors' daily trading value does not account for the largest proportion of the entire market, however, the influence caused by them is much greater than the trading value (Yang, 2002).

Over the past few years, a considerable number of studies have adopted various approaches to demonstrate the segmentation in China's equity markets. Yu (1996) and Su and Fleisher (1998) discovered that the ARCH/GARCH models could be fitted to Chinese stock market returns. They also explored the distributional assumptions underlying the ARCH/GARCH model plus the impact of the government policy intervention on volatility. Chui and Kwok (1998) used the iterated linear seemingly uncorrelated regressions (ITSUR) to estimate the lead-lag relation between A- and B-shares in China.

Fung *et al.* (2000) employed the latent variable asset pricing framework to explore the degree to which the two-tier markets of A- and B-shares in China are segmented. Chen *et al.* (2001) used a panel data model to analyze the cross-sectional and time-series

determinants of the price differences between the two classes of shares. Most studies, such as Yang (2003), utilized the multivariate VAR models to argue the segmentation in China's stock markets. Brooks and Ragunathan (2003) extended the multivariate VAR model augmented with a GARCH (1, 1) model to examine the spillover in volatility between A- and B-share prices.

For the reasons mentioned above, we arrive at the conclusion that market segmentation causes the price differences between A- and B-shares in China's stock markets. The motivation of this paper is to describe the different processes of price volatilities on A- and B-shares and to illustrate the changes of volatility transmissions during the pre- and post-event periods. Additionally, the information transmission process between different shares and a firm's properties are still an unknown problem. Therefore, we try to figure out how the policy changes in China can cause different kinds of impact upon its stock markets and disclose the information transmission process.

Hypotheses' Development

In this section we formulate some hypotheses to be examined in the event study.

(1) Did domestic and foreign investors react in some definable way to this investment policy adjustment?

Through our investigation we collected other policy reforms concerning some investment legality. For example, opening stock repurchases and earnings announcements based on two different accounting standards (Su, 2003). Gonzalez and Gonzalez (2004) analyzed the consequences of legal restrictions on the volume of shares firms can repurchase. Gao and Tse (2004) looked at two different accounting standards, IAS and PRC GAAP, in China's segmented stock markets.⁶ They found that there are different abnormal returns and trading volumes on the event day and during the pre- and post-event periods. These arguments constitute the intuition for the following hypothesis.

H1. *The A- and B-share markets exhibit abnormal returns and trading volumes in reaction to the QFII scheme announcement.*

⁶ International accounting standards (IAS) and PRC generally accepted accounting principles (PRC GAAP).

(2) Did the capital structure and ownership structure affect the information assessment?

It is without doubt that publicly released news lead to financial market reactions. This drives us to the question of how different firms' structures respond to the QFII announcement. We further attempt to discover whether the capital structure (e.g. firm age, turnover rate, and market capitalization of firm equity) or the ownership structure (e.g. State-owned Enterprises (SOEs), number of board members, and shareholding ratio of block shareholders) affect the information access. If the results prove that there are strong associations between abnormal trading behaviors and a firm's properties, then we may assume that firm-specific characteristics affect the degree of abnormal returns and trading volumes. Rosa *et al.* (2005) also argued that the proportion of stock held by block shareholders is positively related to abnormal trading return. To the best of our knowledge, there is still a literature gap of research on a firm's properties and how they affect China's stock markets.

H2. *There are strong associations between abnormal trading behaviors and a firm's properties.*

(3) Were the trading volumes surrounding the announcement date accompanied by large price changes?

He and Wang (1995) showed that volume might lag behind information flow when the information is private. They demonstrated that "exogenous information," which includes new private signals and public announcements, generates trading together with large price changes, while volume generated by existing private information is not accompanied by significant price changes. Chan *et al.* (2001) investigated the impact of salient political and economic news revealed in the Stock Exchange of Hong Kong. They found that both types of news have an impact on return volatility and volume. Long *et al.* (1999) noted a significantly positive relation between changes in volume and absolute price returns in both A- and B-shares. As defined by Long *et al.* (1999), this altered investment policy is exogenous and the following hypothesis is expected.

H3. *Upon the QFII scheme announcement, there are high volume volatilities in reaction*

to high return volatilities in both A- and B-share markets.

DATA AND METHODOLOGY

Data

In order to investigate the impact of the QFII scheme announcement on China's stock markets, we collected daily data of four stock markets from the *China Center for Economic Research (CCER)* database. These benchmark indices are the Shanghai A-share index (SHA), the Shanghai B-share index (SHB), the Shenzhen A-share index (SZA), and the Shenzhen B-share index (SZB).

We also checked the data to ensure that there are no separate significant information events that occurred around the QFII scheme announcement date. The sample period for this study covers 161 daily observations for each stock index price series, which was from 140 days prior to the announcement to 20 days after the announcement. To be included in our sample, a firm must have available information on stock returns, trading volume, firm age, number of board members, shareholding ratio of block holders, turnover rate, total market capitalization, and state-owned ratio. The final sample firms include 628 companies listed on the SHA, 51 listed on the SHB, 483 listed on the SZA, and 56 listed on the SZB.

Methodology

We adopt an event study to examine the reaction of investors to positive and negative news (also called events) first. Thus, we can construct abnormal returns and abnormal volumes by adopting an event study. We further explore cross-sectional variation in these returns and volumes.

Event Study with the GARCH Process

In an efficient market, the effect of the QFII scheme announcement should be reflected in stock price changes immediately following the announcement. Customarily, the measure of the market reaction is realized using a residual analysis. Fama *et al.* (1969) introduced the concept of an "event-study." This is probably the single most important breakthrough in our understanding of how stock prices respond to new information. The

Fama *et al.* (1969) research design has inspired a very large number of empirical studies on market efficiency and allows us to accumulate evidence that stock prices respond in apparently clever ways to information.

Empirical evidence specifically shows that stock returns tend to exhibit clusters of outliers, implying that the volatility series evolves over time in a non-linear fashion.⁷ We use an event study methodology that assumes returns follow a GARCH (1,1) process in order to examine the effects of removing investment restrictions on the stock returns. We focus on the differential reactions of the A- and B-share investors to the removal of investment restrictions - namely, we compare the behavior of the price reactions of the A- and B-shares in response to the QFII scheme.

While trading volume has generally been ignored in previous research as an indicator of differential market behavior, in this paper we investigate the trading volumes of the A- and B-shares in reaction to the QFII announcement. As shown by He and Wang (1995), trading volume around a deregulation date has important implications for the information values of deregulation.

Unlike most previous research, the event study model with the GARCH estimation is herein utilized to analyze the effects of deregulation on stock prices, in line with McKenzie *et al.* (2004). The abnormal returns are calculated around the date when the deregulation period ends. More specifically, the abnormal return (AR) for stock i on day t is defined as:

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{m,t}) = \varepsilon_{i,t}, \quad (1)$$

where $\varepsilon_{i,t} | \Psi_{t-1} \sim (0, h_{i,t})$, and Ψ_{t-1} denotes all information available at time $t - 1$. The conditional variance in the GARCH case is:

$$h_{i,t} = \omega_i + \delta_i h_{i,t-1} + \gamma_i \varepsilon_{i,t-1}^2, \quad (2)$$

⁷ Cao and Tasy (1992), Corhay and Rad (1996), and Solibakke (2002) found that the GARCH-family models are superior to the OLS. Support for the use of this model can be found in Reyes (1999), McKenzie *et al.* (2004), and Chen *et al.* (2004).

with $\omega_i > 0$, $\gamma_i > 0$, $\delta_i \geq 0$, and $\gamma_i + \delta_i < 1$. The parameters are all estimated by maximum likelihood. Here, $R_{i,t}$ is the return on stock i on day t , and $R_{m,t}$ is the return on the SHSE's and the SZSE's A- and B-share indices on day t . The coefficient of α_i , β_i , and the conditional variance equation are estimated based on the market model with the GARCH process by modeling $R_{i,t}$ for the 120-day (half year) period [-140, -21] - that is, 140 trading days before the event date, defined as the QFII scheme announcement date (QAD), to 21 trading days (one and half months) before QAD on $R_{m,t}$.

We also calculate the cumulative abnormal return (CAR) for each individual firm i , covering 20 trading days pre-QAD to 20 days post-QAD.

$$CAR_{i,t} = \sum_{T=-20}^{20} AR_{i,t} \quad (3)$$

We next calculate the cross-sectional average of abnormal returns (AAR). The cross-sectional cumulative average abnormal returns (CAAR) are then estimated to investigate for their statistical significance. In this paper we employ the generalized sign test examine whether the number of stocks with positive cumulative abnormal returns in the event window exceeds the number expected in the absence of abnormal performance. The number expected is based on the fraction of positive abnormal returns in the 120-day estimation period:

$$\hat{p} = \frac{1}{n} \sum_{j=1}^n \frac{1}{120} \sum_{t=E_1}^{E_{120}} S_{j,t},$$

where

$$S_{j,t} = \begin{cases} 1 & \text{if } AR_{j,t} > 0 \\ 0 & \text{otherwise} \end{cases}$$

The calculations of AAR and CAAR are as below:⁸

⁸ Abnormal returns are examined using the generalized sign Z-test in the literature; see Sanger and Peterson (1990), Singh *et al.* (1991), and Chen *et al.* (1991). In this paper we

$$AAR_t = \frac{\sum_{i=1}^N AR_{i,t}}{N}, \quad (4)$$

$$CAAR_{T_1, T_2} = \sum_{j=1}^N \frac{CAR_{j, (T_1, T_2)}}{N}, \quad (5)$$

and N = number of sample firms.

The test statistic uses the normal approximation to the binomial distribution with parameter $\hat{p}$. Define w as the number of stocks in the event window for which the cumulative abnormal return $CAR_{j, (T_1, T_2)}$ is positive. The generalized sign test statistic is:

$$Z_G = \frac{w - n\hat{p}}{[n\hat{p}(1 - \hat{p})]^{1/2}}.$$

Testing the abnormal trading volumes of **H1**, we analyze the abnormal trading volumes for 41 days, centered on QAD. Abnormal daily trading volume is calculated relative to each stock's pre-QAD average daily trading volume (Chen *et al.*, 2004 and Campbell and Wasley, 1996) as:

$$AV_{i,T} = \frac{V_{i,T}}{\frac{1}{120} \sum_{t=-21}^{-140} V_{i,t}} - 1, \quad (6)$$

where $V_{i,T}$ is the trading volume for stock i on day T . We first compute the average volumes of each stock from $t = -140$ to $t = -21$ relative to QAD ($t = 0$). For $t = -20$ to $t = +20$, we calculate for each day the ratio of daily volume to its mean (which is obtained earlier, based on the period $[-140, -21]$). We subtract one from the ratios and average across firms to get an estimate of abnormal volume $AV_{i,T}$ across each day

also use the generalized sign Z-test to test whether there are any significant abnormal trading activities for each trading day in the event period of event window. For a more detailed explanation of the generalized sign Z-test, see Sprent (1989) and Cowan (1992).

surrounding QAD.

Cross-Sectional Variation in AAR and CAAR Values

We further explore the cross-sectional variation in these returns and volumes. In fact, cross-sectional mean abnormal returns and trading volumes do not control for other exogenous factors that might cause a variation in the AAR, CAAR, ATV, and CATV values. Therefore, we estimate regressions of the following form:

$$AAR_{i,T+k} = \gamma + \sum_{i=1}^n \delta_i X_i + \varepsilon \quad i = 1, \dots, N, \quad (7)$$

$$ATV_{i,T+k} = \gamma + \sum_{i=1}^n \delta_i X_i + \varepsilon \quad i = 1, \dots, N, \quad (8)$$

where X contains weakly exogenous variables. These variables include the years since establishment (AGE), the number of board members (BM), the shareholding ratio of block shareholders (BSH), the turnover rate (TO), the natural logarithm of the market capitalization of firm equity (SIZE), the shareholding ratio of the state (SOEs), and dummy variables indicating whether the company is a state-owned enterprise (D_{SOEs} , a dummy variable is equal to one if the percentage of shareholding by the state is higher than 50% and is zero otherwise), listed on the Shanghai stock market (D_{SH}), and belongs to A-shares (D_A). These variables are chosen, because they account for many effects considered in several studies in the literature.⁹

EMPIRICAL RESULTS

In this study the main stress falls on analyzing the impact on China's stock markets after the QFII scheme announcement via an event study with the GARCH process. We investigate whether there are abnormal trading activities – abnormal returns and abnormal

⁹ Examples abound. Zahid and Shekar (2002) found a large impact of stock returns on subsequent insider transactions. Li and McNally (2007) also indicated that the abnormal return may be attributable to private information. Reburn (1994) argued that insiders of smaller firms can earn larger abnormal returns than insiders of larger firms and Wang and Iorio (2007b) even explored that size has the most significant effect in capturing variations in stock returns. Finally, Wei *et al.* (2005) discovered that there is a significant relation between ownership structure and firm value.

trading volumes within the event period. If there are significant abnormal trading activities during the event period, we can then conclude that the announcement of the QFII scheme did affect the stock markets. In the last part of chapter 4, we further explore a cross-sectional variation concerning the property of each firm in the trading activities.

As of December 2002, the total companies listed on the SHSE and the SZSE are 715 and 508, respectively. There are 44 companies that have issued both A- and B-shares on the SHSE at the same time and 43 companies that did so on the SZSE. More than 70% of companies that issued B-shares have also issued A-shares on the SHSE and the SZSE (see Table 1).

For all empirical tests and analyses in the tables, an event window of 41 days, from day - 20 to day +20, is selected. This event window allows us to examine possible market reversal effects. The empirical results are reported in the following parts.

Table 1. Market Size, December 2002

Stock Exchange	Type of Shares	No. of Companies Listed	Market Capitalization
Shanghai	A	705	RMB254 billion (or US\$32.31 billion)
	B	54	RMB57 billion US\$7.25 billion
Shenzhen	A	494	RMB126 billion (or US\$16.03 billion)
	B	57	RMB3.6 billion (or US\$0.46 billion)

Note: The total companies listed on the SHSE and the SZSE are 715 and 508, respectively. There are 44 companies that have issued both A- and B-shares on the SHSE at the same time and 43 companies that did the same on the SZSE. The combined capitalization of the markets reached US\$500 billion in 2000, making up 50% of China’s GDP.

Results of AARs and CAARs

Table 2 reports average abnormal returns (AARs) and cumulative average abnormal return (CAARs) in the Shanghai and Shenzhen stock markets.

Shanghai Stock Market

First of all, the SHA should have a greater influence than the SHB, because the QFII scheme opens up the A-share market. As a widely accepted assumption, the influence of the QFII scheme announcement will be greater in the A-share market. Table 2 indicates by the generalized sign z-test that the AAR is significant at day -20 (twenty days before the event day, or about one month). It implies that before the official announcement date, the Shanghai stock market seems to start to exhibit significant AARs. It is interesting to note that the AARs in the SHA are positive at day -3, day -2, and day -1, while on the contrary, the situation of reversal appears on the event day (day 0). The AARs are negative and significant at day 0. The continuous and significant negative impacts of the SHA prolong for at least four days after the announcement date.

The point to observe is that after the QFII policy announcement, the AARs kept decreasing. This result is consistent with the findings from Bosch and Hirschey (1989) and Karpoff and Rankine (1994) in that there is a positive pre-announcement effect followed by a negative post-announcement drift. One obvious feature is that the announcement precipitates a decline in the CAARs. Twenty days after the announcement date, the CAAR is -2.94 %. It follows from what has been said that the QFII scheme announcement did impact the SHA. For the short term, this policy affected the SHA in negative ways significantly.

So far as the SHB is concerned, the announcement of the QFII scheme almost did not result in any influence. The trend of the CAARs remains at a stable level around -1%. We may go on from this to the conclusion that the varied reactions of the SHA and the SHB might be caused by market segmentation.

Shenzhen Stock Market

According to Table 2, the AARs in the SZA are significantly positive at day -20 and -19. One thing, however, might be certain: the information of the QFII scheme

announcement probably had been known to some traders well ahead of its public announcement date. This is a point to which we shall return to discuss later. There is also a reversal reaction in the SZA. The AARs at day -2 and -1 are positive. When it comes to the event day (day 0), the AARs reverse to negative and are significant. The continuous and negative impacts prolong for five days. The difference between the SHA and the SZA is that there is no significant influence on the CAAR at day +20, while the SHA shows to have been significantly negatively impacted on the same day.

There are different responses in the SZB compared with the SHB. The AAR is positive and significant at the event day. In contrast, after the announcement negative AARs are incurred and there is a reversal of the positive run-up in the pre-announcement period. During our event window, the AARs at days -20, -15, -13, and 0 are positive and significantly different from zero. A reversal situation appears from day +1, and the AARs turn to be negative from this day on. So far as the CAARs are concerned, the unique feature is that the CAARs are positive and significant from day -20 to day +2, while the CAARs in the SHA, the SHB, and the SZA are negative from the beginning of our event window (day -20).

For the present, we shall confine our attention to the differences in the SHA and the SZA, which is the main purpose of this paper. Table 3 summarizes the CAARs for various event windows in each A-share market. In the SHA, the CAARs' values are all significantly negative over each event period. The event period of (+11, +20) shows a reversal of negative impact. The CAARs during this event window are significantly positive - that is to say, the announcement started to affect the SHA in a positive way. Another striking point is that we only observe the constantly significant results via the panel of prior to the event in the SHA. This result implies that the SHA plays a leading role among these four markets. It is easy to tell that the impact of the QFII scheme announcement is weaker in the SZA. According to the panel SZA of Table 3, the CAARs prior to the event are not significant. We hence indicate that the expectation of the announcement did not cause a constant influence prior to the event, although the AARs prior to the event provide little evidence about divulging such information.

Day	Shanghai A-shares			Shanghai B-shares			Shenzhen A-shares			Shenzhen B-shares		
	AAR (%)	CAAR (%)	AAR (%)	AAR (%)	CAAR (%)	AAR (%)	AAR (%)	CAAR (%)	AAR (%)	CAAR (%)	AAR (%)	CAAR (%)
-20	0.00 (2.55) **	0.00 (2.56) **	-0.07 (1.22)	-0.07 (1.22)	-0.07 (1.22)	0.07 (4.78) ***	0.07 (4.78) ***	0.07 (4.78) ***	0.54 (3.34) ***	0.54 (3.34) ***	0.54 (3.34) ***	0.54 (3.34) ***
-19	-0.07 (3.59) ***	-0.07 (1.12)	0.04 (1.50)	-0.03 (1.22)	-0.03 (1.22)	0.01 (3.51) ***	0.01 (3.51) ***	0.07 (3.33) ***	-0.01 (1.47)	-0.01 (1.47)	0.53 (3.07) ***	0.53 (3.07) ***
-18	-0.21 (-3.20) ***	-0.28 (-2.24) **	-0.15 (-0.47)	-0.18 (0.38)	-0.18 (0.38)	-0.03 (0.59)	-0.03 (0.59)	0.04 (0.77)	0.19 (0.40)	0.19 (0.40)	0.72 (1.74) *	0.72 (1.74) *
-17	0.07 (3.11) ***	-0.21 (-1.60)	0.04 (0.10)	-0.14 (0.38)	-0.14 (0.38)	-0.04 (-0.41)	-0.04 (-0.41)	0.00 (1.59)	-0.04 (0.94)	-0.04 (0.94)	0.69 (2.54) **	0.69 (2.54) **
-16	-0.06 (-1.52) *	-0.26 (-1.88) *	0.01 (-0.75)	-0.13 (0.38)	-0.13 (0.38)	-0.06 (-1.60)	-0.06 (-1.60)	-0.06 (1.14)	-0.06 (0.67)	-0.06 (0.67)	0.62 (1.74) *	0.62 (1.74) *
-15	0.01 (3.75) ***	-0.25 (-0.68)	-0.04 (1.22)	-0.16 (0.10)	-0.16 (0.10)	-0.04 (2.32) **	-0.04 (2.32) **	-0.10 (0.59)	0.57 (3.88) ***	0.57 (3.88) ***	1.19 (3.61) ***	1.19 (3.61) ***
-14	-0.28 (-4.24) ***	-0.53 (-3.44) ***	-0.12 (-0.47)	-0.29 (-0.75)	-0.29 (-0.75)	-0.10 (-0.41)	-0.10 (-0.41)	-0.20 (0.13)	0.00 (0.94)	0.00 (0.94)	1.19 (3.88) ***	1.19 (3.88) ***
-13	-0.11 (-0.88)	-0.64 (-4.00) ***	0.02 (0.66)	-0.27 (-0.47)	-0.27 (-0.47)	-0.09 (-0.51)	-0.09 (-0.51)	-0.28 (-0.60)	0.23 (2.81) ***	0.23 (2.81) ***	1.43 (4.68) ***	1.43 (4.68) ***
-12	-0.01 (-0.16)	-0.64 (-4.56) ***	0.01 (0.66)	-0.26 (0.38)	-0.26 (0.38)	0.11 (1.68) *	0.11 (1.68) *	-0.17 (0.50)	0.02 (0.67)	0.02 (0.67)	1.45 (3.88) ***	1.45 (3.88) ***
-11	0.10 (-1.36)	-0.55 (-5.04) ***	-0.01 (1.22)	-0.28 (-0.47)	-0.28 (-0.47)	0.08 (-0.32)	0.08 (-0.32)	-0.09 (-0.23)	-0.10 (-0.40)	-0.10 (-0.40)	1.35 (3.61) ***	1.35 (3.61) ***
-10	0.03 (0.32)	-0.52 (-4.00) ***	0.02 (0.66)	-0.25 (0.38)	-0.25 (0.38)	0.02 (-0.14)	0.02 (-0.14)	-0.07 (0.13)	0.05 (0.67)	0.05 (0.67)	1.39 (3.07) ***	1.39 (3.07) ***
-9	-0.17 (-2.24) **	-0.69 (-4.64) ***	-0.13 (0.94)	-0.38 (0.66)	-0.38 (0.66)	-0.10 (1.14) ***	-0.10 (1.14) ***	-0.17 (0.60)	0.06 (-0.13)	0.06 (-0.13)	1.45 (3.88) ***	1.45 (3.88) ***
-8	-0.11 (1.60)	-0.80 (-3.44) ***	-0.24 (0.10)	-0.62 (-0.19)	-0.62 (-0.19)	0.03 (3.69) ***	0.03 (3.69) ***	-0.14 (1.23)	-0.07 (1.47)	-0.07 (1.47)	1.38 (3.34) ***	1.38 (3.34) ***
-7	-0.01 (-0.24)	-0.80 (-3.84) ***	-0.03 (-0.19)	-0.65 (0.38)	-0.65 (0.38)	0.08 (0.50)	0.08 (0.50)	-0.21 (0.13)	-0.39 (-1.20)	-0.39 (-1.20)	0.99 (2.54) **	0.99 (2.54) **
-6	-0.19 (-4.96) ***	-1.00 (-4.48) ***	0.02 (-0.19)	-0.64 (0.38)	-0.64 (0.38)	-0.08 (-2.33) **	-0.08 (-2.33) **	-0.29 (-0.69)	-0.17 (0.13)	-0.17 (0.13)	0.82 (2.27) **	0.82 (2.27) **
-5	-0.02 (1.04)	-1.02 (-4.40) ***	-0.03 (0.10)	-0.66 (0.10)	-0.66 (0.10)	0.05 (1.05)	0.05 (1.05)	-0.24 (0.13)	0.25 (1.47)	0.25 (1.47)	1.07 (2.54) **	1.07 (2.54) **
-4	-0.33 (-6.08) ***	-1.35 (-5.52) ***	-0.05 (1.22)	-0.71 (0.66)	-0.71 (0.66)	-0.17 (-1.60) *	-0.17 (-1.60) *	-0.42 (-0.78)	-0.09 (1.20)	-0.09 (1.20)	0.97 (1.74) *	0.97 (1.74) *
-3	0.02 (0.80)	-1.33 (-5.36) ***	-0.05 (-1.31)	-0.76 (0.10)	-0.76 (0.10)	-0.10 (-1.87) *	-0.10 (-1.87) *	-0.52 (-0.60)	-0.23 (-1.47)	-0.23 (-1.47)	0.74 (2.01) **	0.74 (2.01) **
-2	0.08 (-0.24)	-1.24 (-5.36) ***	0.04 (-0.75)	-0.72 (-0.47)	-0.72 (-0.47)	0.09 (-0.23)	0.09 (-0.23)	-0.43 (-0.32)	0.01 (0.40)	0.01 (0.40)	0.75 (2.54) **	0.75 (2.54) **
-1	0.07 (-1.28)	-1.17 (-5.36) ***	0.02 (-0.19)	-0.70 (-0.75)	-0.70 (-0.75)	0.10 (0.41)	0.10 (0.41)	-0.33 (-0.69)	0.10 (0.40)	0.10 (0.40)	0.85 (2.27) **	0.85 (2.27) **
0	-0.34 (-9.91) ***	-1.51 (-6.48) ***	0.01 (0.10)	-0.69 (-0.47)	-0.69 (-0.47)	-0.08 (-2.88) ***	-0.08 (-2.88) ***	-0.41 (-0.23)	0.22 (1.74) *	0.22 (1.74) *	1.07 (2.54) **	1.07 (2.54) **
1	0.44 (-8.39) ***	-1.95 (-7.20) ***	-0.06 (-1.03)	-0.75 (-0.19)	-0.75 (-0.19)	-0.01 (0.68)	-0.01 (0.68)	-0.42 (-0.32)	-0.26 (-0.67)	-0.26 (-0.67)	0.81 (2.27) **	0.81 (2.27) **
2	0.10 (4.79) ***	-1.86 (-6.48) ***	-0.09 (0.38)	-0.85 (0.10)	-0.85 (0.10)	-0.07 (2.23) **	-0.07 (2.23) **	-0.49 (-0.41)	-0.11 (0.40)	-0.11 (0.40)	0.70 (2.27) **	0.70 (2.27) **
3	0.90 (-9.99) ***	-2.76 (-8.87) ***	-0.07 (-0.19)	-0.92 (-0.75)	-0.92 (-0.75)	-0.32 (-0.87)	-0.32 (-0.87)	-0.80 (-0.69)	-0.62 (-1.74) *	-0.62 (-1.74) *	0.08 (1.20)	0.08 (1.20)
4	0.18 (-3.76) ***	-2.94 (-9.59) ***	-0.04 (-0.47)	-0.96 (-0.47)	-0.96 (-0.47)	-0.07 (-2.51) **	-0.07 (-2.51) **	-0.88 (-1.97) **	-0.36 (-2.01) **	-0.36 (-2.01) **	-0.28 (0.94)	-0.28 (0.94)
5	0.18 (-0.40)	-3.12 (-9.35) ***	-0.04 (0.38)	-1.00 (-0.75)	-1.00 (-0.75)	-0.20 (-1.05)	-0.20 (-1.05)	-1.08 (-2.42) **	-0.47 (-1.47)	-0.47 (-1.47)	-0.75 (-0.40)	-0.75 (-0.40)
6	0.08 (1.20)	-3.04 (-9.43) ***	-0.09 (-2.71) ***	-1.09 (-1.03)	-1.09 (-1.03)	0.03 (-0.23)	0.03 (-0.23)	-1.04 (-3.15) ***	-0.14 (-0.13)	-0.14 (-0.13)	-0.89 (-0.40)	-0.89 (-0.40)
7	0.01 (2.16) **	-3.05 (-9.35) ***	0.02 (0.10)	-1.08 (-1.03)	-1.08 (-1.03)	0.01 (3.33) ***	0.01 (3.33) ***	-1.03 (-2.24) **	-0.40 (-0.94)	-0.40 (-0.94)	-1.29 (-1.74) *	-1.29 (-1.74) *
8	0.34 (7.83) ***	-2.70 (-8.15) ***	0.12 (0.94)	-0.95 (-0.19)	-0.95 (-0.19)	0.21 (5.06) ***	0.21 (5.06) ***	-0.82 (-1.42)	0.10 (0.13)	0.10 (0.13)	-1.20 (-1.74) *	-1.20 (-1.74) *
9	-0.40 (-3.68) ***	-3.11 (-8.63) ***	-0.06 (0.66)	-1.01 (0.10)	-1.01 (0.10)	-0.18 (-0.05)	-0.18 (-0.05)	-0.99 (-2.24) **	-0.12 (0.40)	-0.12 (0.40)	-1.32 (-2.01) **	-1.32 (-2.01) **
10	-0.29 (-1.44) **	-3.40 (-9.19) ***	0.00 (1.50)	-1.01 (-0.47)	-1.01 (-0.47)	-0.07 (0.04)	-0.07 (0.04)	-1.06 (-1.69) *	-0.35 (-0.94)	-0.35 (-0.94)	-1.67 (-1.74) *	-1.67 (-1.74) *
11	0.03 (2.08) **	-3.37 (-8.47) ***	0.19 (1.22) ***	-0.83 (0.38)	-0.83 (0.38)	0.11 (4.97) ***	0.11 (4.97) ***	-0.95 (-0.87)	0.03 (0.40)	0.03 (0.40)	-1.64 (-1.74) *	-1.64 (-1.74) *
12	0.13 (1.68) *	-3.24 (-8.39) ***	0.20 (2.62) ***	-0.63 (-0.19)	-0.63 (-0.19)	0.04 (-0.60)	0.04 (-0.60)	-0.91 (-1.51)	0.09 (0.13)	0.09 (0.13)	-1.54 (-1.74) *	-1.54 (-1.74) *
13	-0.27 (-1.12)	-3.52 (-9.19) ***	-0.19 (0.94)	-0.82 (0.10)	-0.82 (0.10)	-0.15 (0.32)	-0.15 (0.32)	-1.05 (-0.96)	-0.09 (0.67)	-0.09 (0.67)	-1.63 (-1.47)	-1.63 (-1.47)
14	-0.15 (-2.80) ***	-3.67 (-8.47) ***	0.20 (1.22)	-0.62 (0.10)	-0.62 (0.10)	0.03 (-0.69)	0.03 (-0.69)	-1.03 (-0.69)	0.03 (0.13)	0.03 (0.13)	-1.60 (-1.20)	-1.60 (-1.20)

15	0.25	(-0.08)	***	-3.42	(-9.03)	***	-0.14	(-1.03)	-0.76	(-0.19)	0.14	(-0.05)	-0.89	(-1.24)	0.25	(0.40)	-1.35	(-0.94)		
16	0.38	(3.99)	***	-3.03	(-8.15)	***	-0.03	(-1.59)	-0.78	(-0.47)	0.03	(-1.69)	*	-0.86	(-1.42)	0.30	(1.47)	-1.05	(-0.67)	
17	-0.46	(-7.83)	***	-3.49	(-8.79)	***	-0.29	(-1.59)	-1.07	(-0.75)	-0.25	(-4.06)	***	-1.10	(-1.42)	-0.31	(-2.27)	**	-1.37	(-1.20)
18	0.37	(7.67)	***	-3.13	(-8.31)	***	-0.01	(-0.75)	-1.09	(-1.59)	0.23	(2.60)	***	-0.88	(-0.87)	0.15	(-0.40)	-1.22	(-0.94)	
19	0.18	(2.40)	**	-2.94	(-7.99)	***	0.00	(0.10)	-1.08	(-1.31)	0.08	(1.32)	*	-0.80	(-0.69)	0.08	(1.20)	-1.13	(-0.94)	
20	0.00	(-1.04)		-2.94	(-8.23)	***	0.02	(-0.19)	-1.06	(-1.31)	0.02	(-1.33)	*	-0.78	(-1.05)	-0.24	(-0.94)	-1.37	(-0.94)	

Table 2. Return Performance Surrounding the QFII Scheme Announcement Periods on the Shanghai and Shenzhen Stock Markets

Note: Abnormal return is computed as the difference between the observed and expected returns. Expected return is generated from the standard market model regression. The generalized sign Z-statistics test the null hypothesis that the average abnormal returns or the cumulative average abnormal returns are equal to zero and are in parentheses. ***, **, and * mean statistically significant at 1%, 5%, and 10%, respectively.

Table 3. Cumulative Average Abnormal Returns (%) for Various Event Windows

Event Window	SHA	SHB	SZA	SZB
<u>Across to the Event</u>				
(-20,+20)	-2.94 (-8.23)***	-1.06 (-1.31)	-0.78 (-1.05)	-1.37 (-0.94)
(-10,+10)	-2.86 (-8.23)***	-0.74 (-0.19)	-0.97 (-2.33)**	-3.01 (-3.07)***
(-5,+5)	-2.12 (-10.07)***	-0.36 (-0.75)	-0.78 (-3.06)***	-1.57 (-1.74)*
(-3,+3)	-1.41 (-10.15)***	-0.21 (-0.47)	-0.39 (-1.78)*	-0.89 (-1.20)
(-1,+1)	-0.71 (-10.63)***	-0.03 (0.10)	0.01 (-0.41)	0.05 (0.67)
<u>Prior to the Event</u>				
(-1,0)	-0.27 (-7.67)***	0.03 (0.10)	0.02 (-1.05)	0.32 (0.94)
(-3,0)	-0.16 (-3.12)***	0.02 (-0.75)	0.01 (0.41)	0.10 (0.13)
(-5,0)	-0.52 (-5.84)***	-0.06 (-1.03)	-0.12 (-0.14)	0.25 (1.20)
(-10,-1)	-0.63 (-3.28)***	-0.43 (-0.47)	-0.24 (0.68)	-0.49 (-0.13)
(-20,-11)	-0.55 (-5.04)***	-0.28 (-0.47)	-0.09 (-0.23)	1.35 (3.61)***
<u>After the Event</u>				
(0,+1)	-0.78 (-11.43)***	-0.05 (0.66)	-0.09 (-1.69)*	-0.05 (0.67)
(0,+3)	-1.58 (-11.67)***	-0.22 (0.66)	-0.48 (-1.87)*	-0.77 (-0.13)
(0,+5)	-1.95 (-10.55)***	-0.30 (-0.47)	-0.75 (-2.97)***	-1.61 (-2.01)**
(+1,+10)	-1.89 (-6.72)***	-0.32 (-0.19)	-0.65 (-2.06)**	-2.74 (-2.54)**
(+11,+20)	0.46 (2.63)***	-0.05 (-0.47)	0.28 (2.87)***	0.29 (0.13)

Note: This table represents the cumulative abnormal returns surrounding the deregulation date $t = 0$. Abnormal return is computed as the difference between the observed and expected returns. Expected return is generated from the standard market model regression. The z-statistics test the null hypothesis that the cumulative average abnormal returns are equal to zero. Z-statistics are in parentheses. *** Statistically significant at 1%. ** Statistically significant at 5%. * Statistically significant at 10%.

Results of ATVs and CATVs

As mentioned previously, in studies on stock-price volatility, volume is usually considered to play an important role in affecting price volatility (Song *et al.*, 2005). Table 4 contains the abnormal trading volume (ATV) and cumulative trading volume (CATV) in the Shanghai and Shenzhen markets. Table 5 reports the CATV for various event windows.

Shanghai Stock Market

We begin our analysis by looking into the SHA again. The SHA of Table 4 shows that the ATV in our event period of only 4 days (days +1, +11, +15, and +17) is not significant. Only 3 days (days -2, +16, and +19) present a positive ATV during our event period. All the CATVs are significantly negative and the CATV during days -20 to +20 is -11.44%. The z-test rejects the null hypothesis that the ATVs before are equal to the ATVs after at the 1% level of significance.

Table 4's SHB indicates that the decline of trading volume is also observed. Stated clearly, the ATVs exhibit a negative tendency in 35 days during our event window. Only 6 days (days -8, -2, +3, +14, +15, and +16) are positive. A reversal of negative ATV is found at day +1. When it comes to day +2, the ATV turns down to be negative and significant. Without exception, all of the CATVs in our observed window from Table 4 are negative and are significant with a z-test at the 1% level no matter if it is prior to or after the announcement.

The announcement of the QFII scheme seriously impacted trading volumes in the SHA and the SHB. The liquidity of the Shanghai markets plunged. An interesting phenomenon is that the reduction of liquidity had no impact on return volatility in the SHB. This phenomenon is not consistent with Kim and Verrecchia's findings (2001) that a firm's stock returns depend on trading volume.

Shenzhen Stock Market

We observe a significant reduction in the ATV and CATV on the SZA and the SZB from Table 4. Table 4 details a significant decrease in the volume of trading prior to and after the event. In the SZA, the ATVs at day -2 and day +16 are significantly positive. Aside from these two days, the ATVs are all negative. Panel SZB of Table 4 indicates a

Table 4. Abnormal Trading Volume Surrounding the QFII Scheme Announcement Periods on the Shanghai and Shenzhen Stock Markets

Day	Shanghai A-shares			Shanghai B-shares			Shenzhen A-shares			Shenzhen B-shares		
	ATV (%)	CATV (%)	ATV (%)	ATV (%)	CATV (%)	ATV (%)	ATV (%)	CATV (%)	ATV (%)	ATV (%)	CATV (%)	ATV (%)
-20	-0.57 (-18.43) ***	-0.57 (-18.43) ***	-0.43 (-8.05) ***	-0.43 (-8.05) ***	-0.43 (-8.05) ***	-0.59 (-28.44) ***	-0.59 (-28.44) ***	-0.59 (-28.44) ***	-0.55 (-10.97) ***	-0.55 (-10.97) ***	-0.55 (-10.97) ***	-0.55 (-10.97) ***
-19	-0.55 (-22.51) ***	-1.12 (-22.02) ***	-0.52 (-8.94) ***	-0.52 (-8.94) ***	-0.95 (-9.10) ***	-0.59 (-21.59) ***	-0.59 (-21.59) ***	-1.19 (-28.21) ***	-0.53 (-7.68) ***	-0.53 (-7.68) ***	-1.08 (-10.57) ***	-1.08 (-10.57) ***
-18	-0.49 (-18.76) ***	-1.61 (-23.00) ***	-0.59 (-17.88) ***	-0.59 (-17.88) ***	-1.54 (-12.77) ***	-0.51 (-23.98) ***	-0.51 (-23.98) ***	-1.70 (-30.47) ***	-0.60 (-14.19) ***	-0.60 (-14.19) ***	-1.69 (-12.83) ***	-1.69 (-12.83) ***
-17	-0.58 (-23.77) ***	-2.19 (-25.15) ***	-0.69 (-18.24) ***	-0.69 (-18.24) ***	-2.23 (-15.72) ***	-0.58 (-23.57) ***	-0.58 (-23.57) ***	-2.28 (-31.81) ***	-0.74 (-22.86) ***	-0.74 (-22.86) ***	-2.43 (-16.51) ***	-2.43 (-16.51) ***
-16	-0.47 (-18.76) ***	-2.66 (-25.37) ***	-0.62 (-24.59) ***	-0.62 (-24.59) ***	-2.86 (-18.46) ***	-0.48 (-21.34) ***	-0.48 (-21.34) ***	-2.76 (-31.95) ***	-0.61 (-19.24) ***	-0.61 (-19.24) ***	-3.04 (-19.06) ***	-3.04 (-19.06) ***
-15	-0.53 (-26.15) ***	-3.20 (-27.02) ***	-0.51 (-17.01) ***	-0.51 (-17.01) ***	-3.37 (-19.62) ***	-0.54 (-19.11) ***	-0.54 (-19.11) ***	-3.30 (-32.30) ***	-0.31 (-2.23) **	-0.31 (-2.23) **	-3.35 (-14.38) ***	-3.35 (-14.38) ***
-14	-0.49 (-20.91) ***	-3.69 (-27.50) ***	-0.53 (-15.47) ***	-0.53 (-15.47) ***	-3.90 (-20.70) ***	-0.50 (-20.72) ***	-0.50 (-20.72) ***	-3.80 (-32.49) ***	-0.47 (-10.38) ***	-0.47 (-10.38) ***	-3.82 (-14.62) ***	-3.82 (-14.62) ***
-13	-0.57 (-22.34) ***	-4.26 (-28.84) ***	-0.74 (-27.23) ***	-0.74 (-27.23) ***	-4.64 (-23.40) ***	-0.59 (-23.38) ***	-0.59 (-23.38) ***	-4.39 (-34.06) ***	-0.70 (-18.14) ***	-0.70 (-18.14) ***	-4.52 (-16.04) ***	-4.52 (-16.04) ***
-12	-0.19 (-4.28) ***	-4.46 (-24.33) ***	-0.47 (-7.28) ***	-0.47 (-7.28) ***	-5.11 (-23.20) ***	-0.26 (-7.25) ***	-0.26 (-7.25) ***	-4.65 (-30.56) ***	-0.41 (-6.72) ***	-0.41 (-6.72) ***	-4.93 (-15.79) ***	-4.93 (-15.79) ***
-11	-0.38 (-9.69) ***	-4.83 (-22.91) ***	-0.67 (-17.23) ***	-0.67 (-17.23) ***	-5.78 (-24.03) ***	-0.38 (-7.73) ***	-0.38 (-7.73) ***	-5.04 (-26.98) ***	-0.72 (-17.45) ***	-0.72 (-17.45) ***	-5.64 (-16.78) ***	-5.64 (-16.78) ***
-10	-0.40 (-11.14) ***	-5.24 (-22.32) ***	-0.76 (-24.38) ***	-0.76 (-24.38) ***	-6.54 (-25.14) ***	-0.35 (-4.63) ***	-0.35 (-4.63) ***	-5.39 (-22.71) ***	-0.69 (-14.99) ***	-0.69 (-14.99) ***	-6.33 (-17.23) ***	-6.33 (-17.23) ***
-9	-0.36 (-8.13) ***	-5.59 (-21.45) ***	-0.03 (-0.24) ***	-0.03 (-0.24) ***	-6.57 (-20.09) ***	-0.39 (-6.49) ***	-0.39 (-6.49) ***	-5.78 (-21.05) ***	-0.58 (-15.51) ***	-0.58 (-15.51) ***	-6.91 (-17.67) ***	-6.91 (-17.67) ***
-8	-0.39 (-10.17) ***	-5.99 (-21.23) ***	0.21 (2.52) **	0.21 (2.52) **	-6.36 (-16.43) ***	-0.39 (-7.91) ***	-0.39 (-7.91) ***	-6.17 (-19.97) ***	-0.41 (-7.06) ***	-0.41 (-7.06) ***	-7.32 (-17.38) ***	-7.32 (-17.38) ***
-7	-0.35 (-10.12) ***	-6.34 (-20.85) ***	-0.12 (-1.76) *	-0.12 (-1.76) *	-6.48 (-15.13) ***	-0.37 (-7.30) ***	-0.37 (-7.30) ***	-6.54 (-18.60) ***	-0.41 (-6.84) ***	-0.41 (-6.84) ***	-7.73 (-17.49) ***	-7.73 (-17.49) ***
-6	-0.49 (-17.10) ***	-6.83 (-21.37) ***	-0.58 (-14.08) ***	-0.58 (-14.08) ***	-7.06 (-15.48) ***	-0.41 (-8.17) ***	-0.41 (-8.17) ***	-6.95 (-18.12) ***	-0.54 (-9.40) ***	-0.54 (-9.40) ***	-8.27 (-17.68) ***	-8.27 (-17.68) ***
-5	-0.57 (-27.53) ***	-7.40 (-22.27) ***	-0.60 (-24.78) ***	-0.60 (-24.78) ***	-7.66 (-16.41) ***	-0.46 (-13.01) ***	-0.46 (-13.01) ***	-7.41 (-18.29) ***	-0.59 (-12.31) ***	-0.59 (-12.31) ***	-8.86 (-17.87) ***	-8.86 (-17.87) ***
-4	-0.57 (-25.83) ***	-7.97 (-23.21) ***	-0.59 (-12.24) ***	-0.59 (-12.24) ***	-8.25 (-16.88) ***	-0.52 (-14.93) ***	-0.52 (-14.93) ***	-7.93 (-18.34) ***	-0.60 (-13.12) ***	-0.60 (-13.12) ***	-9.46 (-17.93) ***	-9.46 (-17.93) ***
-3	-0.33 (-4.88) ***	-8.30 (-22.63) ***	-0.42 (-7.02) ***	-0.42 (-7.02) ***	-8.67 (-16.64) ***	-0.35 (-8.89) ***	-0.35 (-8.89) ***	-8.29 (-18.13) ***	-0.42 (-6.67) ***	-0.42 (-6.67) ***	-9.88 (-17.22) ***	-9.88 (-17.22) ***
-2	0.35 (5.98) ***	-7.95 (-19.60) ***	0.36 (4.48) ***	0.36 (4.48) ***	-8.31 (-14.66) ***	0.31 (4.11) ***	0.31 (4.11) ***	-7.97 (-15.91) ***	0.40 (1.75) *	0.40 (1.75) *	-9.48 (-14.43) ***	-9.48 (-14.43) ***
-1	-0.18 (-3.98) ***	-8.13 (-18.77) ***	-0.43 (-10.57) ***	-0.43 (-10.57) ***	-8.74 (-14.82) ***	-0.22 (-3.81) ***	-0.22 (-3.81) ***	-8.19 (-15.42) ***	-0.49 (-7.84) ***	-0.49 (-7.84) ***	-9.97 (-14.50) ***	-9.97 (-14.50) ***
0	-0.25 (-5.85) ***	-8.38 (-18.30) ***	-0.48 (-16.60) ***	-0.48 (-16.60) ***	-9.22 (-15.21) ***	-0.29 (-6.30) ***	-0.29 (-6.30) ***	-8.49 (-15.19) ***	-0.62 (-14.45) ***	-0.62 (-14.45) ***	-10.59 (-14.81) ***	-10.59 (-14.81) ***
1	-0.06 (-1.38) ***	-8.44 (-17.58) ***	0.02 (0.43) ***	0.02 (0.43) ***	-9.21 (-14.69) ***	-0.13 (-2.93) ***	-0.13 (-2.93) ***	-8.62 (-14.57) ***	-0.16 (-1.83) *	-0.16 (-1.83) *	-10.75 (-14.01) ***	-10.75 (-14.01) ***
2	-0.46 (-19.54) ***	-8.90 (-18.05) ***	-0.49 (-19.51) ***	-0.49 (-19.51) ***	-9.70 (-15.20) ***	-0.43 (-10.24) ***	-0.43 (-10.24) ***	-9.05 (-14.66) ***	-0.41 (-4.57) ***	-0.41 (-4.57) ***	-11.17 (-13.83) ***	-11.17 (-13.83) ***
3	-0.14 (-5.19) ***	-9.04 (-17.70) ***	0.15 (3.18) ***	0.15 (3.18) ***	-9.55 (-14.81) ***	-0.14 (-4.02) ***	-0.14 (-4.02) ***	-9.19 (-14.24) ***	-0.18 (-2.66) ***	-0.18 (-2.66) ***	-11.34 (-13.34) ***	-11.34 (-13.34) ***

4	-0.25	(-8.89)	**	-9.28	(-17.58)	***	-0.06	(-1.55)	-9.60	(-14.63)	***	-0.19	(-3.53)	***	-9.38	(-13.74)	***	-0.36	(-5.13)	***	-11.71	(-13.11)	***
5	-0.34	(-7.81)	**	-9.62	(-17.47)	***	-0.49	(-16.63)	-10.09	(-15.14)	***	-0.29	(-4.69)	***	-9.67	(-13.24)	***	-0.39	(-6.99)	***	-12.10	(-12.97)	***
6	-0.27	(-6.80)	**	-9.89	(-17.34)	***	-0.07	(-1.27)	-10.16	(-14.89)	***	-0.17	(-1.42)		-9.84	(-12.46)	***	-0.33	(-5.66)	***	-12.43	(-12.74)	***
7	-0.40	(-9.87)	***	-10.29	(-17.41)	***	-0.61	(-15.25)	-10.78	(-15.63)	***	-0.42	(-8.01)	***	-10.26	(-12.50)	***	-0.65	(-15.34)	***	-13.08	(-13.05)	***
8	-0.40	(-12.17)	***	-10.69	(-17.61)	***	-0.20	(-2.18)	-10.98	(-15.44)	***	-0.38	(-9.95)	***	-10.64	(-12.58)	***	-0.42	(-6.52)	***	-13.50	(-12.95)	***
9	-0.27	(-7.44)	***	-10.95	(-17.52)	***	-0.17	(-1.87)	-11.15	(-15.32)	***	-0.31	(-7.57)	***	-10.95	(-12.50)	***	-0.42	(-5.12)	***	-13.92	(-12.72)	***
10	-0.11	(-3.12)	***	-11.07	(-17.14)	***	0.12	(1.59)	-11.03	(-14.66)	***	-0.13	(-3.50)	***	-11.09	(-12.29)	***	-0.30	(-4.39)	***	-14.22	(-12.45)	***
11	-0.09	(-1.06)		-11.16	(-16.70)	***	-0.01	(-0.06)	-11.03	(-14.17)	***	-0.06	(-0.91)		-11.15	(-11.80)	***	-0.42	(-5.57)	***	-14.63	(-12.34)	***
12	-0.40	(-8.39)	***	-11.56	(-16.85)	***	-0.42	(-5.31)	-11.45	(-14.21)	***	-0.40	(-9.14)	***	-11.55	(-11.91)	***	-0.60	(-11.09)	***	-15.24	(-12.59)	***
13	-0.29	(-6.28)	***	-11.85	(-16.70)	***	-0.23	(-3.27)	-11.69	(-13.88)	***	-0.28	(-5.05)	***	-11.83	(-11.81)	***	-0.52	(-9.36)	***	-15.75	(-12.59)	***
14	-0.17	(-3.55)	***	-12.02	(-16.42)	***	0.18	(2.50)	-11.51	(-13.09)	***	-0.16	(-2.84)	***	-11.99	(-11.58)	***	-0.36	(-5.57)	***	-16.11	(-12.59)	***
15	0.06	(1.11)		-11.96	(-15.68)	***	0.18	(1.64)	-11.33	(-12.00)	***	0.05	(0.83)		-11.94	(-11.15)	***	-0.36	(-7.84)	***	-16.47	(-12.66)	***
16	0.98	(10.11)	***	-10.98	(-13.31)	***	1.17	(8.16)	-10.15	(-9.88)	***	0.75	(8.61)	***	-11.20	(-9.90)	***	0.40	(2.71)	***	-16.08	(-11.74)	***
17	-0.06	(-0.80)		-11.03	(-12.75)	***	-0.20	(-3.79)	-10.36	(-9.73)	***	-0.21	(-4.25)	***	-11.41	(-9.80)	***	-0.48	(-8.39)	***	-16.56	(-11.80)	***
18	-0.23	(-4.76)	***	-11.27	(-12.63)	***	-0.35	(-7.08)	-10.70	(-9.78)	***	-0.36	(-9.20)	***	-11.77	(-9.88)	***	-0.65	(-12.42)	***	-17.21	(-12.01)	***
19	0.14	(2.06)	**	-11.13	(-12.02)	***	-0.09	(-0.93)	-10.79	(-9.41)	***	-0.21	(-4.23)	***	-11.98	(-9.76)	***	-0.48	(-9.69)	***	-17.69	(-12.09)	***
20	-0.32	(-7.52)	***	-11.44	(-12.04)	***	-0.59	(-14.37)	-11.38	(-9.76)	***	-0.25	(-3.66)	***	-12.23	(-9.77)	***	-0.66	(-17.35)	***	-18.35	(-12.37)	***

Note: See Table 2.

similar condition as in the SZA. There are 39 days in our event period that presented a negative number of ATV. Moreover, the CATVs are significant and negative in the whole event period for both A- and B-shares.

From Table 5, when using different pre- and post-event windows, we find that almost each event window is significantly negative. One also can see that in the column prior to the event, each event window presents a significant result. This notable mark implies that China’s stock markets are not strong and efficient yet. This conclusion is consistent with Huang’s findings (2004).

It should be concluded, from what has been said above, that the QFII scheme announcement caused a rapid drop in stock prices and trading volume in the SHSE and the SZSE. It is surprising to note that there are not high return volatilities in reaction to the high volume volatilities in both A- and B-share markets. The best possible explanation might be that the stock price limits installed in each market might affect the return volatilities in both A- and B-shares, whereas volume volatilities would not be restricted.¹⁰

For the present, we shall confine our attention to why the announcement leads to a negative result in our observed period. There is not much evidence to decide the matter. The most likely explanation of the decrease is that carrying out of the QFII scheme had been discussed for a long time. Serious price manipulation might also affect this situation. Overall, the move to integrate the A- and B-share markets displays a desirable result.¹¹ It highlights how sensitive China’s stock markets remain to regulatory policies.

Table 5. Cumulative Abnormal Trading Volumes (%) for Various Event Windows

Event Window	SHA	SHB	SZA	SZB
	Across to the Event			
[-20, 20]	-11.44 (-12.04)***	-11.38 (-9.76)***	-12.23 (-9.77)***	-18.35 (-12.37)***
[-10, 10]	-6.23 (-12.24)***	-5.24 (-8.54)***	-6.05 (-7.66)***	-8.57 (-8.86)***
[-5, 5]	-2.79 (-9.23)***	-3.03 (-10.65)***	-2.72 (-6.49)***	-3.83 (-6.09)***
[-3, 3]	-1.07	-1.29	-1.26	-1.88

¹⁰ The daily price limits in China’s stock markets are set at 10%, for both upper and lower price movements, based on the previous day’s closing price.

¹¹ See for example, Chen *et al.*, 2006

	(-4.55)***	(-5.91)***	(-4.45)***	(-3.93)***
[-1, 1]	-0.49	-0.90	-0.64	-1.27
	(-4.52)***	(-10.73)***	(-4.82)***	(-7.56)***
<u>Prior to the Event</u>				
[-1, 0]	-0.43	-0.91	-0.51	-1.10
	(-5.47)***	(-15.30)***	(-5.33)***	(-11.35)***
[-3, 0]	-0.41	-0.97	-0.55	-1.13
	(-2.35)**	(-5.85)***	(-2.94)***	(-3.32)***
[-5, 0]	-1.55	-2.16	-1.54	-2.32
	(-7.73)***	(-10.32)***	(-6.54)***	(-5.97)***
[-10, -1]	-3.30	-2.96	-3.16	-4.33
	(-11.62)***	(-6.77)***	(-7.90)***	(-9.19)***
[-20, -11]	-4.83	-5.78	-5.04	-5.64
	(-22.91)***	(-24.03)***	(-26.98)***	(-16.78)***
<u>After the Event</u>				
[0, 1]	-0.31	-0.46	-0.43	-0.78
	(-4.13)***	(-8.04)***	(-4.97)***	(-6.41)***
[0, 3]	-0.91	-0.80	-1.00	-1.37
	(-8.22)***	(-8.58)***	(-6.72)***	(-5.73)***
[0, 5]	-1.49	-1.35	-1.48	-2.13
	(-9.65)***	(-10.31)***	(-6.16)***	(-6.10)***
[1, 10]	-2.69	-1.80	-2.60	-3.63
	(-10.59)***	(-5.75)***	(-6.01)***	(-6.43)***
[11, 20]	-0.37	-0.36	-1.14	-4.13
	(-0.76)	(-0.60)	(-2.56)***	(-9.39)***

Note: This table represents the cumulative abnormal volumes surrounding the announcement date $t = 0$. Abnormal volume is computed as the difference between the observed and average volumes. Average volume is generated from the standard market model regression. The z-statistics test the null hypothesis that the cumulative average abnormal volumes are equal to zero. Z-statistics are in parentheses. *** Statistically significant at 1%. ** Statistically significant at 5%. * Statistically significant at 10%.

Results of Cross-Sectional Regressions

The results in Table 6 are helpful in understanding what might affect abnormal trading behavior upon the announcement of the QFII scheme. The measure variables contain years since establishment (AGE), number of board members (BM), shareholding ratio of block holders (BSH), turnover rate (TO), total market capitalization (SIZE), and real state-owned enterprises (SOEs). The dummy variable measures the relationship between abnormal trading behaviors and the listing stock exchanges. The event window (-5, +5) is selected, because in this period the movement of abnormal trading behavior is considered to be greatest.

The correlation between abnormal trading returns and a firm's properties

We now notice here that the variables measuring relative to the BM and the BSH have little power in predicting variations in the AR on the day of announcement. However, TO, SIZE, and SOEs are positive and significantly different from 0, while AGE, D_{SOEs} , D_{SH} , and D_A are significantly negative. It must be noted that the positive relationship between the state-owned ratio and the AR turns to be negative, when the ratio exceeds 50%. The negative AR at announcement day is primarily explained by D_A (about -0.8124) - that is to say, from the aspect of a dual listing company, the AR in the A-shares will be smaller than the B-shares at announcement day.

The cumulative effects of the announcement in the second column of Table 6 tell a somewhat different story. In the regression with CAR (-5, +5) as the dependent variable, the BM is positive and significant while it is negative and insignificant at day 0. The same observation applies to Alexander *et al.* (2007). The most likely explanation might be that a board member could have private knowledge of the announcement before it is publicized to the public. Except for this, the decrease in the predicting power of the SOEs is also exhibited in this event window.

To put it more precisely, the older the firm's age is, the lower the AR. This negative relationship is also the case found in the listing in the Shanghai stock market, where the listing in A-shares and the state-owned ratio both exceeded 50%. From another angle, the AR is higher when the turnover rate or total market capitalization is larger. What this makes

clear is that part of a firm's properties might be related with abnormal trading returns. This will lead us further into consideration of whether a firm's properties are also related with the abnormal trading volume.

The correlations between abnormal trading volumes and a firm's properties

Table 6 presents that the ATV is significantly positive related to the BSH, TO, and SIZE, and significantly negatively related to D_A at the 5% level. The other variables do not help in explaining ATV on the announcement day. Among these variables, the BSH has the largest coefficient at 0.2918. These results suggest that the BSH may be more important in predicting ATV than other variables. An interesting phenomenon is the positive relationship between SIZE and ATV - namely, when the total market capitalization is increasing, ATV will also rise. The result does not hold in the previous study where Choi and Choe (1998) argued that the relationship between a firm's size and trading volume around the disclosure date is negative.

The column of CATVs (-5, +5) in Table 6 indicates that AGE and D_A are both significantly negative, while TO is positive. These results lead to the conclusion that the turnover rate dominates ATV and CATV. We can be fairly certain that the higher ratio will lead to an increase in abnormal trading volume. Moreover, the stock listing in the A-share market will also reduce the abnormal trading volume regardless of the event day or 11-day event period. It seems reasonable to surmise, such as the conclusion we mentioned above, that part of a firm's properties might be also related with abnormal trading volume.

We therefore are able to conclude that a firm's properties are related to abnormal trading behaviors. To put it clearly, AGE is negatively related to abnormal trading behavior. On the contrary, the BM, the BSH, SIZE, and SOEs display a positive and significant relationship with abnormal trading behavior. It may be worth pointing out that D_{SH} and D_A exhibit a negative relationship with abnormal trading behavior. This is consistent with our previous finding that the share types and listing market display different effects on abnormal trading behaviors.

Table 6. Cross-sectional Regression Abnormal Returns for All Companies

	AR[0]	CAR[-5 +5]	ATV[0]	CATV[-5,+5]
Constant	-0.2605 (-0.9882)	-9.6748 (-7.2292) ***	-0.8821 (-4.5432) ***	-2.6327 (-1.3288)
AGE	-0.0277 (-2.7701) ***	-0.1600 (-3.1577) ***	-0.0004 (-0.0597)	-0.3031 (-4.0393) ***
BM	-0.0068 (-0.6603)	0.1502 (2.8932) ***	-0.0122 (-1.6206)	0.0998 (1.2982)
BSH	-0.0149 (-0.0654)	0.0296 (0.0257)	0.2918 (1.7426) *	1.1790 (0.6901)
TO	0.3579 (11.1467) ***	0.5464 (3.3517) ***	0.1148 (4.8540) ***	6.3473 (26.2989) ***
Log(SIZE)	0.2824 (3.2289) ***	3.6020 (8.1128) ***	0.1337 (2.0751) **	-0.2893 (-0.4402)
SOEs	0.3884 (2.2701) **	0.8021 (0.9234)	-0.1335 (-1.0589)	-0.9046 (-0.7034)
D_{SOEs}	-0.2413 (-2.7792) ***	-0.1645 (-0.3731)	-0.0622 (-0.9729)	-0.6785 (-1.0397)
D_{SH}	-0.2409 (-4.9020) ***	-1.1507 (-4.6123) ***	0.0426 (1.1767)	0.1734 (0.4695)
D_A	-0.8124 (-6.4478) ***	-4.6880 (-7.3284) ***	-0.2200 (-2.3703) **	-2.0154 (-2.1281) **
R^2	0.1386	0.1094	0.0327	0.3746

Note: The t-statistics are in parentheses. *, **, and *** statistically significant at 10%, 5%, and 1%, respectively.

CONCLUSIONS

This study conducts an investigation into investment regulations that took place on November 7, 2002 - namely, the China Securities Regulatory Commission's (CSRC) limited opening of the A-share market to foreign investors initiated via the Qualified Foreign Institute Investors (QFII) scheme. We examine the impacts of the QFII scheme announcement on China's stock markets. The results show that the announcement of the QFII scheme did cause a rapid drop on stock prices and trading volumes in both stock markets. It is obvious that the abnormal return in the SHA was influenced by the QFII scheme the most. Another striking point is that we only see the constantly significant CAARs via the panel of prior to the event in the SHA. This result implies that the CAARs in the SHA play a leading role among these four markets. In other words, the release of the QFII scheme may have been known to some informed investors and traders well ahead of the public announcement date in the SHA.

We find abnormal trading volume that exhibits a sustained decline among the four markets. One notices that when using different pre- and post-event windows, almost each event window is significantly negative, which is different from the return volatilities. It is surprising that there are not high return volatilities in reaction to the high volume volatilities in both A- and B-share markets. The best possible explanation might be that the stock price limits affected the return volatilities in both A- and B-share markets.

Our results also confirm that there are strong associations between the abnormal trading behaviors and firm-specific characteristics. The results of cross-sectional variation reveal that the number of board members, shareholding ratio of block shareholders, market capitalization of firm equity, and SOEs are positively related to the abnormal trading behavior, while the years since establishment is negatively related to it. It may be worth pointing out that the stock listing in the Shanghai stock markets and A-share markets exhibit a negative relationship with abnormal trading behavior. This is consistent with our previous finding that the share types and listing market display different effects on abnormal trading behaviors. The most likely explanation might be that the A-share stocks were overvalued after the opening of the B-share market.

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Social Reconstructionism and Higher Education: The Formation of a Global Society

*Dr. Stephen R. White, D. Arts Professor
Appalachian State University, Reich College of Education
Boone, North Carolina 28692
828-963-7093 whitesr@boone.net*

"The consciousness of each of us is evolution looking at itself and reflection upon itself...the whole future of the Earth seems to me to depend on the awakening of our faith in the future."

Pierre Teilhard de Chardin (1881-1955)

"We shall require a substantially new manner of thinking if mankind is to survive."
Albert Einstein

GLOBALIZATION AND AMERICAN HIGHER EDUCATION A Review of the Challenge

Globalization is defined as the social compression of the world globally on an international social, political, cultural and humanitarian scale. The depth of this human phenomenon demands a change in the way humankind thinks about and sees themselves within this emerging integrative global system.

Present day international political and socioeconomic developments will most likely forever change human relations. These new global political and socioeconomic transformations will have a deep impact on our society's collective consciousness as we become increasingly aware that our social-life world is inherently interdependent. This new social phenomenon is termed globalization (Berger & Hunnington, 2002; Bhagwati, 2004; Bloom, 2000; Lal, 2004; Pertrilli, 2006).

The majority of scholars of globalization focus on issues of transnational political conflicts in the quest for a world governance, the effect of global social interconnections on economic justice and the effect of technological innovations on a global relations (Baylis & Smith, 2001; Beck, 1999; Berger & Hunnington, 2002; Bhagwati, 2004; Foer, 2004; Held & McGrew, 2002; Stager, 2001). What follows is a brief summation of recent literature on globalization.

Thomas Friedman in his work *Lexus and the olive tree* (2000) explores the complexity and dichotomy of globalization. He observed the progress a Lexus plant in Japan

marveling at their great success while reflecting on how most of the world was lusting after the technology to make these cars. Yet, simultaneously, much of the Third World, such as in the Middle East, are fighting over the ownership of an olive tree. Thus for him, the Lexus and the Olive Tree serve as metaphors for our state of globalization. Globalization, represented by the Lexus car, is the organizing principle of the post-cold war world international relations. This true even though nations resist globalization by holding onto an old life-world views and what have traditionally mattered to them. The olive tree metaphorically represents this antiquated world view.

Friedman asserts that the problem is that very few really understand what exactly globalization means. For many globalization, is simply about American hegemony and the Americanization of the world. However the reality is that the issue is much more complex because it involves evolving international relations, emerging global markets, expanding technology, and the rise of the power of independent entrepreneurs and multinational corporations who hold power relative to that of nationalistic power. Thus we are living in an age where the Lexus (globalization) and the Olive Tree (the old post-cold war industrial nation-state) are in contention with each other. This situation could lead to either a glorious future for humankind or an unthinkable destructive path for entire world.

Later Friedman in his work *The world is flat* (2004), provides further assessment of globalization. By the term “flat” he means that the world has converged and became tightly interconnected. This global intercourse is due to the technological advances, the diminishment of political barriers and lowering of international trade obstructions. In what he terms as advanced globalization. These global developments is not solely being driven major business corporations or trade organizations but also by individuals who create innovative startups all around the world. This is especially true for the new European Union but in Asia, and most interestingly in India.

Joseph Stiglitz (2002) takes a different position. He argues that organizations such as the World Bank, World Trade Organization and international financial interests fund control of the economic development of globalization. Even so, he believes that globalization can be a force of good for the peoples of the world. This is especially true for the poor and disenfranchised. Though he admits that the past actions of these groups were based on political ideology, special interest economics leaving no room for altruistic musing, this does need to be the case. The reality is that globalization has improved the living of millions around the worlds and can still do even more for the collective good as it evolves.

Jagdish Bagwati (2004) believes that globalization must take more of a humanist disposition about it – put on a human face - that will make it more agreeable to acceptable for all persons. This is necessary because he believes that antiglobalization movements have over stated the claims that globalization has created oppressive conditions of Third World countries that is even worse than the recent past. He specifically cites India as an excellent example of the positive impact of globalization for many poor Third World countries.

In respect to India, Edward Luce (2007) writes of the nation as becoming a 21st century economic and geopolitical giant. He exams the growth of India within the context of globalization by exploring the impact it is having on individuals as they attempt to deal with the new global culture emerging within the old Hindu culture of self-reliance and religious mores. He documents the stress on societies and people caused by the transition

into the new age of globalization but sees the end point of the process as progressive and positive.

Mira Kamdar (2007) has assessed India's transformation from a Third World country into a major global stakeholder. She asserts that a new India is evolving that will have a profound effect on future global financial matrix. India is the world's fastest-growing democracy, has the youngest population on the planet, and a middle class population that equals the total the population of the United States. India has a highly skilled English-speaking workforce, outstanding educational institutions, expanding foreign investments, and has become an innovator of the technology. All of these factors means that India has the potential to become the world's largest market thus making this country a leader of globalization.

Conversely, some 800 million Indians who live on less than two dollars per day, an ever increasing demand for sustainable energy to fuel its economic growth, international and domestic political dynamics to ensure the nations security and to reach its future goal as a global power.

Kamdar sees India as a microcosm of globalization. While it is gaining a new global identity and power without it boundaries within its national boundaries exists the threat of terrorism, chronic poverty, serious health problems, impending environmental crisis and the challenge of economically creating jobs. In her assessment, if India is innovative it will not only save itself, it will save us all. If it fails, we will all suffer. As goes India, so goes the world.

Her conclusion nicely sums up much of what is true to varying degrees for every nation in regards to globalization. Will globalization lead to a new higher order of social reality, an authentic transformation, or will it accelerate humankind into destruction?

Many in American higher education have called for a vision of the profession that promotes activism and consciousness of globalization. American higher education is rapidly becoming a process of global education. The realization is that higher education is strategically positioned to not only participate in the globalization process but advance it. What follows is a review of recent literature on this evolving phenomenon.

Douglas, King and Feller (2009) have taken a critical assessment at American higher education. The focus of their assessment to explore as to why the once-vaunted US system of public higher education has slipped being relative to much of the world. Once accepted as gospel the premise that strong research universities are central to higher education and the development of individuals and societies. America's decline ought to serve to reframe a broader public debate about how the US can and should invest resources if the standard of living is to improve with the rest of the world. They do not call for expanded spending on higher education for the public good but better us of current funds, policies and shift in thinking regarding the overall purpose.

Guruz, and Zinpler (2011) have examined higher education around the globe within the context of what challenges of increasing globalization are having on other institutions. They seek to uncover emerging patterns of strategy and practice in the internationalizing of higher education. They ask how is globalization within in the context of higher education can be understood by those who lead these universities, globally? What leadership thought will be needed in the future that can transform today's institutions?

Theoretically, Gurunz and Zinpler make a clear distinction between forms of globalization and internationalization, and the relationship to leadership challenges such as ethical issues and cultural tensions created by a global economic demands and organizational responsibilities of higher education beyond national boundaries in higher education's administrative efforts to respond to the challenges of globalization.

King, Marglnson, and Naidou, (2011) argue that higher education today has entered center-stage in regars to the knowledge economy and has been deployed in the search for economic competitiveness and social development. Convergences and divergences in national higher education systems are resulting from increased global co-operation and competition. They suggest governance mechanisms by international organizations, national governments and by higher education institutions themselves that analyze local responses to dominant global templates of higher education and the consequences for knowledge generation, social equity, economic development and the public good.

Katherine Kleypas and James McDougall (2012) have focused their research on the history globalization had had on American higher education. The American-Style University are an intervention into current discussions concerning the role of the post-modern American-style university in a global context and explore various ways that American models of higher level learning have become instituted around the world that develops, and how these levels of control methods of education, knowledge, power, and culture.

Their conclusion is that globalization is impacting the future of higher education, the politics of teaching and its cultural impact are changing nature of universities themselves. Thus a rigorous analysis about some of the most pressing issues concerning the future of what used to be known as conventional liberal education, a hallmark of American higher education, are now under the banner of global studies.

Lewin (2009) asserts that we are all becoming global citizens which begs questions such as what are our new civic responsibilities? For him, American higher education has responded to this question by making the socialization of "global citizens" into globalization part of their core mission, primarily through studies abroad. Nevertheless, theoretical and research based pressing questions remain a challenge for the academy: How does one acquire global citizenship, social skills and global competence? What are the philosophical, pedagogical and practical challenges facing American higher education as they endeavor to prepare global citizens? How is study abroad and the cultivation of global citizenship compatible with the traditional role of American higher education?

Felix Maringe and Nick Foskett (2010) make strong theoretical distinctions between different forms of globalization and internationalization. These definitions provide distinct insights into the development of organizational culture and climate and leaderships vision of higher education's efforts to respond to the challenges of globalization.

Odin and Manicas (2004) believe that higher education is a globalizing industry with a potential for growth that cannot be overestimated. Thus they approach the complexities of globalization on higher education from the position of critical questions that are emerging today: Does the processes of global capitalism fundamentally challenge the inherited traditional forms of colleges and universities? How should leadership use of economic markets be conceived? Globalism as an ideology raise questions regarding the goals of American higher education that lead to deeper objectives concerning epistemology and the distinction between knowing in the theoretical mode, knowing in the practical mode. The solution, they argue, is that alternative ways of knowing must be recognized, honored and infused into higher education's cannon.

Poulsen (2011) research relating to higher education teaching, internationalization and student issues and the labour market; the impact of different entry characteristics and learning styles on academic achievement in first-year higher education students; college adjustment among White and Hispanic students; moving from academia to work life; Japan's internationalization and discriminatory attitudes; academic resilience among poor minority college students; e-learning and its relationship with internationalization.

Ruby and Valeau (2009) have explored how there is an explosion of community college models that provide educational opportunities and alternative pathways for students who do not fit the traditional higher educational profile. Their study focuses on economic models to help local and national economies develop strong workforce training, social mobility and transformative models to help institutions expand and keep up with societal needs, and newly created models that respond to the educational and training needs of a constantly changing global context. These models seek to capture the conventional American community college model thus changing global social, political and economic landscapes.

Suarez-Orozco and Qin-Hilliard, D.B. (2004) examine not higher education but the impact globalization has on the education and development of tomorrow's higher education learners in the construction of a new global culture. They merge perspectives from anthropology, history and economics to offer us unique insights. They look on globalization's impact on the neglected but crucial topic of culture and education. They define a new domain of basic scholarship which engages the complex relationships between globalization, culture and the education of global citizens. The fate and future of the planet rests on the ability of education to meet those challenges while also developing future global citizens.

Weber and Duderstedt (2008) have also explored what role do universities play in the process of globalization? They argue that the globalization of higher education is reflective of how the shrinking of the world is affecting universities and how we, as a society, chose to respond.

Ben Wildavsky (2010) has studied how international competition for the brightest minds is transforming higher education. Every year, three million international students study outside of their home countries. Newly created or expanded universities such as in China, India, and Saudi Arabia are competing with the likes of Harvard and Oxford for faculty, students, and research preeminence. He argues that as international universities strive to become world-class, the new global education marketplace is providing more opportunities to a greater number of people than ever before in history.

Bruce Johnstone, D'ambrosio and Yakoboski (2010) assert that higher education in a global society must face new challenges but also face unique opportunities in cultivating global citizenship. They explore how American higher education institutions are crossing borders to creating international experiences at home, from students studying abroad to international students journeying to the United States, and from the critical demands this places on leadership to the vital contributions of faculty as an international partnership emerge as we prepare students for the 21st century labor force. To do so will require exposure to other cultures and societies for research universities as well as investments abroad of technological linkages.

This literature review shows that the focus of global higher education (global education) is much different from that of comparative international studies. The overriding goal for all these educational theorists is to conceptualize educational programs as a forum for knowledge acquisition and the exchanging ideas that promote collective cooperation globally. The role of the educator is to facilitate social change and transform the consciousness of learners. Thus global education is an educational agenda to raise the consciousness of learners who desire to participate in social action advancing collective global cooperation (Merriam & Brockett, 1997).

The world is indeed at a threshold where old international sociological realities are being shattered and new global realities formed. This phenomenon requires a shift in attitudes and behaviors that are conducive to international interdependence and cooperation among all peoples and tribes. Getting this social shift logically communicated, to learners who

were socialized into and have lived in a world contrary to the new emerging reality, is daunting task.

There is much to reorient society toward the rising reality of globalization. This is especially true of American society that is grounded in a culture structured around autonomous individualism, competition, and staunch sovereignty. These American cultural values form a mental model that was cultivated through past learning experiences and toward which their notion of citizenship was cultivated. However, these values are now being challenged by the demands for increased global interdependence that undermines this in-grained paradigm. Nothing less than a transformation of social consciousness is required so that these persons do not to become future dysfunctional global citizens. Thus the challenge for American higher education is to contextualize innovative learning programs designed to construct new mental models of social reality. Given this assessment, I claim that global education, theoretically, is the socialization into globalization. It is the educative process of acquiring the social literacy necessary to function as rational citizens in the new global order. Social literacy is the intellectual competence to interact with others in addressing issues and problems, rationally. In this evolving historical epoch of intensified globalization, rational and reflective social literacy skills are essential tools to advance social evolution over global desolation. Therefore, how the actors in higher education contextualize global education programs is particularly significant. The task here is to explore how to conceptualize our thoughts as being a process of “social reconstructionism” as the contextual foundation for an American global higher education programs.

EDUCATIONAL PHILOSOPHY OF SOCIAL RECONSTRUCTIONISM

Revisited for Higher Education in the Age of Globalization

Globalization’s movement toward global cooperation and the potential for the establishment of a new world order hold paramount interest for educational philosopher of the Social Reconstructionism tradition. In fact, reconstructionist have been visionaries of the coming new world we now face in higher education for over the past century.

In 1969 The Society for Educational Reconstruction (SER) was established. SER’s original mission statement broadly defined their two primary educational objectives: (1) democratic control over the decisions that regulate human interests, and (2) the purposeful promotion of a peaceful world community through education. The society encouraged scholars, teachers and educational administrators to apply Reconstructionist’s values and ideas to new experimental educational programs, curriculum development, learning theories, and pedagogical models (Riley, 2006).

Social Reconstructionists hold that modern society is facing a grave crisis of international political conflicts, economic instability, changes in social stability, environmental and ecological destruction that threaten the very survival of humankind. These issues demand that all educators become social activists. Activism should take place within the domain of education because it holds a strategic social position in addressing the crisis and providing a necessary social foundation for musings that will lead to political, social, and economic changes and cooperation.

Reconstructionists argue that education is the proper social institution for social change because it’s potential to bring about real change is more comprehensive and widespread than any other. Before political, social, and economic reform people must first become educated for change. Social Reconstructionists argue that today’s educational content is tomorrow’s socioeconomic and public policy. Making the college educator aware that the “act of teaching” holds equal importance with narrowly focused “specialized research” is no small or trivial contribution of Reconstructionism. An important contribution of Reconstructionism is the promotion of interdisciplinary study. Colleges and universities

over time have become fragmented and segregated by an over- emphasis on compartmentalized research and specialization. The renewed emphasis on teaching has resulted in the recognition by many in the collegiate ranks of the validity of interdisciplinary study and academic generalization.

As has been demonstrated above, globalization is having multiple venues on higher education in the United States. The socialization process of higher education learning into globalization is the process of learning through what is termed here as “global education.”

In many respects what is occurring through various global higher education curricula is already the reconstruction of American society, the construction of a new global culture and the construction of collective consciousness. How leadership in higher education visualizes humankind globally prescribes how they prepare the consciousness of learners to interact globally to their life-world within themselves. The basic assumptions regarding the human phenomenon and social reality influences social relationships on a global scale. Most often these basic assumptions are so ingrained in thought patterns that educational leaders of the past rarely have they entertained alternative perspectives even though they are fundamental to the way perceive the world and higher education’s place in it.

Conversely, social reconstruction theorists believe that knowledge construction is accelerated as social interrelationships become increasingly interconnected in complexity. Consequently how learning occurs is an essential ingredient for intellectual development and sound knowledge construction through social dialectic (Friere,1982; McLaren, 2000; Vygotsky, 1978; Wertsch, 1998; Wink & Putney, 2002).

It is not enough to say for instance in a social reconstructionist curricular agenda, that a collective system of harmonious individual psyches would be sufficient for evolving a more ideal global culture; rather, both the individual and the society could only achieve its perfection through purposeful collective action on a global scale *and* at the end of its evolutionary process. Instead of higher education blindly submitting us to the destructive capacities of exclusive or utopian subjective inquiry, objective societal action, or totalizing systems for global unity (Stanley, 1992).

The assertion here is that we in higher education look again and anew at the Principles of Social Reconstructionism to see their golden threads so that we might better continue to weave in our service of harvesting human consciousness into the evolving collective global consciousness as part and parcel of an unfolding tapestry of 21st century higher education mission (Roberts & Bussler, 1997).

The thought of Social Reconstructionist Theodore Brameld reveals foundational motifs to contemplate for those of us in the midst of postmodern globalization and higher education. Thus what follows is an overview Brameld and his vision of society reconstructed through education within the context of an evolving global milieu.

THEORIST THEODORE BRAMELD

Visionary of Global Social Reconstruction

Theodore Brameld (1904-1987) was an education theorist who cultivated Reconstructionism into a more polished global philosophy of education. He did not possess the dogmatic harshness of a radical revolutionary of educational praxis but was more a Utopian idealist. His reconstructionist philosophy emphasized the human need for large macro visions of humankind’s progression that inspired compelling goals for a

social frontier. These future frontiers could galvanize and unify educational dispositions and efforts to construct new societies and cultures. Higher education is a forum for the cultivation of individuals cognitive and consciousness progression toward a cooperative and collective action and mind (Roberts & Bussler, 1997; Riley, 2006; Stone, 2003).

Brameld was grounded in Hegelian philosophy of the dialectical evolution of consciousness. Hegel argued that the dialectic process of ideas through thesis, antithesis, and synthesis always led to something better than what existed previously. Therefore, Hegel saw history, society, and political systems as progressive with each new emerging era improved over the last. Likewise, Brameld argued that social reconstruction would occur through the dialectical process of ideas promoted through education. Through the process of education social progression is occurring historically, socially, and politically. Education is the forum for the dialectic of ideas and the pushing of society to new realities improved over the previous reality with as a new global (Ozman & Carver, 2011 ; Stanley, 1992).

Similarly, Brameld argued that social reconstruction would occur through the dialectical process of ideas promoted through education. Through the process of education social progression is occurring historically, socially, and politically. Education is the forum for the dialectic of ideas and the pushing of society to new realities improved over the previous reality with as a new global order as the final idealistic endpoint (Brameld, 1971).

He held that reconstructionism is a crisis philosophy of both education and society. Humankind is at a critical point in history - one road leads to destruction while the other leads to salvation only if humankind will make the effort. Thus, he states, Reconstructionism is a philosophy of values, ends, and purposes. Though Brameld was absolutely certain what path humankind should take, he was not sure and was troubled by which path humankind would actually take (Brameld, 1965; 1976).

Brameld's utopian vision of social progress is inspirational but not an objective realistic assessment. He does not provide a blueprint about what kind of political system should be promoted through education, the questions of political power and how to devise a system of equitable and acceptable economic distribution globally are not specifically addressed. He only proposes that it should be democratic. Brameld often laps into pure speculative idealism of "what ought to be" without addressing "how" education and a global government can overcome these monumental problems (Brameld, 1950; 1957; Stone, 2003).

Simply stated, in Brameldian sense, to change society we must first change the individual and education is the most effective social institutions to accomplish this task. Brameld's brand of social Reconstructionism has flowered into a strong arm of the movement. Other educators following Brameld's lead have contributed to the "futurist" thinking and orientation of Reconstructionism about society and education (Brameld, 1965; 1976; 2000).

Brameld, who represented the more advanced aspects of the modern social reconstructionist movement, understood something deeply essential in this dialogue of developing self through societal action when he conceived of a curriculum of explosive ideas that helped students actualize themselves through collective social action. This view is closely consistent with French philosopher Pierre Teilhard de Chardin's theory and vision of planetization (Meynard, 2006).

In this curricular sequence, societal problems are apprehended collectively through an awareness and empathy with those struggling with poverty, violence, ignorance, and other inequities. From this vantage point, students are able to postulate a teleological goal (vision for collectively-achievable positive change) versus a materialistic one of fateful passive acceptance. They came to understand through practice that a harmonized solution

is achievable through a contentious process of debate and dispenses culminating in consensual action. Moreover Brameld's curriculum posed important philosophical questions within the ideas of culture, class, and evolution that helped prepare students to ask important questions concerning truth and the ideal (Brameld, 1965; 1971, Stanley, 1992; Stone, 2003).

He believed that through this experience students develop a natural desire and capacity to transcend their collective tensions through projected synthesis of collaborative contribution, culminating in purposeful and meaningful action (praxis). Learners gain facility with harmonizing ideas in action and within the context of larger questions that suggest global implications for competing philosophies, beyond national interests (Gutek, 2003).

Brameld's work influenced and directed Reconstructionism toward becoming a more abstract philosophical vision and global ideology. Brameld's philosophy of education is future oriented and optimistic and a major contribution to the development of global education. He held that the underlying forces of a social struggle, both in the Marxian class struggle of materialism and in the Hegelian sense of consciousness, are both propelling humankind to a higher evolutionary social endpoint. Since Brameld, a major tenet of reconstructionism is that the future 'can be' better 'if' people adopt an attitude to work to make it better (Ozman & Carver, 2011 ; Stone, 2003).

In his assessment, social moral contradictions (e.g., social equality vs. Profiteering) and economic mass confusion (i.e., competition vs. cooperation) has stricken contemporary society. To avoid ultimate destruction, society must establish focused goals for survival, particularly the goal of promoting a transnational global social order over that of the current state of nationalism. He believed that humankind must embrace a "one world government" and establish a "united global society." This global society must be one "in which people of all races, all nations, all colors, and all creeds join in the common purpose of a peaceful world, united under the banner of international order. The task of education in the movement toward a global society is to probe the meanings of the different ideas, concepts, and purpose of a global order (Brameld, 1950; 1965; Daun, 2002; Roberts & Bussler, 1997).

For Brameld, humankind needs to design a political system of democracy on a global scale in which "man believes in himself, in his capacity to direct himself and govern himself in relations to his fellows."¹ The establishment of a world government where there is majority rule in policy making and, yet, provisions for minority opinions are allowed. According to Brameld, the fundamental means by which such an ambitious goal can be achieved is only possible through the education of the world's citizens toward a global democratic system (Bramled, 1950; 1976).

He understood and expressed that we could direct ourselves better in society by harnessing technology, and a pluralism of disciplines, cultures, and approaches that direct the harmonization of tensions through reflection and action aimed at a collective goal of a better global organization. Through a flexible commitment to dialectical insight and dialogical action we can help evolve our collective consciousness through moral ends and means in a social reconstructionist agenda for higher education. An agenda for higher education that furthers our understanding and literacy in the plurality of knowing others in a sense of harmony with objective action (Riley, 2006; Roberts & Bussler, 1997).

The idea of a merged, collective, and plural dialectical and dialogical nature emerging from an evolving collective consciousness that helps us imagine and embrace the higher aspect of the evolved global society. Thus an unified and transcendent system of cultures that sees the care of self as ultimately inseparable from the whole, thus producing a more holistic way of respecting plurality and the process of synthesis with other cultures. In this example of social reconstructionists curricula, society can learn to evolve in an ever-

changing process of consensual action through cooperative collaboration ethics of global awareness and action (Brameld, 1957; 2000; 1976; Stanley, 1992).

Critics such as Gerald L. Gutek (2003), Howard Ozman and Samuel Craver (2011) argue that his proposal was more “visceral” than provable. Ozman and Carver write:

...he was opposed to absolute goal setting as he was to absolutes in anything else. He was a dreamer as well as a worker...he had certain presuppositions about the continued perfectibility of individuals and society. Brameld was active in advancing proposals for consideration and implementation, and he saw the utopian concept as a technique for establishing useful goals and orienting people toward an acceptance of change itself.

As a social reconstructionist, Brameld approached global social problems holistically because he held humankind and societies to be globally interconnected and interrelated. He maintained that due to this holistic nature that the solution of one problem may very well create a new problem. If people are challenged to see social problems in a broader interrelated perspective then the chances of eliminating the problems are greatly enhanced (Brameld, 1976; Stanley, 1992).

Brameld believed that humankind has the power to direct its destiny and that we are not subject to deterministic historical laws. Though he argues that history does exert influence on human action but that human’s progress into what they are because of the context of the historical epoch in which we live. Each historical epoch merges out of the proceeding one as such is influenced by earlier periods of history. For him, history has no “ingrained purpose” or “preordained goal.” The goals achieved and the effects of these goals are due to human choices (Brameld, 1971, p.372). Thus in Brameldian thought, the hypothesis is that humankind can shape history and human progression, such musing is only logical and rational as well as being a rational educational agenda.

He argued that humankind is at a critical point in history - one road leads to destruction while the other leads to salvation only if humankind will make the effort. Thus, he states, reconstructionism is a philosophy of values, ends, and purposes. Though he was absolutely certain what path humankind should take, he was not sure and was troubled by which path humankind would actually take.

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Most significant to this study, is Brameld’s (1971) notion of *culturology*. Culturology is his thinking that humankind exerts profound influence on the members of society lives

and culture. He viewed this as an anthropological philosophy in which “culture is regarded as the fulcrum of an effort to interpret human meaning, existence and actions (p.14). The task for educators as social reconstructionist is to examine our culture and to explore the ways in which social institutions, such as higher education, are unequal to our current crisis situation so that we may become conscious of the changes of action and thought to achieve a social cultural transformation.

Cultural transformation asserts that a culture holds deeply ingrained patterns of belief that place persistent influence on social events and human disposition; any careful examination of beliefs about reality will reveal a cultural context (Brameld, 1971, p. 360). Thus the conflicts amongst groups require Reconstructionists is to understand the role of society and it's cultural to be the influence of the psych of intervals. In our society, groups within society can corrupt the thinking and conciseness of the masses in regards to humankind as a whole.

Brameld's work influenced and directed social reconstructionism toward becoming a more philosophical vision and global ideology. Brameld's philosophy of education is future oriented and optimistic and a major contribution to the development of global education. He held that the underlying forces of a social struggle, both in the Marxian class struggle of materialism and in the Hegelian sense of consciousness, are both propelling humankind to a higher evolutionary social endpoint. Since Brameld, a major tenet of Reconstructionism is that the future 'can be' better 'if' people adopt an attitude to work to make it better (Roberts & Bussler, 1997; James, 1995; Stone, 2003).

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Simply stated, in Brameldian sense, to change society we must first change the individual and education is the most effective social institutions to accomplish this task. Brameld's brand of social reconstructionism has flowered into a strong arm of the movement. Other educators following Brameld's lead have contributed to the “futurist” thinking and orientation of Reconstructionism about society and higher education.

Again, educational theorists Howard Ozman and Samuel Craver (2011) state:

Concern for social values, humane justice, the human community, world peace, economic justice, equality of opportunities, freedom and democracy are all significant goals for Reconstructionism, things in which the world is sadly lacking. If it is true that Reconstructionists are impatient and precipitous in their desire to eliminate social evils, it is understandable in a world still filled with hate, greed, bigotry, and war.

Thus what is universal to the human phenomenon is true universally. To visualize the inherent commonalities assist in understanding the construction of the organization of a global life-world. This can potentially empower educational leadership to see and understand social relationships that are not typically identified through conventional theoretical musing. Such visualization is a radical departure from the scientific positivist perception of an organization as a mechanistic fragmented compartmentalized association of disconnected individuals that are groping to come together today.

CLOSING MUSE

For Brameld and others, the evolution of us, our societies, and a global world culture requires conscious and directed acts involving harmonization of tensions—of the self through dialectical insight, of society through dialogical action and dynamic reflection and aspiration. As Brameld reminds us, there is little chance of this goal of a global world-order being reached unless it is grounded in profoundly common attributes, in which the value of love serves as the pervading ethic that is deeper than any custom. Indeed to acculturate a global citizenry into similar habits of mind, action, and practice will require a plurality of disciplines and processes liberating the value of all individuals within all cultures.

Brameldian thought for subjective reflection and for harmonious development of the individual through the liberation of ideas can be a center piece for those of us in higher education in our age of globalization. In order to evolve our collective thinking to its higher aspect, we must also set the conditions for the tool of technology, in the form of the internet and other communication networks, helps us articulate and embrace a global proliferation of moral ends. Transcendent messages of global action, efficiently and effectively transmitted through an increasingly complex network, allow us to internalize a larger harmony that is respectful of the role of diversity. In the resurgence of social reconstructionist scholarship, we begin to understand there may be a building threshold for a collective evolution that embraces a social reconstructionist role for higher education curricula.

The curricular agenda within higher education, the social reconstructionist ideals of Brameld can be recast to provide us with a relevant 21st century curriculum model that merges self development and societal evolution with collective global aspirations. Through Brameld's formula of explosive ideas in action we can both construct our individual and collective consciousness in a kind of interminable inquiry that knits back together our divergent ways of knowing through the formation of consensual plans for action that are respectful of global social unity.

This vision of an evolved society as an organic can be seen to move beyond modern society's concerns for bridging inequities to postmodern needs for illuminating a synthesis of cultures. A new muse that is resolved in consensual moral action that contains an overarching vision of global oneness. In this new paradigm, we see ourselves as "collectively-authoring a peaceful global society and ourselves, our society as an evolving new world culture.

In closing, I propose that we in American higher education focus again on the theoretically intangible, yet extremely meaningful characteristics of higher education process. Thus it should not be shackled by the constraints of conventional analysis but be allowed as a progressive alternative interpretation of the reconstruction of society in a global context and the socialization of global citizens into the new culture forming as the means and end of higher education today.

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Creative-Innovative Activity of Industrial Companies under the Conditions of Globalisation

*Dima Ioan Constantin,
Mariana Man, University of Petrosani, Romania*

INTRODUCTION

Global economy is basically a market economy organised as such as to operate based on the global market mechanisms under a liberalised regime in all respects. (Montiel, 2012) The major moments of reproduction are governed only by generally valid rules, and the main dimension of operating such an economy is the market and mechanisms of the market created in principle from the movement of prices according to the demand and supply ratio on the competitive market.

THE FIRM ON THE TERMS OF COMPETITIVE MARKET ECONOMY

The achievements obtained till present in the field of cumulating and systematization the knowledge about environment, people and society allowed the passing of systematic thinking from the theoretical sphere into the practice of different fields of activity. This fact makes the concept of system-initially used only in technique- to become a basic instrument in the economic research and analysis. It thus contributes to solving abstract and sensible problems of the problems.

In this way the practical approach of the problem leads to the fact that any phenomena activity or process can be considered as systems of a certain type- more or less complex. They are characterized by two categories of environment, namely: external environment of the system, meaning the area in which the area manifests and the internal environment of the system, expressed through the relations established between its compound elements and considered variable measures. Hypothetically, the system is isolated when its connections both with the exterior as well as the connections between its component elements are zero. (Wilson, 2003)

If we refer to artificial or natural systems the connections mentioned above are not zero because these kinds of systems receive and give the surrounding environment information. This leads to the necessity of starting from atomic-dissipate structures and from the utility of systems, especially in the social systems. In such cases the cybernetic system in economy has a special place. The cybernetic system in economy is defined as the assembly of interacting elements. It comprises people, objects and means of labor, in which the activities of manipulation, manufacturing and control of materials, information and human actions focus on the accomplishment of an established program determined by the an leading effort based on feed-back.

According to this definition both the economy of the firm and of the economic branches as well as national economy can be considered as a micro, respectively macro-economic cybernetic systems. For instance (Man and Vilkul, 2006) the cybernetic system of the firms can be represented through the following flow-process chart (Fig. 1).

The input E in the process mainly regards the factors of production: material, human and financial. By their nature the input components are made up of: production materials and raw materials, fuel, exogenous power for production, labor force etc.

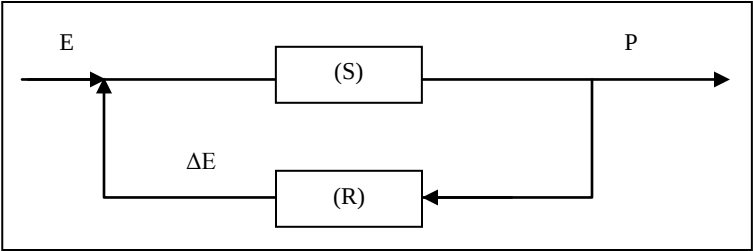


Fig. 1. Flow-process chart representation of the firm

- where:
- (S) represents the developed process;
 - (S) - the operator which the developed process (S) has;
 - (R) - the regulator of the process;
 - (R) - the operator that the process regulator (R) has;
 - E - the input in the process;
 - P - the output from the process;
 - ΔE - the correction made to the input E in order to maintain the equilibrium of the process.

In the specialized literature (Leontief, 1966) such a grouping of the input components of the process is known as the grouping of primary elements. For the input in the process decomposed in primary elements, the following notation is considered:

$$E_i = E_1, E_2..., E_i..., E_l \tag{1}$$

The output of P from the process generally materializes in finished, semi-fabricated products etc.
Assuming that the output from the process is decomposed in J groups of product on the following assortments:

$$P_j = P_1, P_2..., P_j..., P_J \tag{2}$$

The achievement of these in a certain period of time t takes place in the following quantities:

$$\begin{matrix} N_1 \text{ units from the group of the products } P_1, \\ N_2 \text{ units from the group of the products } P_2 \\ \\ N_j \text{ units from the group of the products } P_j \\ \\ N_J \text{ units from the group of the products } P_J \end{matrix} \tag{3}$$

In the case of the firms that produce a single product from a certain quantity (thousands tones), in order to achieve it a certain consumption of material, financial and human factors of production takes place. Thus certain expenses are done in the respective process of production with each of the input components $E_1, E_2, \dots, E_i, \dots, E_I$. The consumption of the factors of production expressed in monetary units represents the manufacturing costs and the production can not take place without this consumption. All the expenses met for the quantities from the components $E_1, E_2, \dots, E_i, \dots, E_I$ consumed during production for the achievement of a certain output level, define the conversion costs realized by the firm in that period.

A similar grouping of the manufacturing expenses on primary elements corresponds to the input grouping of factors of production. In the firm this similar grouping comprises the following: the expenses met for the raw materials and the materials consumed in production, fuel expenses, power expenses, the redemption of the consumed fixed means, personnel wages for production etc.

The achievement of the finished products in a firm is conditioned by a certain organization of the production process. Generally the organization of the production process develops on production sections and as part of these it takes place on operations. According to the role that the production sections have in achieving the products of the firm, they are main sections or auxiliary sections. Main or basic sections represent the center of the basic activities of a firm, namely the main places of production. All the operations necessary for the achievement of the finished product are done in the basic sections. The activity from the basic sections is doubled by a whole range of auxiliary activities that are done by auxiliary sections (mechanic, electric workshops etc.). The auxiliary sections are meant to ensure those conditions necessary for the developing the operations of production that take place in the basic sections.

Both the basic activity developed in the main production sections and the secondary activities developed in the auxiliary sections are very important for the achievement of products. Certain relations are established between these. Certain exchanges of activities and information take place, the section influence each other and they finally tend to achieve a self-adjustment process. As a result the firm can be seen as a complex microeconomic cybernetic system and the sections where the process of production takes place represent the subsystems. The connection of the production sections, as subsystems of the complex microeconomic system, can be parallel, serial and mixed.

For the input in the process (S) of the system decomposed into sections, the classification on groups of primary elements is preserved: $E_1, E_2, \dots, E_i, \dots, E_I$. This decomposed input is at the same time the input for the subsystems of the system, respectively for the main and the auxiliary sections. Due to the role of the auxiliary sections, namely that of serving the main sections in the development of the production process, the input in a main sector may also contain components that represent the outputs of the auxiliary sections. This means that the input in of a certain primary element E_i ($i = \overline{1, I}$) in a main sector is made up of the share of the E_i element input in the system meant for the auxiliary sections and contained in their output towards the respective section.

If the notion of primary own input is introduced for the first component of the input from element E_i and the notion of transferred primary input for the second component then the input from the primary element E_i ($i = \overline{1, I}$) in any main sector is made up of its own and

transferred input. Obviously this decomposition is also preserved if the input E_i ($i = \overline{1, I}$) takes place in an auxiliary section.

The primary input E_i , own or transferred, in a certain main sector of production suffers some transformation operations in order to achieve the commended output from the process (S).

If the output from the process (S) is considered as being made up of a range of products distributed in J groups on the assortments $P_1, P_2, \dots, P_J$ then, the achievement of any product from the P_J group implies the performance of the following operations upon the components of own primary input:

OM_{j1} operations in the main sector 1

OM_{j2} operations in the main sector 2

.....

OM_{js*} operations in the main sector S*

(4)

where: S* is the number of the main sections.

The operations that are necessary to be done in the case of the components of own primary input in the first S*<S sections of production, respectively in the main sections, so that the output from the process (S) makes part of the P_j products group, can be represented in the following matrix:

$$O = \begin{vmatrix} O_{j11} & O_{j12} & \cdots & O_{j1M_{j1}} \\ O_{j21} & O_{j22} & \cdots & O_{j2M_{j2}} \\ \cdots & \cdots & \cdots & \cdots \\ O_{js*1} & O_{js*2} & \cdots & O_{js*M_{js*}} \end{vmatrix}$$

(5)

where: $O_{jsu_{js}}$ represents the operation number
 u_{js} ($u = \overline{1, M_{js}}$) done in the main section
 s ($s = \overline{1, S^*}$) related to any of the products from group P_j ($j = \overline{1, J}$)

If the output from the process (S) is heterogeneous and composed of J groups of products, then the number of matrixes of the type (Eq. 3) is equal with J and represents the difference between the technologies of the products that belong to different groups. The J matrixes are identical if the output is homogenous.

While the components of primary input that takes place in the main sections focus on the transformations presented in the matrix (Eq. 5), the components of primary input transferred in the same sections focus on the insurance of the conditions necessary for the performance of these operations and thus they focus on the achievement of the final goal-the commended output of the system, which is made up of J groups of products.

The primary input in a main sector whose consumption per operations and products can be measured, is called primary input directly measurable and in the opposite situation it is

called primary input that is not directly measurable. Obviously, a part of the component of owned primary input is directly measurable and the other is not (for example: the worker's labor consumption, respectively that of the sector chief). Any primary input directly measurable in a sector is necessarily own while a primary input that can not be directly measurable is own or transferred.

Considering the primary input E_i ($i = \overline{1, I}$) its directly measurable component is marked by E_{i0} , while the component that can not be directly measured is marked by E_{i1} . In its turn, this component decomposes in its components:

$$E_{i10} \text{ and } E_{i11}, E_{i1} = E_{i10} + E_{i11} \quad (6)$$

where: E_{i10} represents the own component,
 E_{i11} - transferred component.

For the primary input directly measurable E_{i0} , it is not necessary the use of a third index, because it is always:

$$E_{i0} = E_{i0} \quad (7)$$

Starting from the destination held by our own or transferred input component that can not be measured directly, in relation to the production process of a sector, the following classification can be done for E_{i10} and E_{i11} :

E_{i101} , E_{i111} - the component of the primary input E_{i10} and E_{i11} meant for the maintenance and functioning of the equipment of the sector;

E_{i102} , E_{i112} - the component of the primary input E_{i10} and E_{i11} meant for leading the process in a main sector;

E_{i102} , E_{i112} - the component of the primary input E_{i10} and E_{i11} in a main sector and meant for leading the whole process.

As a result of these classifications, the primary input E_i ($i = \overline{1, I}$) in a main production sector is made up of the following components:

E_{i0} - the component of the primary input E_i , directly measurable;

E_{i101} - the component of the primary input E_i , directly unmeasurable, own, meant for the maintenance and functioning of the equipment in a main sector;

E_{i102} - the component of the primary input E_i , unmeasurable directly, own, meant for leading the activity in a main sector, namely the component of the primary input E_{i10} that represents the information of the command of the regulator (R) towards the process (S) from the section $s = \overline{1, S^*}$, information of own local command;

E_{i103} - the component of the primary input E_i , unmeasurable directly, meant for leading the whole process. It belongs to a main sector of production, namely it is that component of the primary input E_{i10} in a main sector, representing the command information of the regulator (R) of the process (S) towards a main sector of production $s = \overline{1, S^*}$, information of own central command;

E_{i111} - component of the primary input E_i , unmeasurable directly, transferred meant to the maintenance and functioning of the equipment in the sector from which it derives;

E_{i112} - component of the primary input E_i , unmeasurable directly, transferred and meant for leading the sector from which it derives, namely that component of the input E_{i11} in a main sector, representing command information of the regulator of an auxiliary sector $s = S^*, S^*+1, \dots, S$ towards the own process - information of local transferred command; E_{i112} - component of the primary input E_i , unmeasurable directly transferred and meant for leading the whole process, namely that component of the input E_{i11} in a main section, representing the command information of the regulator (R) of the process (S) towards an auxiliary section $s=S^*, S^*+1, \dots, S$ - the information of central transferred command.

Thus, the firm can be seen as a microeconomic cybernetic complex system in which the following aspects are present: the process (S) is the result of the serial, parallel or mixed connecting of the production sections and these ones are cybernetic systems with feedback; the regulator of the process (S) is the element (R) - the running of the film-together with the leadership of the sections and their components; the input in the process (S) is made up of the primary elements E_i ; the input E_i in each section is characterized through the following components: $E_{i10}, E_{i101}, E_{i102}, E_{i103}, E_{i111}, E_{i112}, E_{i113}$ ($i = \overline{1, I}$) and through the operations from the matrix (Eq. 5) that lead to the achievement of the P_j output.

THE RELATION PRODUCTION SYSTEM – CYBERNETIC SYSTEM FIRM

The production system, through its characteristics can be placed in the category of opened systems. This is the result of its behaviour, characterized through receiving the material, financial and labour resources from the outside environment (thus inputs). These ones are then transformed in finished products and services (thus outputs) and they are transmitted to the external environment.

The essence of the definition of the cybernetic system is that this one is a reunion of systems aiming at the achievement of a mutual transfer of information between the component subsystems and between these ones and the environment so that on a certain period of time the self-adjustment process of the whole reunion to be ensured. If we take into account this definition, the production system can be placed in the category of the cybernetic systems (closed, with feedback).

The component elements of the production system (Maynard, 1971) are in fact internal subsystems between which material and informational relations are established. The material relation results most of the time in the transformation of raw materials and power that take place in the technological and economic process. The informational relation refers to the information present between the subsystems of the production system regarding the following aspects: What finished product must be obtained?, What raw materials will be used?, What technology will be used? etc. In this category there are also included the informational relations of the production system with the external environment. These relations offer the managers the necessary information for the decision making process. Their influence should not be minimized.

The production can achieve its objective-the achievement of products, the carrying out of services, the execution of works- only when it is in a continuous correlation, from an informational point of view, with the other systems of the firm, for example: the commercial system (which through its components offers information about market

requirements, consumer's' preferences, the supply graphic with raw materials and materials, the volume of the previous sales and its forecast in the future etc.); the human resources system (which offers information about the volume and the structure of labour, the promoting of labour, the motivating of labour etc.); the technical system (which offers information about the consumption norms, the types of machines and installations that are used or will be used, the hours of accidental cease etc.).

The informational relations that highlight the communication between the production system and the exo-system determine the dynamic nature of the relations in the production system, which is in a continuous change. This modification leads to the change of the structure of the production system and when this modification takes place according to a certain objective, the system self-adjusts.

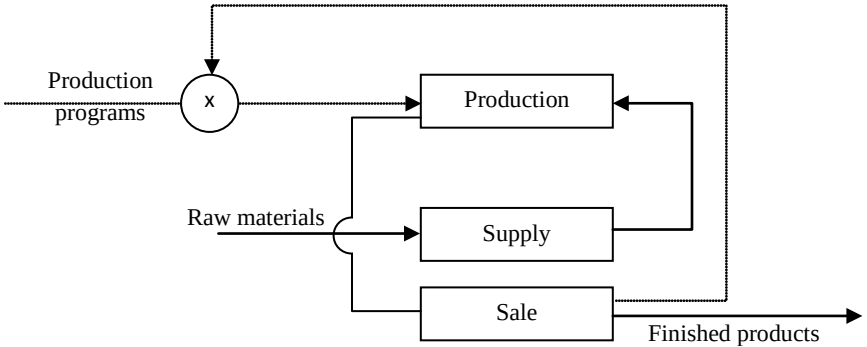


Fig. 2. The relation production system-commercial system

In figure no. 2 it can be noticed that the outputs from the production system, namely the finished products are in fact inputs for the commercial system (the sale activity). At the same time, the outputs from the commercial system (the provision with raw materials and materials, the information about the market etc.) together with the production program lead to inputs for the production system.

In this way a mutual condition appears between the two systems, namely: a direct connection (production plan-finished products- products sale) and an inverted connection (the requirements of market-the sale plan-the modification of the production plan).

If there were no inverted connections, then a certain disturbance of the production plan would lead to a disturbance of the product sale, without any possibility of reducing or eliminating the disturbances from the output. But the signaling of these disturbances permits in fact the gradual decrease of the output at the pre-established values. The emergence of the inverted connection permits thus the self-adjustment of the production system functioning, namely the modification of the input (qualitative and quantitative) so that it permits the achievement of the desired output.

The self-adjustment of production is based on its structuring in controlling system and controlled system (carry out) between which mutual relations of interdependency are established (Fig. 3).

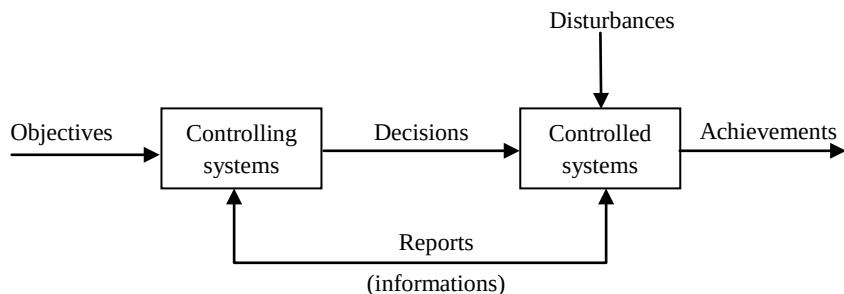


Fig. 3. The structure of the production system

TPOLOGY OF FIRMS

The great diversity of the profile and size of the firm, of the specific conditions etc. make difficult the establishment of some characteristic features of firm's management.

The grouping of firms according to certain criteria is necessary because: the classification offers the statistical basis of determining the economy structure on types of firms, on types of firms grouped according to some classification criteria and on this basis complex and profound analysis can be done upon the existing imbalances and nonfunctioning at a certain moment in economy; the classification of firms in economy according to certain grouping criteria is important in the identification of the characteristics and ways of practicing management in firms from different groups and at the same time this classification establishes the general and the specific features in management practicing.

The most frequently used classification criteria (Pachura, 2012) are:

- the juridical form, according to which firms are public and private;
- the dimension of the firm is quite an controversial criterion. The dimension of the firm can be seen trough the size of the factors of production, which participate in the development of firm's activity or trough the size of the sales volume. The action of these factors is measured trough the calculation of some indicators, used individually or combined such as:

- a) the capital of the firm is made up of the real financial capital (the founds of the firm and the funds borrowed by the firm on a long run period), average financial capital (which is present in different fields of activity and which varies according to its specific) and fixed capital (invested and highlighted in the immobilization of the record balance;

- b) indicators used for labor measurement - they measure the labor used for the development of the firm's activity (the number of employers of a firm etc.);

- c) the rate of turnover (namely the value of the sales of the firm in a certain period). According to this criterion firms are classified in small, medium, large and very large firms;

- the property form is the criterion that classifies industrial firms in: industrial firms in which the assets are public property; industrial firms in which the assets are private property; industrial firms in which the assets are mixed property (public and private, national and foreign); industrial firms in which the assets are cooperative property;

□ the affiliation to a certain branch of activity takes into consideration the following classification:

a) according to the nature of the manufactured labor there are: industrial firms from extractive branches and industrial firms from processing branches (the former deal with extracting the materials from nature and the latter deals with the processing and transformation of raw materials in finished products, which in their turn are grouped on industrial branches, and these ones on sub-branches);

b) according to the economic destination and to the nature of the finished products (it is based on the division of the social product in the two sectors; production means and consumer goods) firms are classified in producers of production means-group A- and producer of consumer goods-group B-;

c) from the point of view of the working time during a year, firms are classified in: industrial firms that work all the year round- the great majority- and industrial firms with a seasonal production, which because of the nature of the processed raw materials they can not work the whole year;

□ the level of specialization according to which there are: specialized industrial firms, universal industrial firms and mixed industrial firms;

□ the degree of administrative subordination leads to the following classification: industrial firms of republican subordination- namely those firms that through their volume of production or through the nature of their specialization are important for the whole national economy; industrial firms with local subordination namely those firms whose production responds to the local requirements of the population of a certain area, county, town and which generally use local raw material

□ the type of production leads to the following classification: industrial firms with individual production; industrial firms with serial production; industrial firms with mass production;

□ the organization method of production classifies firms in: industrial firms with flow production; industrial firms with lot production; industrial firms with unique production.

The approach of the juridical form of the firm focuses both on the property form and on the managerial autonomy of the firm, as well as on the ways of its functioning which are mentioned in the its foundation status.

In this way, a first classification of the firms according to the property form upon their assets divides firms in:

□ private firms, characterized by the fact that their assets belong to one person or a group of persons. According to the number of the capital possessors, these firms can be individual and group firms. The former is the most frequently used, especially for small and medium firms, for example the family firm whose assets belong to the members of a family. The latter type of firm includes the cooperative firm, which is set up through free cooperation on the basis of the equal participation of several persons who have been developing similar activities as small producers. The latter also includes group firms whose main characteristic is the possession right upon its assets on the behalf of at least two persons. The forms of the private group firms are very different and they consist in joint-stock company, limited company etc.;

□ public firms are characterized mainly by the fact that the state on whose area they are, is the owner of all their assets. The setting up and the functioning of public firms depend exclusively on the will of the decision-making nationalized factors, according to the

existing regulations of each country. Practically there are two such categories of firms: socialist public firms that are characterized by a powerful centralization of decisions outside them, at the macro economic management bodies; capitalist public firms or public firms, which are characterized by a strong autonomy although the state is their owner. The degrees of centralizing the activities, the weight of certain criteria with a social nature, the level of the bureaucracy of activities are higher compared to private firms.

There is also another approach upon the classification of firms according to the ownership of the assets. From this point of view there are the following categories of firms:

□ the public firm is the one in which public powers represented by the state or by the public collectivity are the owners of the assets and they influence directly the firms taking upon themselves totally or partially the functions of entrepreneur. In market economy the setting up and the functioning of such firms are the result of the decisions taken by the public power and regulated according to the juridical aspects of the state. The aim of these firms is to ensure the state the possibility of controlling some sectors of special interest of the national economy, as well as to influence some social and economic evolutions on the long run. Public firms can be: semi-public firms, in which the public power has a partial contribution to the finance of their activity and thus the participation to leadership and control is limited (the forms of these firms are: concession in which public power gives a private firm the administration right of a public service, according to some precise conditions mentioned in a terms of supply, and the decisional autonomy is total within the limits established contractually in this terms of supply and the company in mixed property in which the capital is public and private); the proper public firm in which the state owns the entire capital and takes upon itself all the leadership prerogatives through its agents (according to the decisional and administrative functions the following forms are distinguished: national companies and societies whose income and expenses are included in the public budget according to the norms of public accountings and they are organized at national or municipal level and the nationalized company, which results from the transformation of the property of an initially private firm or a semi-public firm towards the state after the indemnity of the old shareholders ;

□ the private firm is the one whose assets belong to a person or group of persons and this fact allows them to behave independently in the orientation and administration of the activity of the firm. Its main forms are: the individual firm, in which the juridical personality of the firm combines with that of the entrepreneur's (the entrepreneur brings the entire capital or most of it and he takes upon himself the management prerogatives and responsibilities and he develops integrally or partially the execution of labor); the familial firm, whose assets belong to the members of a family who are either coproprietors or coproprietors and workers; the cooperative firm, whose assets are owned by some coproprietors who are equally associated and who previously developed similar activities as small producers; the individual firm is characterized by the existence of a certain labor division and the entrepreneur's responsibility of the management prerogatives; the associate firm in which the capital, the assets management and the leadership of the activity are shared between several persons. The main forms of commercial societies are: persons society is characterized by the development of a modest activity and is frequently limited to a family business; capital society in which the

responsibility of the persons who bring capitals is limited to the level of the brought capital and does not reflect upon their entire assets; the intermediate society is a form appropriate to the medium firm and it is placed between the form of the individual firm and that of the persons society. It can be classified in : a) sleeping partners company, joined stock company or on interests company that has two types of associations a (namely the sleeping partners , who are responsible up to the level of their contribution of capital and the active partners or the guarantors who are liable responsible for all goods); b) limited liability societies (in which the associates are responsible up to the level of their individual contribution of capital but their participation proportion to the assets of the society are not negotiable as the shares); c) variable capital societies which can increase their capital without the decision of the general assembly , through the entrance of new members.

In the context of the acquired experience of the developed countries regarding the forms of firms setting up and the foresights of normative acts in our country there were set up commercial societies, companies and national societies as well as autonomous administrations as existing forms of the firms which can be rented or granted.

Autonomous administrations, national societies and companies are organized and they function in the strategic branches of national economy as well as in some fields belonging to other branches established by the government. There are juridical persons who develop their activity on the basis of economic administration and financial autonomy and who have property right upon the goods of the assets which they autonomously own, use and dispose of. These must cover entirely all the expenses (including revenues, the redemption of investments and the repayment of the received credits) from the obtained incomes as a result of the developed activities and finally they must obtain some profit. In order to be aware of their economic situation there will be drafted an annual income budget and expenses, a balance sheet and a profit and loss account according to the foresights established by law.

Besides the autonomous administrations there are commercial societies that have an unique shareholder-the state- until the total or partial transfer of the shares or of the social parts, between third parties from the public or private sector, national or foreign according to the law.

The commercial societies with their headquarters in Romania are Romanian juridical persons and they can have one of the following forms: private company whose social obligations are guaranteed with the social assets and with the unlimited joint and several responsibility of all associates; simple sleeping partners company whose social obligations are guaranteed with the social aspects and with the unlimited, joint and several responsibility of the active partners (the sleeping partners are forced to pay only their shares); the sleeping partners joint stock society whose social capital is divided in shares and the social obligations are guaranteed with the social assets and with unlimited and liable responsibility on the part of the active partners (sleeping partners are forced to pay only their shares); the joint-stock company whose social obligation are guaranteed with the social assets (the shareholders are forced to pay only their actions); the society with limited liability whose social obligations are guaranteed with the social assets(the partners are forced to pay only the social parts .

Through the judicial act of the setting up of the trading company, its running regulations establish the following: the juridical form, the object of activity, the name and

headquarters of the society, the social subscribed capital, its structure and way of setting up, the way of taking over the liabilities and assets of the public economic unit, which forms the trading company. The stock-taking of the assets of public economic units which suffer transformations in the trading companies as well as the evaluation and the capital determination of the trading company which is formed, are performed in the conditions of the law.

INDUSTRIAL COMPANIES UNDER THE CONDITIONS OF SOCIETY DEVELOPMENT IN “WAVES”

The acknowledgement of human society's development “in waves”, according to Alvin Toffler's concept proposed in his work *The Third Wave* (1980) implies the analysis of the firm's evolution (industrial unit, corporation), in the same context, but taking into account the characteristics of the changes in every wave.

The following waves (Toffler, 1996) can be distinguished in the human society's development:

□ the First Wave of human society development is characterised by the agricultural revolution, which created the necessary conditions for the passing on a superior level of development of the human society;

□ the Second Wave which is in fact the same with industrialisation covered a large geographical area and it is still continuing in nowadays. Its origins are represented by the materialism and human supremacy,. This leads to the focus on competition, self-preservation and consumption, which were the results of some pollution problems, the solid wastes elimination, multiple forms of criminality etc. In this stage of development we are separated and we have to compete;

□ the Third Wave or/and the post-industrial wave has a great impact within modern industrial nations and it focuses more and more on the balance and on the maintenance power of the society. During its development, the members of the society become more sensitive to the preservation problems, to life's sanctity and cooperation. Thus, we are connected and we must co-operate;

□ the Forth Wave has its beginnings in the end of The Third Wave, and the integration of all life dimensions and responsibilities in the whole becomes the central point of human society. The recognition of the identity of all live systems will lead to the appearance of some new conditioning and inter-conditioning relations. They are useful both for the human factor as well as for other factors of production. In this stage of development we are one and the same and we choose to co-create.

In the context of the structural modifications of human society, the modifications of the role of the firm's activity also take place. The firm has the role of gross serving, namely it should not only do business in the intrinsic meaning of the word. In the last decades business has become the dominant institution in world's culture in the detriment of the other institutions of society (political, social, etc.), but which have a decreasing capacity of offering effective leadership possibilities. This is the reason why business must assume their responsibilities of the whole.

Most of the present firms remained from The Second Wave are centralised, hierarchical and focused on some values such as: profit, efficiency, size and development The

derivation of The Second Wave has its origins in the military model of development adopted (namely: survival, self-preservation, the defeat of competition, victory) in which success is calculated through summing up (the achievement of the profits). The temporal horizons of future development are between five and ten years.

The field of activity of the firm mainly focuses on business, technologic and economic problems and the general managers' answer only towards the shareholders. The attitudes and the policies of these firms reflect the nationalist concerns in which globalisation is considered as an economic investing process of the foreign country. Nowadays their activity should become more responsible and it should have more varied objectives.

The transition to The Third Wave requires the firm to consider itself a creator of values. In this way its philosophy of making business suffers an essential change, in the sense that the firm will focus its activity on finding solutions through which it can satisfy first of all its shareholders needs and then the needs of production itself. This thing happens on the grounds that there is a mutual relation between the firm on one hand and the employees, employers, shareholders and customers on the other hand. The strategy of the firm focuses on the anticipation of the future needs that are independent of it and the businesses become a vehicle through which people can develop and serve their fellows. Thus there are certain concerns upon the following aspects: knowing the customers' needs, winning the sales markets, offering some services of a certain structure and of an adequate level etc. But, all these need a fundamental change in the human consciousness, from fear to trust, from the need of controlling towards the giving up control, from rigidity to a culture of learning etc. Thus the premises for the passing to the society of the third millennium will be created.

The firm of The Fourth Wave (Toffler, 1997) will be aware of its roles of serving the society as well as of delivering the products, doing services and executing works for a mass of private consumers. The firm will transform its self-image from that focused on manufacturing to a serving conception in the first place and it will act as a leader in approaching the mass problems of society, focusing on the ones that have a positive influence. In this way the serving-manager model imposed will become the corporatist ethos of The Fourth Wave.

The activity of the firm can now acquire a leading role in the global responsibility and citizenship if: it is achieved the intellectual transfer from the defeat the competition to the serving of citizens; the main objective of the firm's activity becomes the identification of the real needs of the consumer citizens; it becomes aware of the advantages of mass organisation and it invests in order to achieve such advantages; it begins to think at global level why it acts locally; it admits that it is an assembly of individuals- with their own characteristics, but within the formal and informal structure of the firm.

As the firms evolve- within the cyclic modifications from the structure of human society- it is necessary to think twice the way of defining its assets. In this redefinition of the firm's assets the following accounting techniques should be taken into account: the generalisation of capital property; the becoming international of social and ambient costs of doing business which are considered external; investments in natural resources through pollution credits that the firms, in the 3R cycle, transform their competence in saleable patrimonial goods; individual capital of creativity insertion in the assets of the firm - as forms of wealth that depend on the people.

In fact the approach of the assets (wealth) of the firm depends on the characteristics of each Wave of development and on the place this one has in the structure of that Wave of development. (Toffler, 1998)

Thus:

- in the firm of the Second Wave, the assets derive from the achievement of a positive final result, which satisfies the employees and creates a good impression on the beneficiaries of the firm. It is due to the profit and it focuses less on the social elements;
- in the Third Wave, the assets of the firm focus more on the social elements and on resources, thus a change in the system of fundamental values takes place;
- the firm of the Forth Wave will have an universal heritage according to the community ethos that will dominate then and which in its turn will be significantly important in the structural organisation and in its management.

Simultaneously with the modifications in the approach of firm's heritage, some modifications occur in the organisational structure of the firm. These modifications focus on a certain evolution tendency of the formal and informal structure of the firm.

The criticisms upon the present organisational structure of the firm emphasise the fact that the model from the Second Wave – characterised by hierarchy and authoritative administration – is inflexible and this fact makes the firm incapable of promptly reacting to the changes of the external environment. In this Wave the following variants of hierarchical formal organisation have been met:

- matrix organisation shares the loyalties of the employees thus dividing the decision making process and this leads to the inefficiency and low level of trust. Thus any stimulus is eliminated so that the manager does not approach the traditional role, which insists on him being the boss. In the informational revolution of the last ten years such a conception - of being the boss - it is not only out of date but also destructive;
- the structural decentralised organisation on business centers gives a lot of credit to autonomy, unified loyalty, unique aim and flexibility. This fact protects the firm of implosion (collapse trough itself).

The former organisation of a firm of the Third Wave is done according to the values-team model that aims at the achievement of values. It is based on the collaboration between employees and between these and the customers of the firm. It is a democratic structure, all the members of the team are equal, including the managers (chosen by the members of their team) who are in fact the interface with other groups. It is a very flexible structure that gives the firm the ability of responding to the continuously changing needs and tendencies of the market.

The firm of the Forth Wave will be structured according to a commentary model, which is based on a change in the consciousness of all individuals. Its structure is democratic, participate and which permits the action of the firm to be focused on its customer's satisfaction. It will be doubled by a common vision and it will act both trough intuitive processes and techniques as well as through the logical and rational methods that are familiar to the present management. According to this organisational structure the firm acts locally as a responsible member of its external community. This action takes place in two ways: as a group of people and as a way of being that unites the members of the group. The first way of action is due to the fact that the people gather together, in a certain place and time with the help of the formal structure of the firm. The second way

of action is due to the fact that through the functioning of the firm the barriers between people are eliminated as a result of the existence of the former structure.

The firm of the third millennium will function in ambient conditions, in which environment protection will not be a problem anymore and ecology will not be against economy.

The management of the firm of the Forth Wave will be done in the bio-politics epoch due to the recent progresses from biotechnology, due to environment crisis and to the global democratisation. Bio-politics will comprise entire nations and gradual evolutionist changes and it will lead to great changes for the entire human kind.

The collapse of private wealth will take place when the conventional distinction between public and private will disappear as private values will be extremely important for the public welfare. In this way in a bio-political environment no one will declare as apolitical. (Fisher, 2010)

In this context the firm of the third millennium -the new corporation- will have the following characteristic features: it is an example for the other institutions of society; its employees act locally and at the same time think globally; it profoundly modifies its assets focusing on the social accounting and on the accounting of the resources; it becomes an organisation meant to serve, being conscious of its being a producer of moral effects; it is transformed in a community of welfare, being conscious of the complete and varies structure of its shareholders; it is a model of environmental concern; it develops breaking new ground actions in the field of advanced technologies with real tendencies towards the technological evaluations; it has in its leading staff bio-politicians fully conscious of their responsibility of fulfilling people's destiny in a modern society.

FORMAL STRUCTURE OF AN INTERNATIONAL INDUSTRIAL COMPANY

Most researches in the area of the organisation of international firms have been directed to the multinational firm. Many corporations have the tendency to adopt one of the next five types of organisational structures based on: functional division, international division, product, geographical area and the global matrix.

The organisational structure (Buffa, 1969) on functional divisions is characterised by the fact that functional managers of the highest level from the mother firm have international responsibilities for different positions, like production, marketing, finances (Fig. 4).

This way, different functional units of the subsidiary from other country, reports directly to the adequate functional unit of the mother-firm. The advantage of this structure is the fact that it can ensure a solid functional survey to subsidiaries from other countries, in areas like production and projection. However, because actions between different functional units need to be coordinated, the structure could face some quick reactions to the change of conditions from different countries according to competition, if there is a big number of different products. Usually, this structure work better when are being sold several related products on a relatively homogeneous international market and when there are just a few subsidiaries in every countries.

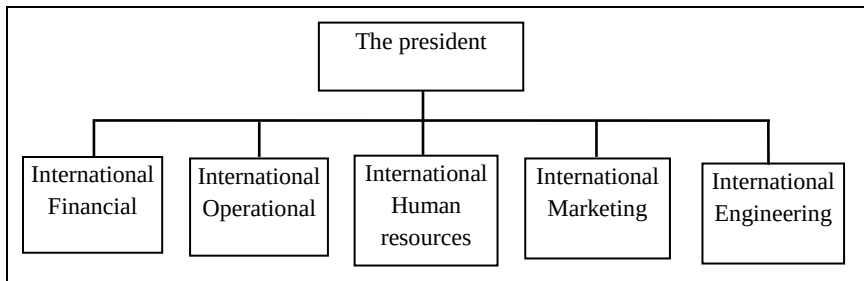


Fig. 4. The organisational structure on functional divisions

The divisional organisational structure (Buffa, 1970) on type of products has as a characteristic element the fact that managers from the highest level are responsible for certain products on international level (Fig. 5). In this kind of structure, mother firm tends to concentrate on the coordination of decisions about products, but allows to foreign subsidiaries to handle other aspects of the business. Because of the focusing on products, this structure is very efficient in firms that have complex products from the technological point of view, are diversified or have obsolescence.

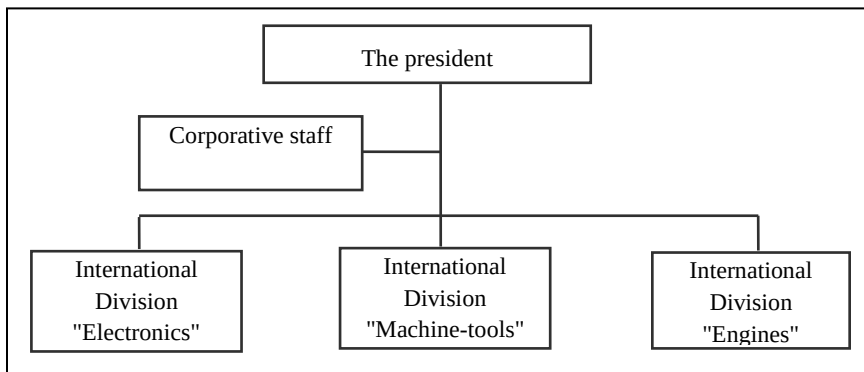


Fig. 5. The product organisational structure

The organisational structure (Maynard, 1971) with one international division creates a division that coordinates all subsidiaries from abroad. Figure no 6 shows that a multinational company with internal product divisions and one international division (one international division could be added to a functional structure, but this form is very rare). This kind of structure gives the possibility to be represented both interests of geographical areas and of product, on the same level. However, this arrangement burdens the coordination of information between internal divisions and the international divisions. An analysis realised by Porter on 37 multinational companies from different countries shows that the international division can be seen more often.

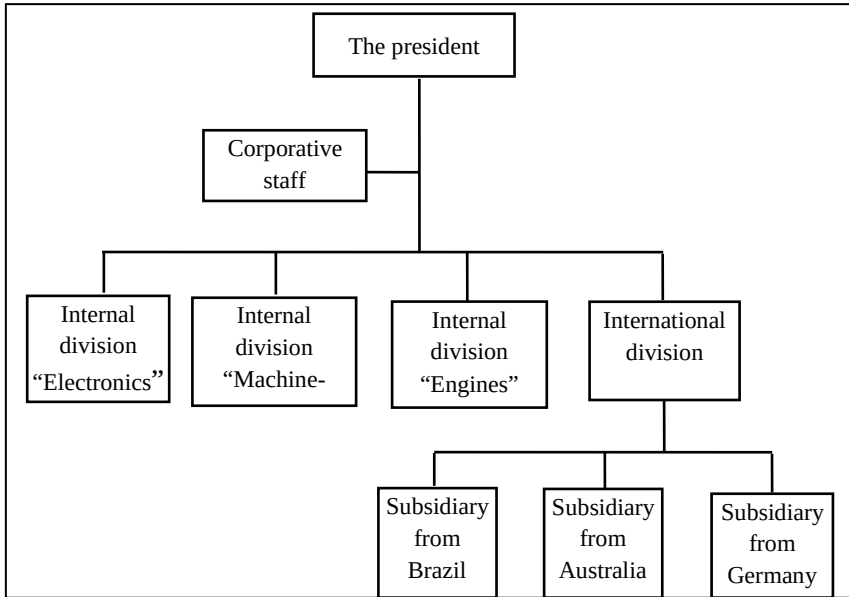


Fig. 6. The organisational structure on international divisions

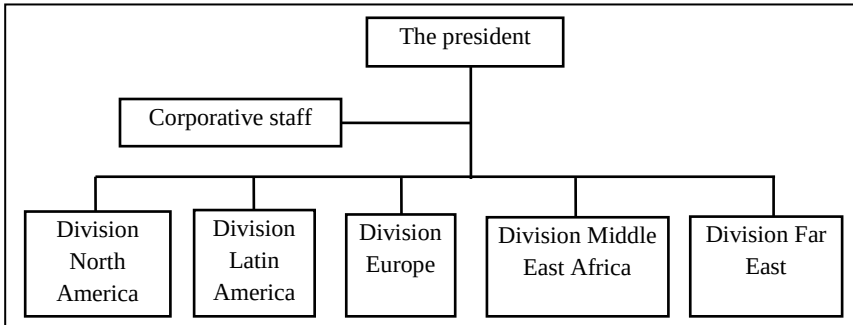


Fig. 7. The organisational structure on geographical areas

The organisational structure (Dima et al., 2011a) with regional divisions is that kind of organisation that is using a sharing on regional divisions, with subsidiaries that are reporting to the closest division (Fig. 7). This kind of structure is facilitating the flow of information between regions, so it matches the adaptation to national differences. The structure on geographical regions is used by Europeans more often than by American multinational companies.

In the global matrix (Dima et al., 2011b) it is being distributed one authority and equal responsibilities, shared in the two dimensions, one being the region and another – product or function. A global matrix, having as dimensions region and products, is represented in figure no. 8. In this kind of structure, managers from middle level are being subordinated to two managers that share the authority of decision-making that affects a certain region and a certain product. Some specialists think that global matrix structure, usually with

two dimensions (region and product), is necessary when a firm is following a polycentric strategy.

An analysis made on 93 multinational companies from different countries, showed that one of them had this kind of structure. Some managers said that they prefer other mechanisms for solving the polycentric problems, like, for example, objective forces and responsible positions.

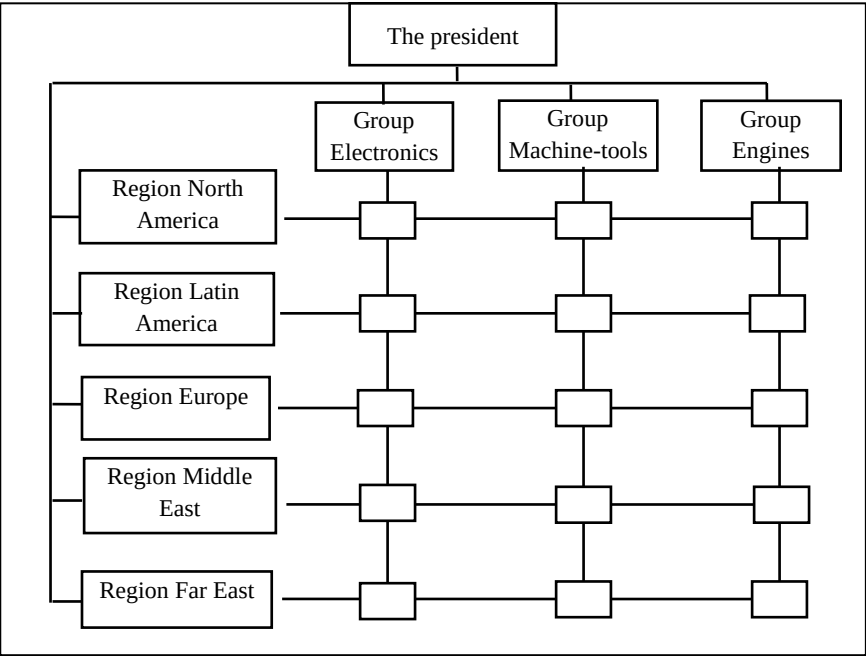


Fig. 8. The structure of global matrix

MANUFACTURE AND ASSIMILATION OF NEW PRODUCTS

Manufacture and assimilation of new products has a goal, as well as products that are liable to modernization, to verify if they suit the requirements of the projection theme and specifications from documentations elaborated in the constructive preparations, as well as attestation of the manufacture technology in the plan of established technical-economic indicators.

Considering manufacture and conception structure of industrial firms, the execution of prototypes can be organized in three systems: centralized system characterized by the organization of some sections or workshop that have the necessary equipment for the execution of prototypes independent from the activity of basic sections; decentralized system that has as a main characteristic the organization of the programmed execution of prototypes in basic sectors parallel with the manufacture duties of the firm; mixed system that involves the organization of specialized subunits for the execution of certain

components of the prototype and the rest of them will be executed in basic sections of the firm or will be obtained cooperation.

In order to know technical-economic performances of new and modernized products and to diminish the duration of assimilation cycle (Dima and Grabara, 2008), their homologation has to be done in two stages:

□ the stage of preliminary homologation of prototypes, that is verifying performance level of product's basic parameters that has to be assimilated in accordance with parameters written in the approved documentation of conception. All examinations are being made by the Homologation Committee, whose members are representatives of main beneficiaries of the executing units, research institute and specialized technological engineering. The preparation of homologation works are based on a totality of parts that are forming the content of preliminary homologation documents: projection theme and feasibility study, the notice of technical project, homologation certificates of products with independent functioning that come from external co-workers, certificate of internal acceptance of the prototype, special experiments note realized by competent institutions, technical conditions documentation, project and operating sheet of the product.

For the approval of product homologation, Homologation Committee has to do a series of studies and examinations, like: verification of product functioning operation conditions mentioned in the projection theme, pointing out concordance or discordance between constructive solutions described in the project and functioning ones requested to the product; verification of behavior of different product elements in long functioning conditions; verification of quality characteristic in relation with levels described in projection documentation; elimination of projection mistakes from the point of view of sub-dimensioning or supra-dimensioning, as well as designing mistakes; verification of technological processes used in manufacturing of the prototype in order to notify some supplementary directions in the projection of manufacture methods suggested for series or mass production.

If experiments made on the prototype confirm appointment of results provided norms, it can be decided the preliminary homologation of the product, fact that allows to the manufacturing firm to prepare the manufacture process and execution of the zero-series;

□ the stage of final homologation, of the zero-series has as a main goal verification the level where manufacture preparation is ensuring the maintenance of performance level of the product and the economies of manufacture, as well as behavior in reliability tests. For the final homologation is being presented to the Committee final homologation dossier, that has to contain the following documents; a copy of the preliminary homologation statement of the prototype or of the experimental model; experiment note of the zero-series; certificate of acceptance of the manufacture preparation and technical documentation of technological endowment; the situation of specific consumption and appointment in the consumption norms; list of imported materials, approved internal norm; presentation memorial of the technological preparation and justification of adopted technological documentation; technical specifications of the product. After presentation of the dossier, it has to be analyzed by the Committee, in order to solve next problems: ensuring the necessary quality for processing and assembling of the product in accordance with given technical conditions; verification of concordance between execution and technical documentation; verification and finishing of the projected technological process of new product's series or mass production; correlating of

technological processes with the elaborated documentation; distinguishing and elimination of defects of the projected or manufactured technological equipment; verification of quality control posts efficiency; analysis of production factors specific consumption and establishing measures of the appointment of production costs in approved levels. The homologation of zero-series allows a complete verification of correctness of technical preparation of manufacture process and follows the establishing of remedying measures of eventual disturbances of series or mass production process. Based on results obtained in this stage is being defined the documentation for series production. The minimum number of products that are constituting zero-series is being determined by the assimilation of new products chart.

In all cases, Homologation Committee is certifying necessary conditions for homologation, as well as conclusions specified in the report, drafted in the beginning of manufacture process.

THE ORGANIZATION AND MODERNIZATION OF PRODUCTION

Because of the continuous nature of reorganization, our country has responded not just to general requirements of this process, but, as well, to economic requirements of Romanian economy.

In these circumstances, we have to keep account of the most serious consequences of the absurd totalitarian policy, such as, incongruousness between supra-dimensioning of production capacity of industry and internal possibilities of ensuring the necessary of production factors, contradiction with repercussions on the entire economic-social life.

Almost the identical perpetuation of this situation in the years after 1989, has lead to the impossibility of covering the productive consumption from internal resources. That is why, this miscorrelation has lead to massive imports of basic raw material required by the development of industry.

This way, is being created a lack of Romanian industry competitively, illustrated by the low weight in volume of exports. The seriousness of such a situation is that, after 1989, the weight of manufactured products in total export has grown.

Another particularity is the existence of an unstable energetic balance (Dima et al., 2011a) that results from the intensive energetic nature of Romanian industry. The following arguments can be given for this: construction of many thermo-electric power stations, without considering the percentage of 70% barren gangue of total coal extraction; supra-dimensioning of hydro-energetic investments; the degradation of some energetic objectives that where functional; the anarchical nature of nuclear energetic policy; the decision that national energetic system would function at low frequency etc.

At the same time, the following state of work of Romanian industry can be considered a particularity: the big weight of public units in property structure of this branch, unsuitable emplacement of some industrial objectives regarding their proximity to material resources; big weight of gigantic units in Romanian industry; existence of a big number of unfinished industrial investments; direct converting in wage increases, of massive budgetary allowances allocated for investments; beginning stage of industrial market structures; lack of fundamental economic-financial measures etc.

The present stage of Romanian industry (Dima et al., 2011b) is, as well, the result of some economic-financial measures with serious consequences, like: ignoring of balance report; work productivity level; pay wages level; unsuitable content of some laws, adopted in this period; freedom of prices, that is, their unjustified growth; absence of some coherent markets; taking some populist actions; application of centralist methods in the detriment of liberal policy; unilateral promotion of market economy mechanisms; practical in-application of adopted laws etc.

Considering the actual situation of Romanian industry, the content of its reorganization process has to consider the following elements: the abandonment of inefficient firms and the ones without doubtless possibilities to be profitable; modernization and development of firms based on the real evaluation of capacities, technology and possibility to ensure production factors; creation of new production capacities, reasonably profiled and dimensioned; development of different forms of trading companies; re-converting and re-profile of those firms that do not answer present or future demands; giving up heavy, rigid modalities that have low efficiency; abandonment of old organizational structures; realization of optimal proportion between present number of employees and optimum outfit; elimination of old outlook, characterized by passiveness regarding decision-making etc.

Reorganization does not have to be conceived as an object of transition period (Modrak and Pandian, 2012). In time, trials of reorganization are connected with appearance of market that is being determined by permanent distribution and redistribution of production factors on activity areas. This way, for countries with an economy structured by market's impact, has as a main characteristic, equilibrium, profitability and good social state, but countries with centralized systems are unbalanced and inefficient. Because of the complexity and scope of problems, which Romanian industry is confronting, creation of new structures has to be based on a viable accurately fundamental program that would respect general requirements of the industry, as well as of the industrial branch.

Among the main requirements, that have to be considered for the elaboration of reorganization program of Romanian industry, we can mention: insurance of an economic growth and of work productivity, based on profound diagnosis analysis that would highlight industrial branches or firms that have to be reorganized; considering of internal possibilities to cover production factors outfit, requested by industry; forming of new industrial structures under the condition of realization of a favorable ratio between necessary currency effort and receipts of industrial production export; quick modification of volume and structure of manufactured products and services demand on internal and external market; creation of a mobile industrial system capable of adapting to necessities that will appear; avoiding to develop industrial activities that are polluting the environment and that are consuming too much energy; elimination of centralization and unjustified horizontal interdependences; legal and correct approach of the relation reorganization-bankruptcy; direct implication of privatization in the process of Romanian industry reorganization; considering not only internal but, also, external requirements of reorganization process; including of national industry links in the mechanism of world-wide economic gearing etc.

If the desideratum of the elimination of inefficient industrial structures and creation of modern ones is characteristic for every country, for Romania, achievement of this

objective is more necessary because of the fact that our internal market, that has relatively small dimensions, is determining the export of manufactured products, where there is a grim competition in conditions of market economy.

CONCENTRATION OF PRODUCTION

Concentration of industrial production is taking place in the period after 1930 and appears as a variable that allows definition and organization of market structures, whose dimensions can be represented econometric, as it follows:

$$\frac{P_r}{R_t} = \beta_0 + \beta_1 I_c + \mu \quad (8)$$

where: P_r - realized profit;
 R_t - rate of turnover;
 I_c - concentration indicator;
 μ - error coefficient;
 β_0, β_1 - coefficient of correlation concentration-profitability from the basic and present period.

A special problem is being raised by the big concentration of production, that helps big firms to be more efficient, if they have a privileged position in the value scale.

Estimating of concentration of production (Buffa, 1969) is being made with the help of the following indexes:

□ the discreet index of concentration (I_{dc}), that expresses that part of market, held by m bigger firms:

$$I_{dc} = \sum_{i=1}^m S_i, \text{ usually } m=4,8,15,20 \quad (9)$$

where: i - rank of every firm in the order of diminishing dimension;
 S_i - part a market, held by firm i .

□ the index d'Herfindahl (H):

$$H = \sum_{i=1}^m S_i^2 \quad (10)$$

□ the coefficient of entropy (C_e), measures the incertitude degree associated to a certain market structure:

$$C_e = \sum_{i=1}^m s_i \log \frac{1}{s_i} \quad (11)$$

□ the index of concentration of entropy (I_{ec}):

$$I_{ec} = \sum_{i=1}^m s_i \log s_i \quad (12)$$

Because there are many indexes, there exists the problem of choosing between them, of the best index that would reflect the real state of industrial production concentration.

Two groups of criterions can be distinguished, which allow to choose between different criterions of production concentration:

□ the group of economic criterions that are establishing connections between every production concentration index and end economic problems (the index d'Herfindahl (Modrak and Pandian, 2012) allows to study the ratio price-cost);

□ the group of axiomatic criterions that allow to establish particularities of elements of every production concentration index. According to Encaour-Jacquemin (Modrak and Pandian, 2012), it can be calculated an axiomatic index of production concentration (I_{ac}):

$$I_{ac} = \sum_{i=1}^m h(s_i) s_i \quad (13)$$

where: $h(s_i)$ - points given to firm i that holds s_i part of market.

This index has to satisfy the following conditions: concentration of production does not have to decrease in conditions of this sector firms merger; the transfer of market share held by a firm in a sector, to another firm, has to be reflected in the value of this index; concentration measure has to be a decreasing function in the ratio with number of firms with equal dimensions; if two sectors have the same number of firms and if market shares held by firms from the first sector, placed in a decreasing order are always superior or equal to those held by firms from the first sector, the index of concentration from the first sector has to be superior or equal to the index of second sector.

THE INTEGRATION OF PRODUCTION

Deepening of social division of labor in industry, is leading to creation of firms specialized in manufacturing of some landmarks, subsystems, aggregates, products or execution of some phases and technological stages. That is why, a very important problem for every industrial firm is the analysis of execution possibilities in profitable conditions of some parts of the end-product or operations, phases or technological stages, in other specialized firms, based on some co-operational relations.

The cooperation represents the system of relations established on production line, between firms that are participating to the manufacturing of a complex product, each of

them being specialized in manufacturing some parts of the product or in execution of some manufacture phases. The coordination of their activity belongs to one firm that has the duty to deliver in time end-product and is responsible for established technical and quality level.

These actions are leading to: outlining the profile and specialization level in end-products of the coordinating firm; specialization expanding of co-working firms in the execution of some landmarks or subsystems; creation of some advantageous conditions for diversifying industrial production; diminishing of production cycle of realized products etc. (Modrak and Pandian, 2012)

Establishing of landmarks of the end-product, operations and technological phases that will be executed internal or in co-operation is based on: volume and structure of programmed production charges, increasing of production capacities and internal or co-operational production expenses regarding components of technological phases that are necessary for the obtainment of products.

This activity is very heavy and is being developed in many stages (Man and Vilkul, 2006), in order to establish the execution option of the internal or co-operational end-product, like:

□ the stage of establishing products' structure and volume of production on landmarks and landmarks-operations, that will constitute the object of option, because for the realization of any product there are necessary many landmarks, that can be grouped in: landmarks that can't be realized in co-operation, that's why they have to be realized entirely in the firm; landmarks that can be obtained in co-operation, although they can be realized internal in all technological operations and landmarks that can be obtained internal or in co-operation only in certain technical operation. In accordance with realized quantity of every product and structure of landmarks it can be established the total quantity of every landmark or landmark-operation, that will be manufactured during the year and will be option object of co-operation or not;

□ the stage of establishing production capacities on product links capable of executing landmarks or landmarks-operations that are being the object of option between internal and co-operation manufacturing, according to the following relation:

$$C_d = C_T - C_{nc} - C_{ri} \quad (14)$$

where: C_T - total capacity of production;

C_{nc} - capacity of production afferent to landmarks that are not the object of co-operation;

C_{ri} - capacity of production afferent to landmarks and operations that are being realized only intern;

C_a - capacity of production available for the execution of landmarks or landmark-operations that can be realized internal or in co-operation.

□ the stage of establishing unitary production expenses necessary for the obtainment of landmarks or execution of landmark-operations, internal or in co-operation, that involves inclusion only of generated expenses, dependent and specific to every alternative;

□ the stage of drafting the mathematic model for choosing the production alternative, with the helps of mathematics. Considering that it can be realized products that need m

types of landmarks and k of them can be realized in all co-operational operations, and the next ones only in certain technological operations and that every technological operation is being executed in one single production link, it can be drafted a matrix table (Table 1), that is leading to the following model of linear programming:

$$\max(\min) \left[\sum_{j=1}^k (C_{opj}^I \cdot X_j^I + C_{opj}^C \cdot X_j^C) + \sum_{i=1}^m \sum_{j=k+1}^m (C_{opij}^I \cdot X_{ij}^I + C_{opij}^C \cdot X_{ij}^C) \right] \quad (15)$$

with restrictions: - not to outrun the programmed quantity;

$$X_j^I + X_j^C = Q_j \quad (j = \overline{1, k}) \quad (16)$$

$$X_{ij}^I + X_{ij}^C = Q_j \quad (i = \overline{1, m}; j = \overline{k+1, n}) \quad (17)$$

- not to outrun production capacity of the production link;

$$\sum_{j=1}^k t_{ij} \cdot X_j^I + \sum_{j=k+1}^n t_{ij} \cdot X_{ij}^I \leq T_{ai} \quad (i = \overline{1, m}) \quad (18)$$

- non-negativity restrictions;

$$X_j^I, X_j^C, X_{ij}^I, X_{ij}^C \geq 0 \quad (i = \overline{1, m}; j = \overline{1, n}) \quad (19)$$

where: X_j^I, X_j^C - quantity of landmark L_j that will be processed in all operations in the coordinating firm, respectively co-working;

X_{ij}^I, X_{ij}^C - quantity of landmark L_j that will be processed internal in operation O_i , respectively in coordinating firm;

t_{ij} - time of processing, in the coordinating firm, the operation O_i of landmark L_j ;

T_{ai} - available time for production link i , remained after it was subtracted processing time of some landmarks, where doesn't exist the possibility of cooperation;

C_{opj}^I, C_{opj}^C - value of optimization criterion afferent to landmark L_j in internal, respectively co-operational production;

C_{opij}^I, C_{opij}^C - value of optimization criterion afferent to operation O_i on landmark R_j , in internal, respectively co-operational production.

Table 1. Optimization matrix of option internal co-operation

Operations (i)	O ₁		O ₂		...	O _m		Value of optimized criterion		Quantity
	M _i	C	M _i	C		M _i	C	M _i	C	
R _i										
.										
R _n										
Available time of production link.										

Legend: M_i - internal manufacturing;
C - co-operation.

Activity of integration-co-operation is different from the activity of supplying, because of the following reasons: it has a technical nature, because between object of cooperation and end-product there is a relation of mutual interdependence; components of the object of cooperation, usually, in beneficiary firms are not being processed any more; co-operation needs technical collaboration between beneficiary and supplier on the line of projection, execution ensuring of requirements from the technical conditions, etc; co-operation is the result of an economic option, that has as a reference term, internal manufacturing. Such an activity has to be done by a compartment oriented to problems of specialization-co-operation, that has the following attributions: establishing the necessary landmarks for the programmed production in accordance with norms in force; specifying the product's landmarks, that would be realized internal or in co-operation; establishing the delivery graphics with supplying firms for contracted landmarks; ensuring the executant firm with technical documentation and other elements, specified in technical conditions etc.

In order to characterize activity of specialization-co-operation, it has to be calculated production integration level of a firm that expresses its direct ratio, in internal fabrication, to the obtainment of a product. A firm is totally integrated when it realized all components and all operating sheets, necessary for the obtainment of end-product.

Expanding of co-operational relations with other firms, for the realization of landmarks or operation-landmarks, is leading to the diminishing of production integration level of the firm and to the growth of specialization level of the beneficiary firm.

Usually, production integration level of an industrial firm in manufacturing of a products is being calculated like this:

$$D_{rip} = \frac{\sum_{j=1}^k R_j^I \cdot C_{pj}^I}{\sum_{j=1}^k L_j^I \cdot C_{pj}^I + \sum_{k=1}^n L_k^C \cdot C_{pk}^C} \cdot 100 \tag{20}$$

where: D_{rip} - integration degree of product's manufacturing;

L_j^I, L_k^C - total quantity of landmarks or landmark-operations that will be processed internal or in co-operation;

C_{pj}^I, C_{pk}^C - the cost of processing of a landmark or landmark-operation, internal and in co-operation.

In the calculation of integration degree are being excluded components of the product obtained from trade. If $D_{rip}=100$, the firm is totality integrated.

Firms may choose either to produce integrally landmarks or to obtain them in co-operation, fact that is determining it to establish an optimum level of integration degree, respecting the following optimization criterions: minimization of production expenses, maximization of total profit, maximization of production volume etc.

Utilization of every criterion leads to a certain variant of integration degree measure, and it has to be chosen the optimum one. For this, it is recommended the utilization of the following criterions: utilization degree of production capacity, value of realized profit, measure of production expenses, period of manufacturing cycle. So, we are talking about multi-criterion decision-making that has the form of a matrix-table (Table 2)

Table 2. Table of multi-criterion decision

Criteria Variants	C ₁	C ₂	...	C _n
V ₁				
.				
.				
.				
V _n				

„SERVING THE CUSTOMER” - OBJECT OF ACTIVITY OF THE THIRD
MILLENNIUM FIRM

Facing changes that will take place at the end of XX-th century, the contemporary firm has expanded its actual managerial orientation, directed exclusively on solving immediate chrysies, building flexible systems of anticipation, to make familiar or even to create changes, that will take place in the future.

In such a context, in the projection of strategic visions of next millennium, it is being very useful and original the concept of evolution as a succession of changing waves in continuous shifting. Its author has identified two waves that have transformed the civilization – First Wave – agricultural revolution and – Second Wave – industrialization and has characterized the Third Wave – postindustrial, that in accumulating power in our days, still, being in confluence with reminiscences of previous waves.

Specific orientation for Second Wave are: the accent is being putted on competition, self-preserve and consumption, exaggerated materialism. These have generated some problems like pollution, delinquency, elimination of solid affals etc.

The Third Wave is manifesting a deep concern for balance and high responsibility for problems regarding co-operation, trust, reciprocal support.

The metaphor of change wave has been prolonged later by establishing the Fourth Wave, whose central point has been identified in the integration of all life dimensions and responsibilities in an unique living system with a common identity.

From the perspective of Second Wave kind of economy, the tendency of the above mentioned changes can be understood only with the help of structural analysis, that is constituting the essence of adaptive organizational strategies, applied by contemporary firms in their confronting with demands and opportunities of a turbulent environment.

This way, classical industrial red tape, typical for the Second Wave, have the structure of a pyramid and are being composed of a control managerial group, placed in the top of the hierarchy, that has in its subordination permanent and functional departments, often inflexible, incapable to react promptly to changes. Such a static form of organization has generated divisions, destructive conflicts, rigidity. A variant of traditional hierarchy is the matrix organization, that, although based on the principle of generating the synergy between functional zones and teams organized on problems, it has serious inconvenient like: splitting the decisional process by double subordination of employees and, this way, is creating insufficiencies and low trust levels. In the Second Wave type of firm, persists the traditional role of manager as the main supervisor and judge of others no matter the status and knowledge level, ignoring the conception that firm is an educational organization for all employees. Nowadays, passage from the matrix model (Toffler, 1996) to the one of business unit constitutes a progressive strategy, although, the last one, is being associated with the Second Wave, as well. Like the name shows, autonomous business groups situated on the basis of this organizational form, has the advantages of autonomy, unified loyalty, of the unique objective (recognition and satisfaction of market necessities) and flexibility. Looking in perspective towards the Third Wave, it was being imagined the model of value team, based on cooperation, trust, integrity and fairness of team members. Managers, that have the role of coaches and servants of group members, are being chosen by the last ones and serve as an interface for other groups. The model of value team has the advantages of high degrees of autonomy, flexibility, democratic nature associated to decisional process and capacity to solve the problem of diversity by formulating a quick answer for market changes. (Shi, 2011)

The Fourth Wave type of firm, will be organized according to a communitarian organizational model. The communitarian model, based on intuitive techniques in the development of future strategic directions, will have in its essence, a democratic nature, focused exclusively on the realization of objective of serving customers and community. Total absence of the hierarchy will conjugate with decision-making in concordance with common vision, principles and values of members.

Most of the firms, connected to the Second Wave of changes, have a centralized and hierarchical structure and they are focusing on values like profit, efficiency or development. The scale of these firms activities is billeting exclusively in the area of economic and technological problems, and globalization is considered a process of economic investments in foreign countries. In reality, the majority of firms with big and

medium dimensions, from Europe and USA, is confronting the danger of implosion, that represents the process of repeated liquidation of patrimony, development programs of market and number of employees, in order to grow short term earnings and money performances. The strategic solution to avoid the risk of implosion is the operation of some deep changes in business philosophy of firms, materialized in shifting the attention from realization of production itself to serving customers, employees and community.

Transition from the Second to the Third Wave claims, in the opinion of some authors, creation of some adaptable firms, that's why, managers will share their firms in small and various units, capable of solving problems of diversity and differences of customers. In this way, it is being considered that, if in the past, the firm was standardizing its production most efficient, in the present firm that will destandardize most efficient, will be placed on the top of change wave. The message, transmitted by this kind of transformations, in the structural plan, is obvious: firms have to revise their organizational structures. In this way, the adaptable firm, oriented to the global serving of customers is being described as a coordinating expert, that is connecting temporary a totality of modular units. They are being constituted of organizations and external independent or semi-autonomous agents, that could reorganize or even eliminate, in accordance with necessities, moving towards the breathe of change. The Fourth Wave will have as a support the tendency to expand goals. The new system of post-economic values will impose firms to concern not just for the economic performance, but as well for the social one, for division of responsibilities for the well-being of local, national and global community. The adaptable firm doesn't have to follow one single economic objective, but it has to become a multi-objective organization that has to integrate in social, moral and ecological environment, in connection with breaking up values, that accompanies social destandardization. (Tan, 2010)

The globalization is understood in a new conception, where there are being handled problems that are outrunning national borders (ecological destructions, environment pollution etc). In the spirit of global serving strategy, multinational corporations will concentrate, for example, a big quality resources and infrastructures in order to develop new capacities, by positioning physical installations in certain regions or by developing of some infrastructures and maintenance methods, that are easy to apply in developing countries. In such an approach, customers will identify themselves with countries or global regions. The basic idea, that is coordinating the concept of global serving, is the one of the existence of some manufacturing capacities, that are enough for covering material necessities of all people, and it is being imposed just the necessity of conception of a value system that would ensure fair distribution of what might be produced.

The temporal horizon associated to strategic vision of the firm from the Fourth Wave is dilating in comparison with the Third Wave, including generations or even countries. The strategic management will concentrate to the objective of giving a valuable inheritance for the future and will be practiced by managers-servants, that will constitute the essence of firms' ethos from the Fourth Wave. Multinational corporations have adopted the strategic way of thinking on global level, meaning the wave approach. In the future, this concept will be enriched in ratio with its traditional meaning, suggesting an interconnected economy, developed in a world without frontiers oriented to the satisfaction of common interests of all human beings.

CONCLUSIONS

Industrial companies (economic operators in general) freely confront on such a market, that is in principle without the intervention of the state. Therefore, the structures of industrial companies or their attitudes are based on the market mechanisms, and the confrontation of companies' attitudes allows the global market to operate. In this context of globalisation, industrial companies need to boost their creative-innovative activities which become increasingly more complex. (Belenzon, 2012) So, in this chapter we have treated some aspects of creative/innovative activity of industrial companies under the current globalization.

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Euro-centrism and the Development of a Global City Idea

Dr. Adolfo Benito Narváez

Universidad Autónoma de Nuevo León, México

INTRODUCTION: LOOKING TO THE RURAL: HOWARD TO DOXIADIS

It is necessary to understand the European imaginary as the foundation of net-cities¹ of our time, through a key form: the ecumenopolis. Since the first summit of enlightened modernity technology, which occurred during the nineteenth century, the western people have sustained the idea of creating giant cities, which could exceed the reduced size of the European capitals and the squalid villages of the pioneers of the Great West, at the expense of the railroad moved by steam power.

The railroad was a technological milestone in the nineteenth century could shift the animal driving force in urban contexts (until the arrival of the internal combustion engine that did move the animals to work in rural areas) and significantly expanded loading capacities and transportation. The discovery of large deposits of coal to generate energy made feasible the growth of the rail network, which technically made it possible for people to do have wider ranges of movement. The image of new towns for the emerging bourgeoisie and the working classes was really viable trough the diffusion of this technology. To the extent that these ideas was diffused, emerged the model of a Linear City by A. Soria y Mata, to which he devoted his efforts from 1882, and later, the utopia of Muscle Shoals by H. Ford based on the intensive use of car transports, and that was the impetus for the production of the utopia of a extremely large city, without limits, embedded in nature, taking continuously the land resources, that was the original image for Broadacre City by F. L. Wright.

A key part of utopian thinking that developed in this time around the new technologies of transportation was made to amply justify the need for the viability of these models. The most important basis of this justification is founded in the visionary ideas of the urban economy. Indeed, studies on these subjects were relatively recent. Most experts trace its origins in the classical work of Von Thünen: *"Dert Isoliert Staat in Beziehung anf Land wirtschafft und Nationaleknomie"*, published in Hamburg in 1826, and that clearly indicates how a urban theoretical model based in a concentric form, was causally related with different land uses from central to peripheral locations, forming at the same time the dynamics of distinct values of urban land and rural, which is mobilize differentially with respect to the nearest lands of the city, which eventually generates processes of accumulation and differentiation in wealth that can become important during the industrial age.

These ideas were echoed in subsequent approaches, partly because it were consonant

¹ As will be discussed in the chapter, the concept of net-city can be equated to Doxiadis' concept "eperopolis" or Friedman's concept "hyper-urbanization"

with the events that confirmed its accuracy and partly because they justified the ideas of exact correspondence of effects on the territory that could be manipulated by the market, tests required by the dominant imaginary, entrenching their power through the manipulation of all aspects of life of individuals. By the end of the nineteenth century and the beginning of twenty century was already evident in the minds of the visionaries, that cities did not should remain much longer concentrated in the old ways protected, self-contained and independent, that represented historic cities. Several lines of thought apparently ideologically very distant from each other took care to put these intuitions and feelings in viable models for the development of new cities. Among the most influential models will be identify only two, which arise directly on the idea of a city that can cover the whole territory, to become in a universal city.

The first model projected the city as a part of the landscape, to construct a new city it is necessary to leave the old model, protected and isolated, by the city that mix the urban landscape, and home economics, with the field. The project was imagined as composed of sets of low-density built with generous vegetation, far removed from earlier historical models highly dense, complex, and with no presence of vegetation. This model was quickly named "Garden City". Among his most important precursors is Ebenezer Howard, who pushed for a radical transformation of the urban lifestyle of his time.

His ideal city model was based fundamentally on the laying of suburban transport networks that could connect large urban-industrial populations with new city, cleaner, connected to the field and away from manufacturing activities. In his book published in 1889 on the planning of the Garden City, displays a picture in which places the urban center of the first order in the center of a radial system of residential garden cities. The urban center - industrial is surrounded by a ring of rail transport, which is the structuring axis system of the surrounding garden cities. Emerges radially from the urban center, six radial axes of railroads, that end in the peripheral Garden Cities and in the railroad ring. From the system of Garden Cities emerges a road, most external that the railroads. These rings establish limit areas with controlled growth, so as to achieve "belts" of fields with no constructions in, between the central- urban-industrial city and Garden Cities. In the case of utopian planning of Howard that appears in his "Garden Cities of Tomorrow" from the edition of 1902, illustrates his ideas of isolate the people from the horrors of industrialization through very emphatic legends: the figure 7 is entitled "Group of Slumless Smokeless Cities" (Fig. 1).

— N° 7 —

GROUP OF SEAMLESS SMOKELESS COFFEE.

TOTAL AREA 60,000 ACRES. POPULATION 220,000.

CENTRAL CITY. POPULATION 12,000.

MUNICIPAL. POPULATION 20,000.

GRAND FOREST. NEW FOREST. LAKE. FARM. RIVER. CANAL. RAILROAD. STONE QUARRY. COLLIERIES. INDUSTRIAL HOMES. RESERVES. WATERFALLS.

TRAFFIC. WATER.

The theoretical work of Howard, became an influential vision of one future that was desired by many, because fusion two forces in the Euro-centric imaginary: deep attachment to the suburbs and rural, and the intense use of modern technology to "distribute the city" beyond the tight mold of the old town. The first project that led to the reality these ideas was made by Raymond Unwin in the Garden City of Letchworth and in the neighborhoods of Hampstead. It is remarkable in these developments the presence of images that connect to the medieval idea of the cabin. Unwin presents ideal images of what he calls "irregular towns" romantic streets of mediaeval peasant villages, irregular houses, with pitched roofs and wooden structures, windows to the street with small windows, shutters, chimneys as a forest of stone projected organically from the rooftops

into a luminous sky. In a particularly expressive image of an ideal town, a lady long dress with a little girl walks past an innkeeper at the mouth of a small public square that arises from the irregular shape (Fig. 2).

Fig. 2. Ideal Irregular Town. Raymond Unwin (1909: 135)



For the Garden City project in Hampstead, Unwin followed the same design principles used before in Letchworth, which privileged a romantic image of buildings constructed with wood structure, the use of landscape views, pitched roofs, heavy use of natural materials and a generous trees (Jellicoe, 1995), echoed the nationalist idea of English landscape, strengthening the ideals of irregularity, historicism and naturally inherited the designs of an imagined medieval age, that was reproduced in engravings, paintings and in landscape design.

The utopian work of Howard perhaps was one of the most influential images for the development of the idea of a city that mixed with the gentle wooded grassland, and contributed importantly to the develop of the idea for suburban architecture in the United States: from Jefferson's projects in neoclassical stile (Campus of the University of Virginia, 1817 - 1826), to projects for relaxation and inspiration of F. L. Olmsted (Central Park, New York, 1857; suburb of Riverside, Chicago, 1866), but had not the territorial scope of the images of Howard, who devised a system of subordinate hierarchies among cities, with links for motorized transports, in a project who used nature as a great unifying substrate, thus planting the seeds of what we now think of as the major urbanized areas of net-cities in our age.

There is no evidence that Howard's ideas have had to do with the development of theories over the form of the city and its surrounding territories, such as those developed in Germany from the late eighteenth century through the work of Von Thünen, which has been presented already. However the German theorists exhibit in their projects the idea of a hierarchy of dependencies and a functional division over the territory that comes very close to the spatial approaches of Howard, and later to those developed by later German theorists and planners as Walter Christaller in Nazi Germany from the 1940's.

It is precisely the geometry of Howard's projects making more similar to the ideas of the German geographer. The theory of Central Cities developed by Christaller, and then would lead to the development of urban theories of gravitational centers (Munziaga Vigil, 2000). The Christaller's model is based on the evidence of the maximum topological compactness of a set of circular shapes. Christaller assumed that there is a maximum displacement of people around a central city, based on the profitability of such displacement. For an isotropic space, such limit sets a circular area around the central place where would be distributed the peripheral settlements. If there were two or more areas of influence that were adjacent, the resulting minimum geometry tend to hexagonal, which would eliminate overlapping areas between the circular areas. A common form in nature by their obvious spatial economy that remember the combs of bees (Wagensberg, 2004).

Thus, departing from theoretical evidence, Christaller constructed a tool for planning. The success of his approach was such that the Nazi leaders converted this in the formula for the systematic occupation of the territories in their expansion into Eastern Europe. The idea is based on a theoretical space with no meaning in itself, a conception that was to be set on the Cartesian paradigm: A space that is defined only from itself, that arises of pure mathematics, which forgets the history, the milestones, narrations, the memories, which provide different attributes to places. It would be as a clean, orderly, predictable, perfect; clear as the neoclassical inspiration of modernity.

The planning system meant a system of hierarchy and subordinations that was consonant with Nazi policy, based on a *Führerprinzip* (leadership principle) that was associated with central place around which would subordinate the peripheries. It was a highly rational territorial organization, that makes more important the territorial cell system, that the local specificities. Christaller, during the occupation of Poland, helped the team of planners from Nazi government for the rearrangement (Germanization) of that territory. That meant radically changing the spatial structure of Poland.

A perfect system that is superimposed on a real territory? As a concept, does not seem to be a purely Teutonic invention. One of the milestones of American political history that later would have a significant impact on urban development occurred in 1785 when Thomas Jefferson signed the Land Ordinance, that from the fundamental cell of an acre of land, allowed the United States would expand westward across the nineteenth century. This law relied on plans to build infrastructure to support production activities, beginning with the plan of H. Clay in the second decade of the nineteenth century.

It is important to mention this because as much as the posterior German plan, these grid systems for urban and territorial organization supported the planning of infrastructure for mobility and communications. One of the foundations on which now arise the continental-scale urbanized areas is precisely this infrastructure.

Such ideas were the basis for territorial programs for the economic recovery after the crisis of 1929. The so-called "German Miracle" of the period immediately preceding the Second World War, under the government of Hitler, signified, like the recovery plan of the Roosevelt administration in the United States, New Deal, that all the efforts were made with a major investment to construction of infrastructure for production, mobility, transport and communications, on the basis of a isotropous ideal space -Cartesian- for fast and effective planning.

Seeing these planning systems from a broader perspective, it is possible to imagine those would be systems for the efficient occupation of the territories could be related to certain military strategies used in warfare for thousands of years by Western Culture. The occupation of the Mediterranean by the ancient Greek confederation, although were did not based on the systematic occupation of rectangular or hexagonal cells on the territories, but implicated the construction of new settlements that were designed based on streamlined urban models in order to accelerate the work of production and subsequent occupation and control of the conquered territories.

Certainly when I am referring to American or German modern models for territorial planning, compared with these historical examples, do not want to point out that their conception was based on the same principles, but equally, the illustrated modernity did adopted the military strategy as the basis of its plans of territorial expansion, even in peacetime. The uniqueness of these modern Cartesian systems used in urban and territorial planning, implicated that was adapted an ideal model to be "superimposed" over the actual territory, regardless of local conditions. A well planned system by the bureaucracy or technocracy from the capital thus becomes a hegemonic project, whose main function is to control, manifested externally as an urban form with order and unity attributes. Deeply, control is an expression of fear to lose the power.

Nevertheless, the representations of power shown by these territorial planning models are far from the homogeneity. Indeed, while the German model would create a utopia based on the pyramidal hierarchy, that would reveal the role of hegemony in the political philosophy of Nazi Party; the basis of territorial occupation system proposed by the defenders of the garden city, in counterpoint to that, were would based in the relative freedom of local communities and a socialist-style cooperative, closely following the ideals of E. Bellamy and others writers of the end of nineteen century, originating in socialist idealism.

The Broadacre City Project of Frank Lloyd Wright has an important debt to these planning systems based on an abstract grid overlaid on the territory, in parallel to the desire to emancipate the inhabitants of all subjection to any hegemonic power. Perhaps like no other project of that time, raised the possibility of a city that was spreading

throughout America from the East to the Great West, in a plan that mixed the urban uses with farm fields, creeks and forests, making this net-city an urban area that occupies the whole territory from Atlantic to Pacific.

One project that would be majorly indebted to these utopian models of urban planning is perhaps the most daring of all, one that envisioned a completely urbanized world. It is not possible to be secure with absolute certainty, but Konstantinos A. Doxiadis, the main promoter of this idea, was doctorate in Germany at Charlottenburg University of Berlin in 1936, which could possibly have put him in contact with the theoretical work of Christaller, or would be possible that Doxiadis had learned about the main ideas of Christaller in the intellectual environment in which being moved as a young architect, making contact tangentially with these ideas.

Of these possibilities arises another equally attractive: the ekistics is in debt with the ideas germinated from the application of spatial isotropic meshes for planning. The ekistics arises from the idea that the living space is complex, unlike the simplification of Christaller, who conceived the economic forces as engines that contribute to explain the spatial location, Doxiadis proposed that the urban location and shape depended on the balance of a series of "forces": social, economic, geographical, political, cultural, etc., which had been studied in the past by various disciplines, and according to Doxiadis, these should be studied together in a single discipline. Proposed five basic disciplines for the planning of cities: economics, sociology, political science, technology and cultural studies (Doxiadis, 1967, Doxiadis and Papaioannou, 1974).

He imagined that the world could then be abstracted as the complex aggregate of five basic elements which he called person, nature, society, shells (buildings) and networks (intercommunications between the elements). From these arguments, Doxiadis deduced 14 territorial units and 15 social units that start with the person and end up in the ecumenopolis. What kind of debt has this model with the utopist proposals of Jefferson, Howard, Christaller or Wright? What images contribute to give its energy to this prophecy?

The ecumenopolis, seen by Doxiadis as the final urban horizon, would be the result of the aggregation of small territorial and social cells, properly planned to meet with economic, social, political, technical, cultural and aesthetic demands. Cells, internally well designed in a multidimensional way, could contribute to generate with its aggregation a higher level of organization, equally satisfactory for the development of human life. Somehow it is a final form, which is the result of an abstract pattern of pieces aggregation. This is also an ideal model based on an almost absolute confidence in the bright order of reason.

The ecumenopolis seems to be the most complete fantasy that proposed to expand the Western light to all corners of the planet, on the grounds that this expansion is the result of the systematic occupation of all places that is possible to humanize. The ecumenopolis conduces us into a fantasy of total control and power. Probably to Doxiadis and his followers would be a bright destiny, a horizon waiting to be reached. Pyla (2009) notes that Doxiadis himself referred to this result as "entopia" a word coined from two Greek

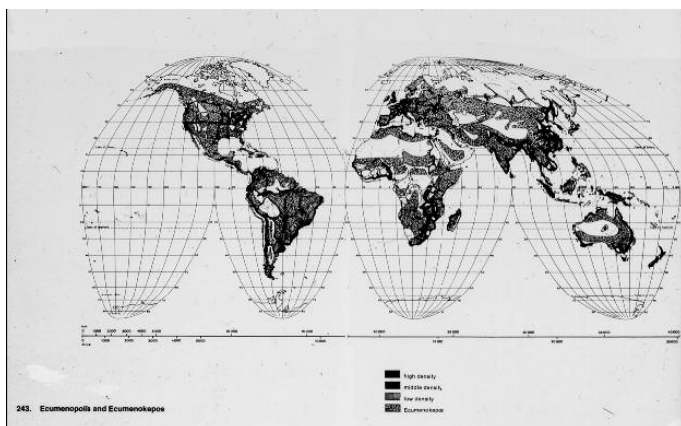
words: *en* and *topia*, as a term opposed to utopia, for their ability to be possible in the future.

If a mythical image has had to take Doxiadis in his utopia, perhaps has been of Trantor. In the trilogy of books “Foundation”, “Foundation and Empire” and “Second Foundation” written by the science fiction master Isaac Asimov in the 50’s, the main scenario it’s a world entirely urbanized, located in the central systems of the galaxy, and it would be head of an ancient empire with partly unknown remote sources on the planet Earth. The image of Trantor is amazing, it is a world of 1200 million square kilometers, hyper-urbanized, described as the home of a population of more than 40.000 million people in its heyday, it could have been excavated to depths of 2000 meters to take advantage of the thermal energy of the planet's core and to raise a few hundred meters above the surface, Asimov describes a continuous urbanization that is very complex and in certain localizations is even sub-oceanic. As a head of the great galactic empire, on its surface is the imperial palace, which is the only forest area of the planet-city.

Doxiadis's fantasy could be presented as one more of these utopian projects that culminate with a huge hyper-urbanization. What deeply represents this picture? The destiny of the race is sealed in a future state dominated by a singular super-civilization that covers everything, and is fed by a system of servitude, who retreats into an unimaginable luxury and wealth, in a sophisticated technological paradise, while remains in permanent isolation: a center of a dependent periphery where they live the others, the invisible humankind, serving the empire drawn from his land whatever he needs to continue to dominate them? Asimov's trilogy, away from that golden vision proposed by the prophecy of Doxiadis, offers this heyday as the beginning of a precipitous decline, culminating centuries later with the demolition of the ruins of Trantor, to allow farmers return to work on the floor of the planet that has become a useless desert due to the decadent global city. Doxiadis points to a target which appears to be an end of history, a time of culmination of the efforts of human civilization around a giant collective invention. This is an image with a deep and meaningful Christian background.

The future world, according to the vision of the Greek planner, would consist of metropolitan areas of low density and low rise, linked by highways, where nature is mixed with the city, with subterranean factories that minimize adverse effects and pollutants, and the aesthetic of the past industrial world. Would say that the ecumenopolis would start to be a joint concern of governments and citizens of the world at least in the year 2100 and when later in the year 2200 (Doxiadis and Papaioannou, 1974, Fig. 3).

Fig. 3. Ecumenópolis, according Constantinos Doxiadis' schema. The image shows various degrees of settlement's density in the global- city. Pyla (2009: 9).



It is surprising, when we fly fast through the sky of the Rhineland, or Holland, or through the fertile French plain, which this image is almost a reality today, when the human population reaches a figure of about 6000 million beings. Doxiadis had expected the emergence of those urbanized continents on the horizon of 7500 million people inhabiting our mother earth.

But far from the fantasy of an industrial economic power was displaced from the surface into the depths of the planet, now those bucolic continental cities, that stretch along the Atlantic coast of the United States or in the plains of central Europe, with super-efficient infrastructures, with picturesque dairy farms, electronically interconnected with the rest of the planet in real time, with subway and train systems that move from side to side their population, with its historical monuments and sanctuaries, have moved their factories more uncomfortable and contaminants to other continents, with a lax or corrupt law, and have accepted modes of manufacturing, that in most cases were unacceptable in their original locations.

FROM EURO-CENTRIC MYTH TO ECUMENOPOLIS

The significant changes experienced by the world today after expansion unbridled neoliberal capitalism seem to be the expected effect of ecumenical campaign waged by the West since the Renaissance dream of an order universal, unlimited progress. The world should, in this view, to mirror West that winning the war against the invading Muslims and seeing them run stampede to take refuge beyond the Greek borders and in the desert south of Mediterranean, appointing himself as the model for nations, *urbi et orbi* the Christian civilization, the ideas of the humanists would travel across the seas installed on the hard parcels in the aromatic convents and haciendas slave of some colonies that did not recognize the natural rights to speak their language and to communicate with their old gods of stone.

Such ideas originated in the need to install a center from which depended a acculturated peripheries. In economic theory, such expansion of the dominions of the old empires

would have exceeded the inexorable law of diminishing returns capital, installing an "out there" which could draw on to bring raw materials necessary for the opulence of the old capitals.

Is an established truth of history that has been based on Marxist theory and positivist, that the root of European industrialization that gave beginning at the Age of Enlightenment would be based on the capital accumulated from the sixteenth century overseas colonies and empires, for merchants that underpinned their money to absolute monarchs in exchange for the security of the brilliant aristocratic societies, full of art and intrigue and the primitive accumulation by the fruit of the low birth rate, compared to other regions of world of European peasant families, which allowed a margin of savings on tithes, taxes and rents paid to landowners².

This 'truth' have made the historians and the philosophers to suppose that they should be values in the European civilization that will trigger such a force of progress and order over the world and that will catch up, early or late, to all the corners in the world, spreading this values over the passiveness and savagery of the subjugated towns. This idea began to thread during the Eighteen century through the works of Adam Smith, Thomas Malthus and David Ricardo that imagined Europe as an active and creator of civilized strength, which had the virtue of the 'capitalism development as "progress", the West as "progressive" and Asia (and also, as consequence, Africa and America) as "underdeveloped" and "despotic"' (Marks, 2006:17)

The force of the Euro-centric myth³ has hogged the minds of the most erudite of the academy, of the politics and of the arts, until the point of no way to imagine history

² It is the view of Max Weber (1864-1920) that among the reasons that explain the "rise of the West" would be environmental, technological, political, military and demographic, as during long period of history pre-industrial Europe, pressures of many kinds took to farming families to get later marriage age, than Asian families, African or American, which would limit their fertility, so would have fewer children and therefore a favorable demographic environment for the accumulation of capital. Recent information on China and other Asian countries, suggest that other means, the families of these countries limited the number of its members, reaching a situation of greater development than Europe at least until 1800.

³ The "Eurocentric Myth" and its development through the history of the West has been the concern of some thinkers among which we highlight Braudel (1984), Samir Amin (1988), Blaut (1993), Appleby, Hunt and Jacob (1998), Marks (2006), among others. The latter author advances a definition of myth, through which "some critics argue that the Eurocentric view of the world sees in Europe the only active agent in the history of the world, their only 'Spring'. Europe is active, the rest of the world, passive. Europe makes history; the world has no history until it comes into contact with Europe. Europe is the center and the rest of the world periphery. Only Europeans are able to initiate change and promote modernization, the world is inadequate" (Marks, 2006: 24). The author of this

without Europe in the center, in which it has become a metahistory, a forced sieve that has to impersonate the local history. The culmination of this vision conduced to the formulation (probably since the post war of Second World War, but it is evident that the roots are found in the political writes and letters of Thomas Jefferson, one of the fathers of the United States) of an image that if the history began in an active and creator of values Europe, it culminated in the United States of America and, anchoring in their vision and values, the history of the world⁴.

This obviously has an opposite face, and is that if all the history is based in the incorporation of the Western values, the rest of the world would have to be indolent, passive and incapable of gestating by itself a vision, a way of life that brings happiness and hence to well-being. An address of George Bush (son) of 2000, in which he makes a call to adopt the way of life and the vision of the West, have in its center the notion on which such values are natural goods that the western civilization brings to the world and that they makes them prosper, he said something almost: 'the international (liberal) markets is a "moral imperative" that "will bring liberty to the world, progress to our hemisphere and a long prosperity to the United States"'

In the center of the Eurocentric myth that is the base of the modern vision of the West exists the notion of absolute values that emanate from the eternal cultural spring of Europe and that are brought to the world in order to be converted and created, in order to be saved. This quasi-religious vision that they entail is manifested in the blind adhesion of our imaginary that thinks itself in the periphery, it sees himself in the semi-obscurity of an marginal development of those who have 'founded' the myth and that pretend to perpetuate by the governing institutions of this vision through the exportation of politics that teaches the doing and the well thinking of those who haven't made their own road. In the center it also lasts the certainties that the success of the West is due not only to the strength of its culture, but to the strength of its race, which has fueled the images of the superman that the racial supremacists fanatics and the fascism have brought from the political extremism to the ethical cleaning, since the Germany of Hitler in the unleashed horror in the Second World War, to the Serbian genocide paroxysm of Milosevic at the end of the twentieth century; the new man that proclaims the Red October, founder of a new dictatorship of those who have less but overwhelmed by their anxiety of having the bourgeois, to the new eugenics of the program of the decoding of the human genome.

In this imaginary there is a force that makes us see over ourselves the coming of indisputable values that model the route of our lives, its times, its spaces, the images of

myth holds that now permeates the vision, actions and the political projects of developed countries.

⁴ "I think our governments will remain virtuous for many centuries, at least while they are mainly agricultural, and this will happen while there are free land in America. When clumping in large cities, as in Europe, it will corrupt as in Europe. "Excerpt from a letter Thomas Jefferson to James Madison December 20, 1787, cited in the work "The city's agrarian ideology and F.Ll. Wright". (Ciucci, 1975).

the buildings in which he lives, it is educated, it is worked, and even in those who have died. A vision that is presented as the only possible vision, that penetrates in our election, the cloths we use, the way in which we move, the house that we desire, and the one that, we finally possess, the form of our relationships with other people and the spaces that made it possible. A perspective that indicates us to how to make our cities, how to use it, to transform it and think them, a perspective that model even the scenario of our dreams. Lindon (2007) has denominated to this vision “dominant imaginary”.

The investigator suppose that in front of this categorical, hard, and functional imaginary of the structures of power, it emerges the “imaginary of the resistance”, that form the local perspective it forces a different vision disenchanted by its marginalization, but genuinely replying at the other perspective. Does the resistance does not brings, as the seed in its heart, the images of a tyrannical domain and for the opposition it affirms it by creating the conditions towards its perpetuity as something real and beyond to the imaginary being?

As it will be show in this work, it is possible to explain that the net-cities, vast urbanizations present in the industrialized West, answers to a logic that is based in the values of the Eurocentric imaginary, deeply rooted in the mind as the “final” product of a world that migrates to a sole control. Such urban entity has exceed by its magnitude the scale of the national units that, arising from the age of enlightenment as the model of government that looked to realize the revolutionary principles of equality, liberty, and fraternity in the frame of democratic model of government, now it is sustained in the frame of habited areas that surpass the nation to function, that gives sense in the space the idea of a New World Order.

UNEQUAL RELATIONSHIPS CENTER-PERIPHERY AND THE ARISE OF THE NET-CITIES

The studies about the territorial impact of the last globalization wave in the national grounds have initially concentrated in the characterization of a system of cities in which diverse types of flows (informatics, of goods, financial, of transports, etc.) are concentrated, that has made evident a systematic functioning of this localizations, that also, and this is extremely important to analyze, hog two thirds of the world’s wealth, at least, in the present times and concentrate 40% of the consume of the world’s goods and services (O’Connor, 2003). This group of countries that amass this wealth should be formed by the so-called G7 (or G8, if it is considered the recent incorporation of Russia in this selected group), in other words, Canada, USA, UK, France, Italy, Japan, and Germany. The rest of the countries of the planet, which have most of the world’s population –around a 85% of it (O’Connor, 2007)- functions more or less peripherally to this central group incorporated to a diagram of uneven development⁵. This can be a good

⁵ The uneven has to be with the urbanization. In 40 years, he rent per habitant f the 20 wealthiest countries almost got to the 300%. In the year 2002 it went up to an average of

expression in the form of predominant life in the different regions of the world and in its specialization.

The localizations in which the wealth is concentrated and its flows, in other words, the central locations of the planet are the cities situated in the territories of the G7⁶, although this panorama moves quickly from one to a different whole, as we will see.

Diverse alliances in the commerce, like what in its moment represented the GATT and now is present in the Organization for Economic Co-operation and Development (from now on, OECD), has contributed to form the structure of a system of cities that now links with the system of the central locations. Although this is no absolutely new and precedents can be found in the commercial alliances in the Middle Ages, like the Hanseatic League, or in the East of Asia, in the period time that is referred and other moments of the past, now it is presented in forms that have never been saw in the world's history, since the incorporation of technologies of communications and mobility have increased the space of flows up to, for the case of certain types of movements, transactions or information, paradoxically making it virtually inexistent at the space between the locations, constituting, for some cases, a compact system, in difference to the old times, when the distance was a natural barrier for the contact and exchange.

The spaces of flows that give the central locations to the structure of the system can be thoroughly understand through the maps of aerial mobility. A map developed by Keeling in 1995 shows the links of aerial transport in the world, and exhibits with enough eloquence the existent of certain knots in the net: it talks exactly of the global cities. London, New York, and Tokyo appear like the preeminent knots. Of this it is detached the sub-nets of aerial transport that is articulated by other regional centers (Frankfurt, Amsterdam, Miami, Los Angeles, Singapore) until we arrive to the national articulations (Paris, Madrid, Mexico City, etc.) and the subnational (Osaka, Huston, Montreal, Milan, Barcelona, Hong Kong, etc.). The map of Keeling is interesting because through the analysis of a specific flow it permits us to visualize the articulation of the system of cities describe by the literature.

It is possible to think about it as a valid hypothesis that these spaces of flows, that constitute today the bases of the world system of global cities, have an impact in the territories outside their central locations, configuring large spheres of influence that have to form of urban branches that spread through large territories at the cost of, precisely, the communications that have been established between the knots of the world system of

US \$32.339 per habitant. In the other hand, the twenty most pauper countries grow only a 26%, which went up in 2002 to an average of US \$267 per habitant.

⁶ "The capital generated in the hinterlands money tends to migrate to large industrial and financial centers. Was more the rule than the exception, for example, large industrial areas, commercial finance and milked agriculture and overall rural economy in pursuit of profit ("unequal exchange"), which in many countries led to the underdevelopment of the latter. (O'Connor, 2003: 12).

cities. It is also valid to think that the forms of the dispersion of the territories of these urban entities answers to the locations of every net-city in the political geography that emerges from the inequality.

The different commercial leagues established the spaces of the commercial flows since the Middle Age, which contributed that the continent Euro Asiatic functioned in a gigantic cultural net of which plot can be seen now in the customs of the people around these lands.

Now it seems that urban forms that are beyond the dimensions of the most important metropolis of the world. The images of the central cities that present a silhouette steep of big buildings in an extremely tight plot, theme that probably gave its images to the mega-structuralist in the town-planning pop utopia in the decade of the 60s, with their giant mobile machines that could be “plugged” to the natural environment, does not look like it can be applied for this class of planetary scale net-cities. The idyllic image of a road embroidered of tall and old trees after which can be seen a country cottages, with spacious camps of weed, services and infrastructure hardly visible but permanently plugged with global nets, that depend of a small distribution point and the services situated the same in an extensive green grassland and equipped with the basic commercial infrastructure, the points of contact with the government of the region, the educational services, the health ones, etc.; looked mostly like this class of emergent urbanizations.

This image could be well situated in the conurbation line in the south of Canada, in the sea line of the east of USA, the French countryside or the German plain, without having change more than a few elements of identity. It is possible to think that this urban forms, which we have named ‘net-cities’ (Narváez, 2006), more due to its permanent communication through high technologies of computer science and telecommunications, at the physic form that presents themselves, are very dependent of the form of links of communication roads and of its faint but persistent presence through the vast territories. The studies about the emerge of urbanized areas that surpass the metropolitan scale have been the recent worry of a reduced number of investigators in the world, in which we can point Friedmann and Wolf, 1982; Friedmann, 1986, 1997; Sassen, 2001; Knox and Talyor. 1995; Hall, 1998; Hall and Castells, 1994; Narváez, 2006, and some others; that have thought that the contemporary cities have begun to liking up ones with others that are getting stronger and stronger, constituting spaces of (Castes, Halls) economic, computing, energetic flows, and even flows of people that work outside the city and even of its country (Friedmann, 1997).

Friedmann characterized the end of the decade of 1990 the hiperurbaization in formation and quick growing in the Asiatic south-east that already exceeds the capacities of the national governments for the dotation of buildings, infrastructure, and basic services. This clase of urbanizations already represented the emerge of the city-region: ‘that extends outside the urban centers, up to a distance that can be represented by an approximate radio of travel of one or 2 hours as maximum, covering an extended region, for which, in the Asian context, covers populations that oscillate around the 5 million until over 20

million and continues to expand at values that well could make the population duplicate in less than 20 years. The main springs of demographic growth for this megacities- region comes from rural migration (in the case of Asia) and from international migration (in Oceania and North America), even when Asiatic global cities are beginning to experiment international migration...The rural houses in the global city-regions are now closely attached with the urban economy, based in manufacture and financial services' (Friedmann, 1997: 44)

THE GREAT CITY OF THE ROADS, SYMBOLIC RESONANCES AND THE HISTORICAL DEVELOPMENT OF THE IDEA OF AN EXTENSIVE CITY

Underneath the myth of traveling, underneath the transformation that happened in the middle of the nowhere, in the solitude, there is the gift of a new humanity. It is one of the promises and of the searching of the Modernity as a doctrinaire idea of the West, as the heart of the Eurocentric myth which is fed to this civilization. Starting from this resonances it is possible to think here that the territorial transformation, with the conquest of the desert through a project which in favor of civilizing the barbarians, paradoxically, through the most barbarian methods (Morin, 2006). It is the New Human the one who will have such a mission. In Jefferson's political writings, the New Human sees himself as morally superior through his hard work, established in the land. Then it would be the anarchist philosophers (Thoreau, Howard, Bellamy, etc.) who will give form to this dream being, throughout the consecration of the individual efforts in the edification of an order that will oppose to anything that has something to be from the ancient regime: in front of the stinking capitals of the old Europe, the forests of the New World, in front of the rococo opulence of the courts, the puritan austerity of the shacks of logs.

In the myth of a new city without frontiers, extensive and located in the fields, absorbing not only the resources, but also the strong ethics of its old inhabitants, the anarchist individualist will play an important role. The Southern Agrarians issued through the pages of *The American Review* related ideas of a just distribution of the resources, of equaling the Americans with the wealth. Making eco in Jefferson and of the American intellectuals of the 1800s, prophets of the New Human suggested it should be imagined a private property for each American family, because the principle of property is a basic principle of every democratic society, and under its skin, it is a natural right of the man related to its legitimate aspiration of liberty.

Is from this trench that the American intellectuals in this epoch made strong critics against the capitalist system and the communist system (that they considered the twin brother of capitalism due to its anxiety of possessing all the methods of production), installing the necessity of a third route that based in a more just distribution of the wealth. These ideas, that in the dawns of the twentieth century would blossom in Europe and it flowed in the American intellectual advocated of agrarian reform sphere, were based in the ideas of Hillarie Belloc, that in 1911 published a manifesto for the installation of an agrarian society, and of G.K. Chesterton, founder of the magazine *G.K.'s Weekly*, of the

Distributist Movement, which texts like the one of Belloc, referred to the agrarian society of the Early Middle Ages as an ideal model of life for the nations. The closeness of these theses with the ones of the European nationalism that will take strength between the First World War and the Second World War, aren't interesting and, maybe, explain the supremacist turn that will identify this ideas later through the incorporation of racism in the political agenda through the Ku Klux Klan.

The twentieth century is crucial for the material body of the myth, incorporated since the political visions developed in the eighteen century, up to the new technological elements presents in the imaginary through the popular fiction literature that fed the minds of the readers with promises of a bright future, very clean and automated. The crisis of 1929 will be the occasion to think of the necessity of a new world, based in the synthesis of the old ideals and the new technologies.

But the anarchist and agrarians ideals deeply rooted in the mythic North America, will confront the great technological progress that the industries and the man of science in the cities, that hated so much the intellectuals of Anglo-Saxon protestant traditions, were reaching. As the pioneers in the extensive and mobile boarder of Turner⁷, confronting this new rugged world, the engineer, creator of the mega-constructions and the most powerful machines, were the heroes of the imaginary of the people. Of the main American heroes in the beginnings of the twentieth century is possible to count as the most skilled the industrialist Henry Ford. This car manufacturer propose to the American government in the decade of 1920s an ideal world, Muscle Shoals, that fitting with the distributive ideas and the agrarians, incorporated the technological components that claimed by the utopists in the ends of the twentieth century.

The utopia of Ford had naturally strong contact points with the suburban reality that prevails nowadays in the East coast net-city landscape. This realization of the dream illustrated by the Modernity situated in this conglomeration as seen in the image in which the Eurocentric myth seems to base on. What historical symmetry will be provided in the net-city in the center of Europe behaves alike the city of the routes in the east of USA? A line of investigation that won't be developed for the moment points necessarily to the period of big crisis in Europe between the First World War and the Second World War, which will naturally point to the rise and fall of the European nationalism, creating the conditions that will be provided to the Beneficiaries States. This is the epoch of the Western Europe Eurocentric myth, that it will also support the idea of the Super Man, the one of the new and universals values, developed by the fascism.

The construction of an extensive city had to follow the enlighten destiny that imposed the imperative of the expansion of the national borders. The pioneer, one of the last

⁷ The work at which it is referring is: Turner, Frederick, J. (1967). *La frontiera nella storia Americana*. Bolonia, Il Mulino. Has been transliterated of Ciucci, Giorgio (1975) *La ciudad en la ideología agraria y F.Ll. Wright*. In: Ciucci, Giorgio, et alt. *La ciudad americana*. Barcelona, Gustavo Gili.

incarnations of the myth of the hero that fed the fantasies of politicians and of the America people, confronted the *terra incognita*, to construct with his own hands a destiny for a whole nation, but with the appeal of a huge national plan of the division of the territory, of the building of infrastructure and the foundation of outposts towns, realized with a clear military logic for the occupation of the conquered territories.

The fall of the Eurocentric myth barely looks like it began to manifest in the heart of the Western industrialized societies for the emergence of the called Generation X. It also looks like it is contemporary the moment of the take of conscious of the political value and the forced contact with the others, outside the frontiers. How it will react a resulted city of the most polished western myth to the aliens, when making contact with the other space?

CONCLUSIONS

It prevails an enormous inequality in the contemporary world, in a way that now, as Beck (1999) has warned, has been constructed with the radicalization of the politics of neoliberal cut from the wealthiest industrialized nations, a radial society, with an extremely isolated and exclusive center, and impoverished peripheries that are dependent of the growing center. This society presents now as one of the results of the imaginary gestated for centuries of events and interpretations around the Eurocentric myth, which has put the West as the center of the world's civilizations, as guide and guardian of the values of order and progress that characterized the modern world.

This way to conceive the world and its history has constructed images that support the idea of a *destino manifesto* of the westerns to control the world and its resources and, as if it was a religious image, it is concluded that there is something in the Western culture that made it be the center of the world and the deposit of all its treasures, a luck of a chosen in a mission of evangelization in order to civilize the savages.

Around the myth of the hero it has been constructed the imaginaries of the West as the bringer of light. In the rest of the world, the Eurocentric vision does not grant them the enough the necessary creativity to sustain a non-western ways of life that are minimum prosper, using the images of prosperity of the West, evidently. This vision and its most radical manifestation have bring out the most brutal historical events, since scenes of loot and reduction of the locals to slavery and poverty, in the colonization, up to the ethnic cleaning, the paroxysm of the fevered nationalism.

The spatial response of the necessity to extend to all the directions of the orb the Western civilization, exceeding the restricted limit of the national borders in the globalization dream of a New World Order, it is the ecumenopolis, with its early manifestations: the net-cities. This entities presents as dependent of their accessibility and this factor looks like it determines, for now, the morphology of this hyper-urbanizations; making the existence of a considerate difference in the patterns of extensive urbanization and the one that exhibit it up today in the peripheries countries.

Remains to be seen what effect will this global economic crisis that was opened for public opinion 2008, but it would have been unleashed before, apparently by increasing capital and speculation about the indebtedness of Western economies. The effects are noticed early in the year 2012 are closing markets for importing products and raw materials from peripheral countries by core countries, which shows austerity policies and boost consumption of locally produced goods and materials. One issue that is a disadvantage to the nations who bet their development in globalizing schemes, neglecting areas of the economy priority, such as food production (the Mexican case is an example of this). Experts predict the immediate future inflation and loss of welfare in countries peripheral processes of deflation and loss of welfare in the populations of central countries. With all this, it is expected to increase inequality between northern and southern political so it is likely that this will have space demonstrations increased socio-spatial discrimination seen large-scale urban institutions that concern us. It likely that this is increasingly evident in the border areas of the cities network located between the West and the periphery. Mexico is an area that is in one of these limits, the Middle East almost adjoins another location as well. In both cases, the answer is building strong walls dividing borders.

It is foreseeable that in the current conditions of these cities geopolitical system develops a highly fragmented space and strong controls Security inside. These forecasts show while in the heart of these cities and their societies today are installed imaginary fear and conflict, in breaking the Eurocentric myth would be as perverse substitutes that vision bright (But brutal) that built these giant structures inhabited. It is important to undertake more specific research on the life and its representations mental in these cities, in order to understand the evolution of the processes of adaptation beings to their habitations. At the same time it is imperative to investigate the components and dynamics of dominant imaginary construction that encourage geopolitics, in order to understand the impacts of these visions in the development of life communities now that the world system has reached a compact such that the impact of these imaginary animated by political winds are almost immediate communities, now that blurs the sense of locality.

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About the Editor

Dr. Jay Rajasekera, has been teaching Management and Information Technology courses at GSIM (also called IUJ Business School) at International University of Japan (IUJ) since 1995. He started his career at AT&T Bell Laboratories in New Jersey, USA. While at Bell Laboratories he designed the computer algorithm for the construction of world's first undersea fiber optic cable TAT-8 between US and Europe. Good percentage of the world's Internet traffic today is carried over the optical cables built using his patented algorithm.

He resigned from Bell Laboratories and joined IUJ in 1995. Since then, holding positions of Professor, Associate Dean (1996-1997), Dean (2000-2004), Director of Matsushita Library and Information Center, and Director of E-Business Program. He has previously co-authored three books and published more than 50 management and technical articles in academically rated journals. He has wide consulting experience on issues related to globalization strategies, management, and technology, including e-government. He has conducted executive training programs at a number of large corporations in Japan, including IBM-Japan, Fuji Xerox, Fujitsu-AMD, Hitachi, DHL-Japan, and Mizuho Bank. He had also conducted seminars for business and government leaders in Indonesia, Myanmar, Nepal, and Mongolia. His opinions have appeared in Wall Street Journal, Nihon Keizai Shimbun, Japan Times, and other leading publications.

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