THE WORLD ECONOMY TODAY:

Major Trends and Developments

First Edition
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Joint publication, comprised of selected works of renowned scholars and experts representing:

University of Antwerp, Belgium
Bond University, Australia
Center for Education, Policy Research and Economic Analysis
ALTERNATIVE, Armenia
Delft University of Technology, Netherlands
Zhejiang Gongshang University, China
International Monetary Fund, HQ in Washington D.C., USA
University of San Francisco, USA
Shinawatra International University, Thailand
United Nations University, Belgium
Yerevan State University, Armenia
Liliane Van Hoof, Ph.D., Professor of International Business
Evrard Claessens, Professor of Economics
L. Cuyvers, Professor of International Economics,
Stijn Verherstraeten, Research Assistant
Céline Storme, Industry Management Consulting
Liesbeth Van de Wiele, Consultant
Philippe Van Bets, MBA at
University of Antwerp

Michel Dumont, Ph.D., Assistant Professor of Economics of Innovation at
Delft University of Technology

P. De Lombaerde, Associate Director at
United Nations University

Rosita Dellios, PhD, Associate Professor of International Relations at Bond
University, Gold Coast, Australia

Ararat Gomtsyan, Ph.D., Senior Analyst,
Armen Safaryan, Ph.D., Senior Analyst
Tamara Grigoryan, MBA, Senior Analyst at
Center for Education, Policy Research and Economic Analysis
ALTERNATIVE, Armenia
Guillermo Tolosa, IMF Resident Representative to Armenia
International Monetary Fund, Headquartered in Washington D.C., USA

Xiaohua Yang, Ph.D., Associate Professor of International Business at San Francisco University, USA

John Walsh, Ph.D., Assistant Professor at Shinawatra University, Bangkok, Thailand

Wang Guo-An, Professor of International Trade at Zhejiang Gongshang University, China

Tatoul Manasserian, PhD, Professor of International Business and Economics at Yerevan State University, Armenia
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PREFACE

The book you are holding in your hands was just an idea a few years ago. The idea was to come up with a team of authors from different institutions in different countries and on different continents to first completely understand the real causes and consequences of the latest trends in development; secondly, to be able to explain that knowledge and understanding thoroughly and clearly; and thirdly, to share such knowledge fully with the reader. Moreover, we attempted to draw scenarios for the years to come realizing that forecasting is a real challenge and that future realities are largely dependent upon the dynamic changes that take place worldwide.

We have not only stepped into a new millennium, but also noticed that the time runs much faster now in terms of experiencing real changes and developments. In fact, the changes have become more dynamic and no one can argue that many of those events that occurred in the past few years could hardly have taken place within one century. In 2000, 189 nations signed the Millennium development declaration and set Millennium development goals. In 2001 a new world currency – the Euro – was put into circulation; the same year divided the world community into pro and anti terrorist blocks following 9/11. In 2002, when the wars were still being fought, East Timor gained independence and another nation, a traditionally very neutral country, Switzerland, joined the United Nations. The year 2003 was marked by the Velvet Revolution in Georgia; and the continuation of armed conflicts in the Middle East and the capture of Saddam Hussein. 2004 was marked by the Spirit rover landed on Mars. In 2005, the European Space Agency's Huygens Titan set down on the surface of Saturn’s moon Titan; and a new Pope was elected. In 2006, Thailand’s military overthrew Prime Minister Thaksin Shinawatra; and Montenegro gained independence. In 2007, the leaders of Northern Ireland's main Protestant and Catholic parties reached
agreement to form a power-sharing administration; and the Palestinians formed a unity government. 2008 became historic with the global financial crisis and the war in Georgia. Later, 2009 was signified by the drug war in Mexico; the Swine Flu; and GM’s bankruptcy. 2010 marked the debt crisis in Greece; and Wall Street demonstrations in USA. 2011 marked the Arab Spring revolutionary wave of demonstrations and protests in the Arab world. And in 2012, the Iran oil embargo made the headlines and a second wave of the global crisis with new attempts to resolve the external debt crisis in EU. While 2013 may deepen the global food crisis and 2014 could be marked by a new storm in worldwide financial markets, by 2015 a new economic order will continue to be in demand, but yet not established.

Do these developments matter for the world economy, and to what extent?

We believe that the global economy is very sensitive to each and every major move and change in global politics. Despite the changes in the world political order, the collapse of a bipolar world and other transformations, the economic order remains about the same since WWII. Therefore, the call for the new global economic order may no longer be overlooked. It is obvious that free trade is not always a fair trade, and that the subsidies have nothing to do with a favorable climate for competition.

Scholars and experts from Europe, North and South America, China, Armenia, Australia, Thailand, representing distinguished universities, think-tanks and international organizations cover current trends and developments in the world economy, including economic globalization with its social consequences, and reveal the main challenges for local and global economic security. Economic, political, legal and cultural issues are discussed in this manuscript, along with grounds of competition and a range of other matters related to strategic alliances. Discussion of global developments concludes with an overview of the lessons learned from the international financial crisis and an analysis of its roots. In addition, regional trends covering most popular topics
including, the rise of emerging markets’ MNEs in developed economies; a new vision on EU integration; issues from AFTA towards an ASEAN economic community and beyond; and controversies over NAFTA. International organizations’ role deserves special attention, particularly in IMF’s view and the new world economic order, and the impact of WTO on foreign direct investment, i.e., China’s case. Scenarios for the future follow the mega trend analysis on convergence with its possible impact on global markets.

We hope that the topics presented, including the in-depth analyses of major trends, innovative approach and clear exposition of various issues will help grasp the root drivers of global development and their impact on industrialized and emerging economies.

Our team will be grateful for any comment made by readers that will only help further improve future work, making it more useful to students, experts and broader audiences. Your thoughts are welcome to the following address: researchcenteralternative@yahoo.com. You may also post your notes in www.alternative.am. We wish you a pleasant journey through the chapters that follow.

Prof. Dr. Tatoul Manasserian
Project Initiator/Coordinator
Part one: Global Developments

Chapter 1

Current Trends and Developments in the World Economy

Demonstrating greater vulnerability than previously predicted, the world economy has slowly slipped into a recession by the end of the 20th century, with former engines of growth – the high-tech sector and business investment – sputtering. Overall global economic restructuring continues to reshape the world's economic landscape as plant mergers and the relocation of production facilities occur at an accelerated pace, and companies adjust to changing conditions in the world. In spite of this perspective, future prospects are good and the preconditions for a gradual long term economic revitalization of global activity are largely in place. The process of global recovery and revitalization should begin to get back on track as most world organizations are forecasting genuine positive growth.\(^1\)

The primary forces transforming the world throughout the first half of the 21st century will originate from the acceleration of economic trends already evident in the 20th century:

- increased empowerment of disenfranchised sectors of society, in both economic and political spheres;
- reduction of xenophobia that opens up new markets and permit new alliances;
- rising dominance of supra-national institutions, eroding the sovereignty of individual countries;
- intellectual property becoming the primary economic output of the developed regions of the world and waxing of a service – driven economy;

\(^1\) International Monetary Fund's World Economic Outlook, 2003 and the TD Bank's Global Economic Outlook Report 2003.
• the increasing strength of Eastern markets;
• radical change in the processes and institutions of education, to support the needs for lifelong learning, and to convey the knowledge which forms the basis for economic competitiveness;
• greater transparency and accountability of public and private institutions;
• adoption by less developed nations of many habits common among developed nations;
• technology-driven transformations in the way we communicate, travel, and maintain our health;
• the move toward the development of space opening up new frontier for business;
• liberalization of international monetary system.

With these in mind, there are a number of general trends that will continue to affect the economy and determine how companies do business in new economic order. Recognizing and understanding how these trends affect local businesses will assist in establishing strategic directions that will benefit local, global companies and attract new investment\(^2\).

The dominant changes in the world in the first half of the twenty-first century will be driven by social, economic, and political trends, which will be facilitated by technological changes.

The global economy will increasingly center on intellectual property.

Educational institutions will be transformed, both from the tremendous demands imposed by this knowledge-based economy, and from the possibilities enabled by the explosion in information technology.

Economic growth will vary greatly from region to region; the new wealth of nations will be the educational base of a country’s population, the ability of its sociopolitical institutions to protect freedoms and foster economic growth, and its ability to absorb outsiders and facilitate their integration into their economy. Individual nations will see their sovereignty eroded both through the continued growth of multinational companies, and through the growth of supra-national institutions.

Institutions, both public and private, will become more open, accountable, and less hierarchically-organized. In the developed world, the greatest force for change in our health care will be less biomedical wizardry and more health education.

Transportation landscape will change, as we move away from an oil-based energy economy to a biomass-based solar-powered economy, and as intelligent guidance systems allow cars to move more fluidly across the highways and allow personal flying vehicles to take to the skies in great number.3

Following factors will combine to promote widespread economic dynamism and growth:

*Political pressures for higher living standards.* The growing global middle class – now 2 billion strong – is creating a cycle of rising aspirations, with increased information flows and

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the spread of democracy giving political clout to formerly disenfranchised citizens.

**Improved macroeconomic policies.** The widespread improvement in recent years in economic policy and management sets the stage for future dynamism. Inflation rates have been dramatically lowered across a wide range of economies. The abandonment of unsustainable fixed exchange rate regimes in Asia and the creation of the European Monetary Union (EMU) will contribute to economic growth.

**Rising trade and investment.** International trade and investment flows will grow, spurring rapid increases in world GDP. Opposition to further trade liberalization from special interest groups and some governments will not erode the basic trend toward expansion of trade. International capital flows, which have risen dramatically in the past decade, will remain plentiful, especially for emerging market countries that increase their transparency.

**Diffusion of information technology.** The pervasive incorporation of information technologies will continue to produce significant efficiency gains in the US economy. Similar gains will be witnessed – albeit in varying degrees – in numerous other countries as the integration of these technologies proceeds. But the absorption of IT and its benefits will not be automatic because many countries will fail to meet the conditions needed for effective IT utilization – high educational levels, adequate infrastructure, and appropriate regulatory policies.

**Increasingly dynamic private sectors.** Rapid expansion of the private sector in many emerging market countries – along with deregulation and privatization in Europe and Japan – will spur economic growth by generating competitive pressures to use resources more efficiently. The impact of improved efficiencies will be multiplied as the information revolution enhances the ability of firms around the world to learn "best practices" from the most successful enterprises.
Indeed, the world may be on the verge of a rapid convergence in market-based financial and business practices.

Based on current developments in the world economy, it seems more reasonable to divide the major trends analysis into three major groups: trends based on key problem sets, sectoral developments and geopolitical trends.

**Trends based on most contemporary issues and problem sets**

*Globalization and Outsourcing.*

Because of globalization, investment is easily moved across borders. International corporations and small businesses participate in a global marketplace where every one is potentially a customer or a competitor. International economic and trade agreements and alliances also continue to redefine barriers to trade and investment. EU, NAFTA and other regional alliances accords have guaranteed that local companies face the challenges of increased competition in the global market and the creation a new type of global company – the 'differentiated network' company. With the expansion of the Internet and the bridging of the digital divide, all kinds of knowledge based work can now be done anywhere in the world. Hence, a differentiated network company will organize in terms of capability clusters distributed around the world resulting in the creation of the new 'global job shift' and in 'out-location' and 'outsourcing' of employment opportunities through processes referred to as 'Business Process Outsourcing' and 'Information Technology Enabled Services' (i.e., Call Centers).

*The Movement of 'Creative Capital'*

The flow of goods and services has been supplanted by the flow of creative talent as the cornerstone of economic growth in the New Economy. In North American society, what is occurring is a redirection of this flow, with increasing movement of creative
and innovative people to cities and regions that are more socially tolerant and diverse. The key factor in achieving economic growth is a jurisdictions' ability to attract members of what he dubs the 'new creative class' – engineers, scientists and entrepreneurs with a talent for innovation.

**Strategic Alliances**

As the economy becomes more globally connected and more local jobs are related to international trade, partnerships and strategic alliances amongst governments and companies are more important than ever. Strategic business alliances factor prominently in business strategies, providing a viable third option to the 'make or buy' decision. Consequently, the role of governments in general and economic development professionals in particular, requires identifying and building relationships between local and international companies that can benefit and prosper from these alliances.

**Small and Medium Entrepreneurship**

The size of businesses and the preponderance of smaller business units are directly related to the amount of economic growth occurring in various economies. Traditional large corporations are continuing to downsize and downscale their operations to remain competitive in the global economy. Efficiency and the 'bottom line', foundations of small businesses, had become the key to business survival. The small business sector continues to form a major component of today's economy, and will continue to power the future economy.

**The Importance of Human Capital**

Human capital is undoubtedly the most essential asset many companies have in their business and directly related to innovation in the workplace and to creating a product or service that is unique. A key ingredient making possible the New Economy

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is what economists are terming 'knowledge workers', who are in the following three select occupational categories; professional (doctors, engineers, accountants); engineering, scientific and technical workers; or senior ranks of management. As a result of this emphasis on human capital, companies are looking for innovative labor when selecting a new business location.

**Privatization of Government Services**

Governments in all jurisdictions are identifying and examining methods to cut costs and reduce taxes through the deliverance of cost effective and private partnership services.

**Reduction of trade barriers**

Barriers to trade in goods, services and financial assets have been progressively lifted during the last few decades, leading to a growing interaction among national economic systems. This growing interaction and connectedness is what people commonly refer to as globalization. Countries participating in this process have seen their domestic financial markets become more integrated with markets abroad. Two factors shape and characterize this process. First, technological innovation has sharply reduced transportation and telecommunication costs. Some figures taken from IMF study illustrate this impressive change\(^5\).

<table>
<thead>
<tr>
<th>Years</th>
<th>Cost of a 3 minute phone call New York to London (in $2,000)</th>
<th>Price of computer and peripheral equipment relative to GDP deflator (year 2000 = 1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>60.42</td>
<td>1,869.004</td>
</tr>
<tr>
<td>1970</td>
<td>41.61</td>
<td>199.983</td>
</tr>
<tr>
<td>1980</td>
<td>6.32</td>
<td>27.938</td>
</tr>
<tr>
<td>1990</td>
<td>4.37</td>
<td>7.275</td>
</tr>
<tr>
<td>2000</td>
<td>0.40</td>
<td>1.000</td>
</tr>
</tbody>
</table>

In only 40 years telecommunication costs shrank by a factor of about 150, while computer costs became around 1900 times cheaper. As a consequence, information is now disseminated almost in real-time and at low cost. Second, financial crises have become more frequent. Most of the time, they are driven by rapid inflows and outflows of capital. We still vividly remember the crises in Mexico, Asia, Russia and Argentina. Obviously, these crises have not been restricted by the financial sector, but have had a profound impact on the real economy as well.

The lifting of restriction to cross-boarder holding and trading of financial assets has unleashed massive capital flows. According to World Bank figures, global debt and equity flows (excluding foreign direct investment) expanded by more than five times since 1991, from $794 billion to $3.4 trillion⁶. Without doubt, this development reflects a long term trend. More and more investors decide globally and on the basis of risk-adjusted expected returns. Taking place in a system of increasingly integrating capital markets, capital allocation has become more efficient. The other side of the coin, however, is the increased volatility on financial markets.

One of the major concerns is the existence of some fundamental inequalities in the international trade system. Today poor people face twice the tariffs that non-poor face in the global marketplace. In manufacturing, in order to get into the markets of the industrialized countries, poor countries have to pay anywhere from two and a half to seven times more than do other rich countries. Part of this has to do with how the system of tariff reductions and, going back to the GATT, actually occurred. Originally, it was sort of a rich country club in the fifties and sixties. And so, rich countries reduced tariffs in response to products that were of interest to them, and those were mainly in manufactures, and in manufactures that they felt comfortable in trading. As it now turns out, of course, developing countries have

⁶ World Bank, Global Development Finance 2001, Chapter 2, Trends in private capital flows (Table 2.3).
become very important in the membership of the WTO. And so, their interests are fundamentally different than what has led to the current situation.

An important issue in the world economy remains the *anti-dumping*. Antidumping measures affect developing countries at a rate three times what they affect rich countries. Recently, other middle-income countries particularly have gotten into the antidumping game and are also taking actions against imports, and they tend to file antidumping claims at a rate of two to one against developing countries, two actions against developing countries for every one action against a rich country. International experts Dr. Gobind Nankani, Dr. Richard Newfarmer noticed that the system is emerging in such a way that developing countries' exporters have real problems in market access. Tariff escalation, is almost prevailing. The tariff system in the U.S. is such, for example, that a Chilean exporting raw tomatoes would pay a tariff of about 2 percent; canned tomatoes of about 5 percent; and processed tomatoes, about 12 percent. So as a result, more and more of the exports are raw. Another example from Africa: cocoa bean exports. The tariff on cocoa beans into the European Union is 0.5 percent. The tariff on chocolates is 30 percent. As a result, a country like Ghana, Ivory Coast, these countries, produce the bulk of the world's cocoa, and all of the exports are cocoa beans. The chocolates are all produced outside of Africa.

WTO Doha and Cancun rounds of negotiations disclosed new prospects to reduce global poverty by some 140 million persons by the year 2015. After Doha round, then, we can expect major benefits, up to some US$600 billion of additional income by 2015 shared by both developed and developing countries.

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7 Vice President, Poverty Reduction & Economic Management Dept, World Bank
8 Economic Adviser, Trade Dept, and Development Economic Prospects Group, World Bank
10 WTO Ministerial Conference in Cancun, Mexico, 10-14 September 2003.
Here is how poverty and poor people interact with the global trading system. First, on average, a poor person in the world faces twice the level of trade barriers as an average rich person. And there are some 2.7 billion people who live under situations of US$2 per day in terms of their income. So, 2.7 billion people are facing barriers that are twice as high as that faced by an average rich person.

The key issue, as far as poverty and trade is concerned, is market access: market access makes a big difference to the poor, because the poor have access to rich country markets; they can export more goods, particularly agricultural exports and textiles. And if subsidies are dropped by developed countries, then, they will be exporting these goods at higher prices than exist, and hence, the link to income.

It is critically important that the rich countries take action to break the deadlock. According to UN data one billion of the world's six billion people live on less than $1 a day, and 2.7 billion live on less than $2 a day. Low-income countries need investments of $70 to $80 per head per year from 2006, rising to $120 to $160 per year in 2015, it says, adding that many middle-income countries could fund those investments themselves, given adequate debt relief and appropriate, specialized technical assistance11.

There is a vital need to use the potential to speed growth in developing countries further; to raise incomes and reduce poverty. And all countries, developing and advanced economies alike, have an interest in its success. But to realize this potential, governments have to tackle inequities in the world trading system and to forge an agreement that benefits the poor. Those are the key messages for coming decades.

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11 United Nations Secretary-General Kofi Annan report (3,000 pages) on January 17, 2005, containing recommendations how to reach the Millennium Development Goals of halving extreme poverty by 2015 and going beyond to eliminate it by 2025.
Looking first at the rich countries, there is just a moderate recovery, with growth up by a percentage point, from 1.5 percent in 2003 to 2.5 percent in 2004. And indeed, the current cycle parallels very much that of the early 1990s, except this time, there is an anticipation of a weaker recovery. Policy impetus has been substantial to mitigate the worst of the downturn. The first was sharp cuts in investment and employment by corporations that are struggling with the debt overhang of the 1990s occurred. Also, there is an overlay of some non-economic events: the lead-up to military intervention in Iraq; the advent of SARS, which tended to depress consumer confidence and clouded demand conditions for business.

The growth impulse from the rich to the developing countries flows through the international markets, and here some very dramatic improvements were seen since 2001. In trade, for example, this notion of export market growth has risen from a decline in 2001 to growth of 8 percent by 2004. That's a very strong positive for developing country exports. Against this positive background, however, some risks do remain. Among these are the persistence of structural problems in the rich countries remain of concern, from widening external deficits in the United States to the battle against deflation in Japan and the fragility of the banking system there to the need for labor and product market reform in Europe. And the potential for additional shocks, given the situation in the Middle East, given the situation in oil markets, cannot be ruled out. At the same time, the scope for additional policy stimulus has run its course as available policy leaders may be insufficient to accommodate additional challenges should they arise, and here, in particular, interest rates at historic low levels; the widening of fiscal deficits across the rich countries. And this is really suggesting that a policy focus to address go back to the structural issues, including trade, should receive some priority.

Turning briefly to the developing countries, international experts see the beginnings of a robust outlook but note also that growth has been quite volatile over the last decade. And yet, at
the same time, the longer-term trend remains upward. The 2001 downturn took a toll on growth but much less dramatic than in earlier episodes. And then, finally, low-income countries have to reduce their reliance on trade preferences and, indeed, work hard to increase the competitiveness of their exports.

One of the important reasons for this is that the high level of protection in rich country markets has remained virtually unchanged since the mid-1980s. This is a stark contrast to what has happened in manufacturing protection. At the end of World War II, in 1945, the average level of protection in manufactures globally was on the order of 40 percent. That's come down to about 4 percent today. Meanwhile, in agriculture, the level of protection has remained high, on the order of 60 percent.

What are the factors behind this? It is continuation of favorable trends in domestic policies yielding productivity gains and, importantly, further opening to trade and hope for broader trade liberalizations are the main factors. One of the policy levers that the international community has to influence the long-term growth prospects is international trade and what is going on at the WTO. For a country like Russia, where there is a debate, an internal debate, as to the benefits or disadvantages of joining the WTO, it is important to disclose the main expectations. One of the benefits is bound access to European markets. As Russia becomes a more dynamic exporter in the global marketplace, and it begins to diversify out of energy, its exports will want assured access to European markets, to Western markets generally, and there is a real advantage to Russia in doing so. It might be necessary for Russia to make a great deal of movement on domestic energy prices. The World Bank likes to see Russia join the WTO, stating that it is hard to imagine a World Trade Organization without a country so important as Russia.
It is equally important to find out what would the industrialized countries stand to gain from these concessions at the WTO. Number one, they would gain from the faster world growth, which, of course, means faster growth for themselves as well as the rest of the world. Secondly, they would gain the US$170 billion in additional income – which is not a very big number, but extremely important in terms of progress. Thirdly, the poor in their own country would benefit from a gain. The tariff structures that keep the products from poor people out of the market are often precisely the products that the poor in Germany, in the United States, actually consume. So, for example, a t-shirt which comes in over a very high tariff into the United States is consumed by, more often, poor people in the United States than they are, as a percentage of income, than they are middle-class people or upper-class people. Also the study of the distributional effects within rich countries shows that they will be fairly strong. The fourth benefit is if it is possible to reduce those subsidies, it would mean taxpayers in rich countries would have to pay less. It is calculated that the average working family pays US$1,000 in excess or in taxes to support their relatively wealthy farmers. And when the tax system is a little unequal or regressive, that means poor people in rich countries are subsidizing rich farmers in rich countries.
Coming to the disadvantages that industrialized countries would have if they decide to cut subsidies and tariffs it is important to note the following. A little bit depends on the way tariffs and subsidies are actually cut. It is unlikely that there will be an immediate reduction in border protection and subsidies from one day to the next. This is likely to be phased in over a number of years. That gives time for people to adjust. Second, given an important first set of steps, on the issue of domestic subsidies and de-linking them from production, there can be an enormous impact on developing countries while preserving the incomes of those farmers to be protected. For example, if the government pays them not to produce more, but simply transfers the income to them and let them do what they want with the income, that would allow them to back out of products where they might not have a comparative advantage and begin to shift into other products where they would. In order for that to work, essential work have to be done to reduce the level of border protection, because otherwise, there is no incentive for a Norwegian beef producer or sugar beet producer, for example, to get out of sugar beet production. Basically, policy makers need to make sure that the price incentives work together with whatever subsidy program exists. But there are ways of managing this. A third thing that would be very important is targeting subsidies in agriculture to small farmers, because after all, that's often the rationale. It is not the large corporate farmers who are going to be hurt by this. But there may be some small farmers. Thus subsidies may be reduced and targeted more effectively and thereby help manage the transition.

**Sectoral developments**

*Agriculture and manufacturing.* Rich country agricultural subsidies, at some US$300 billion per year, are larger than the GDP of all of Africa. That number is also equal to six times all of the global aid that is given from developed countries to developing countries. A global simulation had brought down tariff peaks in agriculture; brought down tariff peaks in manufacturing. It lowered averages. A good agreement could boost incomes
anywhere from US$270 billion to US$520 billion, depending on the assumptions. These models are open to interpretation because of assumptions, but basically, developing countries would stand to gain anywhere from half to two-thirds of the total benefit from WTO Doha agreement. That's US$350 billion of additional income that could be expected in addition to normal growth, the income that normal growth would produce by 2015. But to realize the development promise of WTO, World Bank, FAO and others means reducing the barriers that face poor people all over the world. And here, agriculture is a priority, particularly border protection and subsidies in the rich countries. Reducing protection on manufactures – and here, tariffs tend to be higher in developing countries against developing country exporters as well. In agriculture, one of the striking features about the international trading system is that developing countries have failed to penetrate agricultural markets of rich countries, in contrast to what they have done in virtually every other market. The developing countries' share of total world exports in manufacturing to rich countries has risen from about 12 percent to over 22 percent in 2004. Similarly, intraregional trade in developing countries has also expanded. So their share of manufactures in each others' markets has increased. They also have increased in agriculture, but only in trade with each other. Meanwhile, exports to rich countries during this period have fallen.

**Consumer spending, investments, markets and jobs.** As consumer spending remained strong, what was a critical factor was the fall in investment spending. And for recovery to get off the ground there is a need for an improvement in business confidence and capital spending, and these were factors clearly required. Among the improvements in the climate for investment, corporate profits are now advancing at high rates in the U.S. and Japan. There are stronger equity markets across the OECD that had been sustained so far that tend to bolster confidence, and they may also reflect improved economic expectations. And indeed, business sentiment is now picking up, and this includes Europe. When stocks go up steadily in the United States questions begin to arise about economic growth.
And job creation figures from the Labor Department, one of the most closely watched barometers of the nation's economic health, begin to fall. After that, confidence in the economy and stocks begin a nosedive, leading to a long drought that pushed the major indexes lower. Why sometimes the stock market cannot perform the same way as after it fell so badly but made a fast recovery in 2001, 2002, 2003 or earlier. There are three main reasons for that: jobs, oil and the dollar.

**The Role of Education.** Education will be determinative of success in the 21st century at both the individual and country levels. The globalizing economy and technological change inevitably place an increasing premium on a more highly skilled labor force. Adult literacy and school enrollments will increase in almost all countries. The educational gender gap will narrow and probably will disappear in East and Southeast Asia and Latin America. Progress will vary among regions, countries, and social groups, triggering increased income inequalities within as well as among countries. School enrollments will decline in the most highly impoverished countries, in those affected by serious internal conflicts, and in those with high rates of infectious diseases. With the intense demands for education created by the shift to a knowledge-oriented economy centered on intellectual property, educational institutions will experience enormous pressure to reorganize around fulfilling the goals of actually preparing their students for the new economic order. Also, the demographic profiles of students will change significantly, as lifelong learning will become commonplace, with people shifting careers frequently, continuing to be economically productive into old age. Such mature students will be much more demanding consumers of education than today's. Those individuals who do excel at teaching will have new electronic venues for transmission of their knowledge. This will provide a large economic incentive to devote energy to teaching, as they will be reaching millions of students, rather than hundreds. At the pre-university level, many

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more options will be available to students and parents, and the current state-run monopoly will disappear. Updated versions of “voucher systems” will be commonplace, and competition among a set of institutions providing a diverse set of educational options will provide exceptional educational preparation for the university environment.

**Technology and Place of Work.** Global economic restructuring continues to be impacted by various advancements in information technology that have made the world 'functionally smaller' and have drastically changed the work place and where people work, spawning the emergence of the 'technology-integrated' office environment. As computer devices become smaller, more portable, and perform more complicated business tasks, they will continue to revolutionize how and where business is conducted.

**Cluster Sector Development.** Over the last few years, the economy has seen the growth of 'sector clusters' in various municipal settings. Sector clusters represent the concentration of investment and job creation in like-companies located in proximity to each other in relatively concentrated centers. A prominent example of an emerging cluster in the GTA is Toronto's biotechnology industry cluster, which represents a growing critical mass of biotech and related research and development, and related convergent industries.

**Emerging Growth Sectors.** The 19th-century was the heyday of society’s transformation by technology. While its influence was still large in the 20th century, its impact in the 21st will be less dramatic. Nonetheless, one can anticipate the following technology-driven transformations representing the future engines of growth.

**Computers and semiconductors (including software and information) & information technologies** Computerized society will allow knowledge to be very fluid, via the new educational systems and countries’ ability to capitalize on this transformation will be limited primarily by the effectiveness of their social and political institutions.
Health and medical care. The major health problems of the 21st-century in the developed world will primarily be related to lifestyle issues, intransigent to simple treatments with surgical intervention or pharmaceuticals and the greatest impetus for change in our health will come from health education, with educated individuals taking responsibility for the maintenance of their health and the prevention of disease.

Communications and telecommunications (including space equipment, radio and microwave communications, and entertainment).

Instrumentation [process controls, environmental equipment and consulting, optical instruments and lenses, engineering and scientific equipment\(^{13}\)]. Innovations will further improve both the systems and the methods of new technologies and modernized equipment and the use of new achievements on earth and in space laboratories.

Transportation. Solar-energy-based fuels will finally replace fossil fuels and the technological hurdles will be solved to convert this biomass into a readily transmuted and transported energy-storage medium; Also, the orgy of highway-building of the 20th-century will finally slow, as technology is put in place to allow more cars to flow over existing highways.

Geopolitical trends

As the world experiences rapid economic changes, world economies are becoming less internalized and are adopting a more global perspective to survive and prosper. Much of the global trends will be more relevant to the economically-developed nations, with the developing nations and the underdeveloped nations catching up to the status of the developed world in coming decades. Let us analyze most significant geopolitical trends in the 21st century.

The North American Economy. Its position as the leading economic region will solidify by 2050. Both the US and Canada, with their sociopolitical systems already attuned to the economic trends of the 21st century, will be in leading positions on most of the trends. The US will be the prime destination for emigrants from all over the world, with emigration from Mexico and Latin America, and Asia leading the way. Mexico, through its economic ties with the US, and the introduction of a political system responsive to the public, will become one of the dominant economies of the world. The educational resources of the US will lead the global, knowledge economy, but the consumers of these resources will not require a sojourn to the US, knowledge will be disseminated electronically.

The general investment outlook for the North American economy continues to look bright with forecasts that it will continue to advance briskly\textsuperscript{15}. Although the Canadian and

\textsuperscript{14} Source: Data from UNCTAD reports 1996-2004.
\textsuperscript{15} As indicated in Aurora Economic Development Division Economic Development Strategy introduced in 2003, Canadians are, and will be affected by government spending cuts made since 1993, which resulted in balanced budgets in the late 1990's and a reduction of interest rates to a 4-decade low; recent Government budgets tabled, which propose additional spending priority, and corporate business tax cuts; the proposed phased removal of the
American economies have become increasingly integrated over the past 40 years, the recent difference in their growth rates is obvious\textsuperscript{16}. Despite the close cooperation within NAFTA, differences in foreign policies still exist. While Canada has active economic relations with Cuba, the United States continue to practice major restrictions in trade for purely political reasons.

Today’s global economic concerns are obscuring the solidity of the groundwork laid for stronger growth in North America and, in particular, Canada. Even if the U.S. economy continues to sputter, the Canadian economy will continue to expand and maintain substantial forward motion, with real GDP gains over the next three years, because of number of factors\textsuperscript{17}.

Three very vital emerging trends that will undoubtedly affect Canada's economic future have been confirmed through the latest report on the 2001 census from Statistics Canada. All three have important implications for businesses and governments at ever level: Canada increasingly becomes a knowledge-based/technology-based economy where education makes the difference in employment opportunities and job creation, highly skilled occupations normally requiring a post-secondary degree accounted for 61% of total labor force growth between 1991 and 2001, and 17% of the growth in the labor force due to information technology jobs. In addition, Canada's workforce is aging which will impact on future productivity growth and immigrants count 70% of the growth in Canada's labor force.

\textsuperscript{16} Competing on Creativity: Placing Ontario's Cities in North American Context, Study by Aurora local government, Aurora, Ontario, Canada, 2003.

\textsuperscript{17} Canada's economy is on track to grow at three times the pace of the U.S and to have the only surplus in the G-7 this year. Forecasts expect Canada's economy to grow between 2.8% and 3.0% in 2003, and to 3.4% in 2004, with manufacturing leading the way. Canada's overall unemployment rate is expected to fall to 7.2% in 2003 and to 7.0% in 2004, and real disposable income of Canada's is expected to increase to 4.9%. Economists also predict that the Canadian dollar will appreciate to 70.4 cents (U.S.) by the end of 2003.
In **Central and South America** the most substantial changes in the wake of recent financial difficulties and election outturns and moving to a stronger recovery in coming decades are anticipated. Latin America will manage fairly rapid aggregate growth, but it will be spread unevenly across the region. The market-oriented democracies in Mexico and the southern cone will lead the way. A new generation of entrepreneurs will be inclined to favor additional market openings, but the benefits may further distort income distribution, already the most inequitable in the world. Elsewhere, the Andean region will struggle with a poorly educated labor force, unstable governance, and dependence upon commodities such as oil, copper, and narcotics. More and more, the leaders of this region will be trained as economists, and will lead these countries more towards free-market economies, with governments responsive to the people. This will facilitate dynamic economic growth. The perennial weaknesses in the educational systems in these countries, which have slowed economic progress, will be ameliorated somewhat through the globalization of our educational system.

In **Europe and Japan**, the picture is mixed. Western Europe is likely to narrow what has been a growing economic performance gap with the United States, and Eastern European countries, after EU accession, generally will adopt reform policies and grow apace. South-Eastern Europe will improve economic prospects only gradually as it improves regional security. Although Japan's economic performance in the next decades will be stronger than that of the end of the 20th century its relative importance in the global economy will decrease. Economic prospects for Russia and Eurasia are not promising. A pickup in growth in the Central European countries after EU accession is feasible, and at the same time, a slowing of growth for some of the CIS countries, including Russia, that have had relatively strong growth rates based on oil exports over the last years. While Armenia’s rates of economic growth look optimistic after WTO accession and further utilization of Diaspora’s competitive advantage (in January 2005
Jackson Vanik’s amendment\(^\text{18}\) was lifted due to essential progress made in required directions), other countries of the former Soviet Union will be slow to join the dynamic, global economy, as they struggle to establish sociopolitical systems which respect the rule of law, individual rights, property rights, and economic freedoms. Economic growth in this region will be sporadic, and will tend to concentrate in areas adjoining economically vibrant countries. Violence of all types will remain common (urban, ethnic, sectional clashes, etc.). For a country like Russia, where there is a debate, an internal debate, as to the benefits or disadvantages of joining the WTO, it is important to disclose the main expectations. One of the benefits is bound access to European markets. As Russia becomes a more dynamic exporter in the global marketplace, and it begins to diversify out of energy, its exports will want assured access to European markets, to Western markets generally, and there is a real advantage to Russia in doing so. It might be necessary for Russia to make a great deal of movement on domestic energy prices. The World Bank like to see Russia join the WTO, stating that it is hard to imagine a World Trade Organization without a country so important as Russia.

The early 21st century will be a tumultuous time for Europe, driven by global economic forces and the inclusion of eastern European countries. This will lead to the demise of the EU, and a total political restructuring culminating in the emergence of a federal structure for Europe, with economic and social freedom at its centerpiece. By 2050, the dust will be settling on this transformation, and the trends described above will be in full force. Europe’s commitment to education and its propensity to

\(^{18}\) The Trade Act of 1974 excluded all Soviet countries from having normal trade relations (NTR) status with the United States. One particular provision of the Act, known as the Jackson-Vanik amendment, required the President to deny NTR to those countries that restricted free emigration. According to the terms of the Jackson-Vanik amendment, when the President determines that freedom of emigration rights have been reinstated in a country, normal trade relations may be granted. To maintain NTR, the President must report to Congress twice a year that Jackson-Vanik requirements have been met. While successive Presidents have waived the Jackson-Vanik Amendment restrictions on Armenia during the past decade, the passage of the Knollenberg bill would grant Armenia permanent normal trade relations status, without the need for semi-annual Presidential determinations.
think globally will be its strongest competitive advantage in the new economic order. Continental Europe will continue to display a flair for innovation on social issues. In particular, we may see in the 21st century another medieval aspect of 20th-century society begun to be remedied: the penal system. As debtors’ prisons were replaced by a bankruptcy system in the 18th and 19th centuries, the 21st century may witness a similar transformation of our approach toward social deviancy. This process will be facilitated by a dynamic economy, with lowered barriers to entry for the young into the workforce, and high-quality educational resources accessible to all via libraries and computer networks. Concomitantly, we may see the legalization of drugs, with society treating equally alcohol, tobacco, marijuana, cocaine, and heroin. Britain will be watching these changes in Continental Europe from afar, in 2050 still debating whether to view themselves primarily as European, or a member of a global economy. The imprint of Thatcherism on the economy will be long-lasting, however, leaving Britain always on a different path from the rest of Europe, allowing Britain to replace Switzerland as the neutral home for supra-national institutions.

Aside from policy, the euro area is beginning to adjust to the stronger value of the euro. It has made trade more difficult. Exports have dropped sharply. Extra-EU exports have dropped. But there does offer the possibility that domestic demand, should confidence increase, become the source of growth, in contrast to what we normally see for the European Union.

**Emerging Asia** will be the fastest growing region, led by breakout candidates China and India, whose economies already comprise roughly one-sixth of global GDP. To the degree that China implements reforms mandated by its entry into the World Trade Organization, its economy will become more efficient, enabling rapid growth to continue. China's economic development, however, will be mainly in the dynamic coastal provinces. Agricultural provinces in northern and western China will lag behind causing social tensions that Beijing will be challenged to manage. East Asia is expected to enjoy fastest growth benefiting
from the quick containment of the SARS\textsuperscript{19} epidemic and eventual upturn in the high tech cycle and the re-ignition of intra-region trade. This region is an exception to the sectors advance with maturing economies growth slowing modestly.

The huge economic potential of this region will only be beginning to be unlocked by 2050, as most of the countries in this region struggle to put in place sociopolitical systems based on individual freedom and free markets. The Confucian tradition of reverence for authority will be a brake on progress, while the Confucian tradition of reverence for education will be a great advantage. The once-admired benevolent despotism of Lee Kuan Yew will be increasingly viewed as an economically ineffective political structure. India will continue its struggle to emerge from socialism, and will thrive in specific sectors in the knowledge-based economy, such as software and pharmaceuticals.

South Asia should benefit from renewed growth in India, which growth had been depressed earlier largely due to weather-related factors but also a burgeoning growth in the Bangalore high-tech services sector and manufacturing. India nevertheless faces enormous challenges in spreading the benefits of growth to hundreds of millions of impoverished, often illiterate citizens, particularly in the northern states. India's relatively strong educational system, democracy, and English-language skills position it well to take advantage of gains related to information technology. This should power the South Asia region.

\textit{Middle East, North and Sub-Saharan Africa.} The gains in this part of the world are likely to be lower: In the former region, as economic uncertainties may persist as well as political uncertainties; in Sub-Saharan Africa, where weaker commodity prices or those commodity prices for Sub-Saharan Africa and still-sluggish European growth may play a role. This will remain the most troubled region of the world, though its geopolitical importance will diminish as we move away from an oil-based

\textsuperscript{19} Severe Acute Respiratory Syndrome
energy economy. In 2050, the Arabs and Israelis may still face some challenges that might need further international assistance. This region will still be hamstrung by poor political leadership, with the exception of a few countries like Israel, Egypt and South Africa, which will cause the global economic trends listed above to largely leave this region behind. While global health organizations will invest a large effort in Africa, with the introduction of vaccines and simple public hygiene, the low level of basic education will leave this region devastated by sicknesses and low life expectancy, in stark contrast to the rest of the world. In Sub-Saharan Africa, persistent conflicts and instability, autocratic and corrupt governments, overdependence on commodities with declining real prices, low levels of education, and widespread infectious diseases will combine to prevent most countries from experiencing rapid economic growth. Today’s Africa is one of the regions that is unlikely under current projections to meet the Millennium Development Goals. Nearly half of the total projected increase of the number of people lifted above poverty would accrue in Africa. This region’s forecast might be more promising once the developed nations honor their commitments to provide 0.7% of their annual income to be spent on projects to reduce the poverty and eradicate hunger\textsuperscript{20}.

The countries and regions most at risk of falling behind economically are those with endemic internal and regional conflicts and those that fail to diversify their economies. The economies of most states in Sub-Saharan Africa and the Middle East and some in Latin America will continue to suffer. A large segment of the Eurasian landmass extending from Central Asia through the Caucasus to parts of southeastern Europe faces dim economic prospects. Within countries, the gap in the standard of living also will increase. Even in rapidly growing countries, large regions will be left behind. For the long-term outlook, there is a need to compare growth in per capita terms. And here, longer-term trends through 2050 remain upbeat for most regions, contrasted

\textsuperscript{20} United Nations Secretary-General Kofi Annan report, January 17, 2005.
with the performance of the nineties. And this supports, in part, the expected achievement of the Millennium Development Poverty Goals for developing countries as a group, though Africa, in particular, is expected to fall far short of this target.

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WTO Ministerial Conference in Cancun, Mexico, 10-14 September 2003.
Chapter 2
Challenges for Global Economic Security

Global economic security will be defined in the coming decades by two concurrent forces in international relations: the quest for energy and the rise of strategic regions. Pivotal to both will be the East, a hemisphere that spans Eurasia through to the Western Pacific and South Asia through to the Indian Ocean. East Asia, comprising China, Japan, Korea and the Association of Southeast Asian Nations (ASEAN), is the most dynamic region of the East. The International Monetary Fund (IMF) projects that in 2015 East Asia will account for over a quarter of global output (26.3%) compared to the USA’s declined share of 22% (IMF cited in Rudd, 2010). The People’s Republic of China (PRC or China), the world’s biggest energy consumer in terms of a range of energy sources (oil, natural gas, nuclear power and renewable energy), may be viewed as the core state of the emerging global markets of East Asia and a core contributor to trade and investment in Africa and Latin America. With its growing resource needs, China represents a key determining factor in the way in which the quest for energy is handled. Its economic weight, especially when augmented by its regional associations, is such that its mode of international interaction will be setting standards rather than following them from the West. Its cross-regional energy diplomacy will strongly influence the competition-cooperation calculus: whether hedging or harmonising strategies become dominant in the geopolitics of the future. This chapter explores the challenges for global economic security at a time of transition from West to East. It concludes with a ‘mandalic’ recommendation that includes social policy for a more comprehensive security.
Energy

Energy resources are vital for the upkeep of the global economic system. Ninety-five per cent of world energy consumption derives from fossil fuels: approximately 40 per cent from oil, 30 per cent from coal, and 25 per cent from natural gas, leaving hydro-electric and nuclear power to account for the remaining five per cent (Goldstein and Pevehouse, 2004: 364). The competition for control of natural resources has been a perennial theme in international relations, as resource wealth traditionally represents a significant contribution to the power and influence of a nation – assuming such wealth is harnessed by a strong state and not squandered by a weak and corrupt one. Whether as timber to build the great navies of the past, as coal to power steamships and the expanding railways, or subsequently in the 20th century as oil to support the world’s industrial development, energy is still the most sought-after commodity for power. This power may be understood in both senses: physical propulsion and political projection. A graphic example came on New Year’s Day 2006, when energy-rich Russia punished the Ukraine over a pricing dispute – and this in the context of the Ukraine’s anti-Moscow ‘Orange Revolution’ a year earlier – by suspending the supply of natural gas. Moscow demonstrated in this instance, and on subsequent occasions, that it was capable of causing energy shortages in the Ukraine and throughout Europe during the depths of winter.

Worldwide energy supplies have entered an era characterized as a “crisis in supply capacity” with the Organization of Oil Exporting Countries (OPEC) having reached 99% of its capacity to produce (Barnes and Jaffe, 2006: 145), while reserves in the “traditional crude-producing areas are rapidly depleting” (Goldstein and Kozyrev, 2006: 167). The fall in production capacity and reserves has not been matched by a drop in demand. The world’s largest oil (but not overall energy) consumer in 2010, the United States, is projected to increase threefold its oil imports from the
Persian Gulf by 2020 (US Department of Energy, cited in ibid.: 144; Smith and Schmollinger, 2010).

The world’s second largest consumer of oil is China whose industrialization is still incomplete. A net importer of oil since 1993, China’s proven oil reserves are expected to be depleted by 2018 (Wright, 2004: A3). By 2025, its energy requirements would have quadrupled, while in the first five years of this new century China alone was responsible for a third of the growth in oil demand worldwide (The Economist, 2004, 2005). Small wonder that besides investing in energy-rich countries, China is also looking at more futuristic plans: one of the tasks set for its space program is to extract lunar energy reserves (isotope helium 3) to compensate for limited oil reserves on Earth (Chinanews.cn, 2005).

China’s position as a leading energy consumer in the company of other energy-hungry great powers who are China’s potential rivals – the US, India, Japan – suggests a scenario of a geopolitical competition for resources. If a resource war is the danger for the future of global economic security, opportunity beckons at the other end of the spectrum. China could set the standard for improved energy consumption patterns: “If China uses electric cars, hybrids and so on, they will impose the manufacturing line on most of the rest of the world” (International Energy Agency chief economist, Fatih Birol, quoted in Smith and Schmollinger, 2010). By 2010, China’s investment in science and technology made it “home to the world’s largest private solar research facility and the world's fastest computer” (Stutchbury, 2011: 11).

This is indicative of a broader trend dubbed the ‘new globalization’ in which global economic power is shifting to Asia after the weakening of the West by the global financial crisis (GFC). Susilo Bambang Yudhoyono, the president of one of the emerging market economies of Asia, Indonesia, told the 2011 World Economic Forum in Davos, Switzerland, that Asia was undergoing a “rapid and strong economic, social, cultural and
strategic resurgence, the size of which is certain to redefine global affairs”; this “big shift”, he said, would define “21st century globalism” (quoted in Stutchbury, 2011: 11).

**Strategic Regions**

Energy and the rise of strategic regions, especially in Asia, come together in a direct fashion when considering the geopolitics of oil. The Middle East remains the world’s energy heartland. It is also widely considered to be the most intractable zone of political conflict, with the West’s dependence on oil ensuring a global dimension to events in the Middle East. The adjoining region of Eurasia, which encompasses the Caspian Sea basin and Central Asia, is regarded as one of the world’s richest, largely untapped, sources of oil (see Forsythe 1996; Goldstein and Peverhouse, 2004: 367-8). It was also the site of the infamous ‘Great Game’ of the 19th century when Britain and Russia contested control of the region. Today, with its emergent energy infrastructure, despite the problems of laying pipelines across war zones and diplomatic hot-spots, another Great Game is in the offing (on the new Great Game see, for example: Zha, 2006; Kimmage, 2005; Wolfe, 2005). The politics of terrorism and pro-democracy movements on a post-Soviet gameboard, have injected new elements into Eurasia’s 21st century great power rivalry. The principal players are now Russia, the United States, China and India. Three of these, Russia, China and India, are members of the ‘BRIC’ group. This is an acronym for Brazil, Russia, India and China, coined by economist Goldman Sachs (2003), who argued that the economies of the BRICs are rapidly developing and by 2050 will eclipse most of the current richest countries.

The processes of regionalism have shaped great power relations in such a way as to provide a stark contrast between empires of the past from the strategic regions of the present. In the former, great powers carved up the globe amongst
themselves and laid claim to resources. In the latter, membership is premised on institutional requirements and mutual benefit. Thus the old imperial powers of France, Germany and Britain are part of the European Union. Russia is a member of the Eurasian security grouping, the Shanghai Cooperation Organization, as is China, with India an observer. China, Russia and India also belong to the East Asia Summit – along with Japan and, more recently, its defense ally the USA. The Asian players are a part of the wider Asia-Pacific Economic Cooperation (APEC) region that bridges the Pacific to include members from the Americas. The Americas themselves are regionalizing at multiple levels since the early 1990s: from the hemispheric to sub-regional (see Grugel, 2004; Blackett, 2005).

While driven by trade in the post-Cold War enthusiasm for geo-economics, the global regional process entered a security phase this century. This was heralded by the ‘war on terror’ since the attacks of 11 September 2001 and the rise of China as a military as well as an economic power. A prime example of the securitizing of regional affairs was the way in which APEC was re-invigorated in 2006 by three of its members for strategic purposes rather than directly economic ones. Australia, Japan and the US held a trilateral meeting to strengthen APEC and the ASEAN Regional Forum as “the primary elements of East Asia’s security architecture” (Walters, 2006: 2; see Downer, 2006). While it began in 2002 at the level of senior officials, the Trilateral Security Dialogue would henceforth meet annually at ministerial level. The timing of this trilateral support for established regional frameworks came soon after the inaugural meeting of the East Asia Summit in Kuala Lumpur in December 2005, a summit which excluded the United States. US and Russian inclusion came at decade’s end, with their formal membership attendance at the 2011 Summit. Such diplomatic dynamics in the first decade of the 21st century revealed Washington’s determination not to be sidelined by China in the Western Pacific. Clearly there was a danger of adversarial strategic groupings emerging; hence the USA’s eventual inclusion.
Indeed, Sino-US strategic competition was anticipated as a plausible trajectory back in 2006. Rather than permitting itself to appear as a counterpoint to China’s multilateral efforts in East Asia and Eurasia (SCO) that excluded the US, the Trilateral Security Dialogue was presented as a means of balancing relationships and even saving them from further deterioration: here the diplomatic rift between Beijing and Tokyo was a case in point (see Walters, 2006: 2). The inclusion of India on both the East Asia Summit and in the Trilateral Security Dialogue’s commitment to a “global partnership with India” (Downer, 2006), was indicative of a level of interdependence unheard of in the bipolar Cold War period or even the traditional balance-of-power. The world has indeed become, in Arjun Appadurai’s (1996: 41) words, “one large, interactive system, composed of many complex subsystems” (see the classic on complex interdependence: Keohane and Nye, 1977).

Such levels of interdependence suggest that great powers are no longer the rivals they used to be. Instead, they operate out of their respective regions to consolidate gains and create coalitions. Examples are both actual and potential. Russia cooperates with its fellow SCO member, China. Indeed, joint Russian-Chinese military exercises have been held every two years since 2005 under the auspices of the Shanghai Cooperation Organization.

The first, “Peace Mission 2005”, was the largest since 1958 when the two were still Communist allies. It was funded by Beijing, and involved air, sea and ground forces, with about 7,000 Chinese and more than 1,800 Russian troops. Phase 1 occurred near the city of Vladivostok on Russia’s Pacific coast. Phase 2 moved to Shandong Province in northeast China (see ‘Russia, China Kick Off Joint Military Exercises’, 2005; Khan, 2005). The perceived political dimensions of the maneuvers were also twofold. One was that they were Russia's response to the cooling of relations with the United States and other Western nations, most notably over the ‘Orange Revolution’ in the Ukraine. The other saw ‘Peace Mission 2005’ as a further development in the Sino-Russian ‘strategic partnership’ of 1991 when the USSR
collapsed and Russia and China promoted a multipolar world (in other words, opposition to US hegemony in the international system).

As for ‘Peace Mission 2007’, 1,700 Chinese troops and their equipment were deployed to a small town in the Urals to engage in wargames based on a scenario of a terrorist attack. The Chinese side said the PLA had not been deployed this far before and that it “contributed to the capabilities and experience of the PLA” (quoted in de Haas, 2007). China’s ability to project force well beyond its borders could also be construed as a capability acquired for future contingencies regarding security of oil and gas pipelines.

‘Peace Mission 2009’ was held in the Russian Far East and Northeast China, near the Korean peninsula. Its objective, using “paratroops, tanks, self-propelled guns, armored personnel carriers, helicopter gunships, fighter planes, and jet transports”, was officially stated as: “to verify operation plans and capabilities to respond to unexpected incidents under the unstable environment of countries and regions” (Blank, 2009: 8). This suggests a stabilization mission in North Korea. The ‘Peace Mission’ exercises may be seen as going beyond the Central Asian SCO framework and anticipating other contingencies that would harm China’s and Russia’s mutual security environment, including “unexpected incidents” in North Korea.

Multipolarity, however, has – as its name implies – many faces; while complex interdependence, as noted above, has made great power relations more malleable. Russia is prepared to maintain a pro-West disposition and provide energy to China’s rival, Japan, in order to avoid the Russian Far East eventually becoming a Chinese satellite, and to command competitive prices for its Siberian resources (Goldstein and Kozyrev, 2006: 171-2). The US, in its mounting energy dilemma vis-à-vis the Middle East, is likely to find common cause with China as “an oil-importer ally rather than focusing on how Beijing could some day be a strategic rival” (Barnes and Jaffe, 2006: 157). China, for its part, must depend on the US for security of the sealanes, as it still
lacks blue water naval capability. With 80 per cent of China’s oil imports passing through the Malacca Strait in Southeast Asia, it is understandable that PRC President, Hu Jintao, should refer to this vulnerability as the ‘Malacca dilemma’ (cited in US Department of Defense, 2005).

Meanwhile, China is casting its energy net globally. Aware of its over-dependence on Middle East oil, Beijing has been in the process of buying up energy and other strategic materials. It even tried buying a major US oil company in 2005. An offer by the Chinese state energy company, China National Offshore Oil Corporation, to purchase Unocal, one of the largest oil companies in the United States, was blocked in view of the potential for the company’s oil and gas resources going to China instead of the US at a time of emergency. Despite an impressive array of energy agreements across most continents, China does not appear to be solving its problem. A RAND study concluded that “foreign oil exploration and development projects are moving slowly and probably will not produce enough oil to offset China’s projected growth in oil imports over the next 20 years” (cited in Zha, 2006: 181). Moreover, China’s lack of transparency in seeking oil resources from ‘rogue states’ is problematic. According to the director of the Centre for International Energy Security at Renmin University in China, Zha Daojiong, China “has been poor at making energy transactions with countries such as Iran and Sudan transparent”, thus giving rise to “speculation that China has a well-coordinated project for countering US influence . . .” (Zha, 2006: 3-4).

In the end, China’s reliance on overseas energy supplies and US protection of their transportation to markets, means that Beijing will need to focus its regional ‘charm offensive’ on energy diplomacy and avoid appearing confrontational, as had occurred during its dispute with Japan in 2010. More than that, it will need to exercise responsibility in the way in which it consumes resources – from ‘oiloholic’\(^{21}\) to good international citizen. Global

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\(^{21}\) The August-September 2005 cover story of *The Economist* aptly headlined the US and China as ‘The Oiloholics’.
economic security will much depend on the path taken by world’s biggest developing country. Is it a stakeholder or a free-rider? To quote US Deputy Secretary of State, Robert Zoellick, when he spoke at a dinner of the National Committee on US-China Relations in September 2005 (Xinhua, 2005): “We now need to inspire China to become a responsible stakeholder in the international system.”

**Social Policy: The Highs and Lows of Global Politics**

What does this mean in terms of broader economic security? The global financial crisis which entered its high-point in 2008 would mark the US and others that followed the American growth model as irresponsible stakeholders. This is not only a question of economics but also of social policy. To understand this, it is worth noting that besides the ‘high politics’ of the global Great Game in energy sourcing and securing its flows to world markets, there are the so-called ‘low politics’ of poverty. This needs to be delineated historically to understand the hold of hard-power politics over soft-power modes of governance, such as the UN Millennium Development Goals (MDG). The goals to (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality and empower women; (4) reduced child mortality; (5) improve material health; (6) combat HIV/AIDS, malaria and other diseases; (7) ensure environmental sustainability; and (8) develop a global partnership for development, have been “agreed to by all the world’s countries and all the world’s leading development institutions” (UN, 2010). If they are to be realized by the designated target date of 2015, they would have to be deemed ‘high politics’ – the driving forces of the international agenda. This would represent a reversal of the usual divisions between high and low.

During the Cold War with its strategically opposed Soviet and American camps, military affairs were deemed ‘high politics’ while economic, environmental and social affairs were consigned
to the category of ‘low politics’. After the Cold War, trade often become more important than military might, and the environment and human rights occupied a far more prominent position on the international relations agenda. Security from the 1990s onwards was no longer taken for granted as meaning military security. ‘Human security’, denoting the individual’s worth as a unit of analysis in global affairs, became widely considered when issues of poverty, human rights, and state-sponsored violence arose. Nonetheless, human security did not define power in the 1990s and early 2000s, but was used to justify – in the name of ‘humanitarian intervention’ – the exercise of hard power. Paralleling this was economic intervention, in the name of fiscal stability. Both were acts of sovereignty-defying behavior in a global theatre of operations.

In the first act of such sovereignty-defiance, the low politics of human rights permitted the high politics of ‘regime change’ by armed intervention, as demonstrated by the 2003 war on Iraq. The securitization of human rights became evident in this instance, as well as in the post-9/11 environment generally. The ‘war on terror’ meant that for citizens to feel safe from terrorism, they themselves would have to submit to the state’s close scrutiny. Middle Eastern and Muslim individuals became especially prone to feeling insecure under the new rules of engagement. Thus humanitarian intervention could occur across personal and not only state borders, for the perceived greater good.

The second form of intervention concerns global economic processes that have affected the individual, the state and, because of ‘contagion’, the region. With power in the 1990s gravitating to trade and economics, particularly the power of the global financial system, those who sought to join the system were not always prepared for the shock. The capabilities unleashed by the new geopolitics of ‘globalism’ were shown to be formidable: they could cripple whole nations, as evidenced by the Asian financial crisis of 1997-98, and devastate an individual’s ‘human security’ if one happened to be a Thai, South Korean, or Indonesian worker. The power of global capital to intervene in a nation, and then of
the IMF to ‘redress’ the problem through its enforced policies, illustrated in no small way the political culture which had evolved in ‘integrating’ the world economically. This political culture was recognizably American.

It was an American culture of irresponsible lending and consumption that led, a decade later, to the global financial crisis – the worst since the Great Depression of the 1930s. It began in the US with the collapse of the housing bubble. The US Financial Crisis Inquiry Commission of 2011 found that this crisis was avoidable and blamed “widespread failures in financial regulation; dramatic breakdowns in corporate governance; excessive borrowing and risk-taking by households and Wall Street; policy makers who were ill prepared for the crisis; and systemic breaches in accountability and ethics at all levels” (Financial Crisis Inquiry Commission Report, 2011).

The GFC sharpened debate on the nature of global economic security. Like the Asian crisis of 1997-98, what began as a single-country, single-sector crisis spread to other countries and other sectors, demonstrating how intimately interconnected the global age has become. As sociologist and economist Walden Bello (2008: 35) remarked: “Globalization has made ‘decoupling’ impossible. We are like prisoners bound together in a chain-gang.” Certainly there was a greater coupling between the developed and the developing world, with a more active participation of the new emerging powers in shaping the global economic system. This was evidenced in the November 2008 G20 meeting of the industrialized nations and the largest of the emerging economies to formulate a strategy for dealing with the crisis (BBC News, 2008). If the rise of new powers is becoming a prominent feature on the international horizon, then for many of the industrializing great powers economic security will remain a major focus; and in turn this gives added momentum to regional economic integration (Pan, 2007). Hence the relationship between regional governance and economic security will deepen. How is this to be conceptualized?
First, it is necessary to recognize the problem of security *per se*. An idea that security is multi-sector, larger than the state but as small as the individual, as well as spanning traditional and non-traditional spheres of activity, requires a distinctive mode of investigation. One such mode is to locate economic security at the heart of a security ‘mandala’ that connects the levels of analysis and spheres of operations. This is a fitting representational device as it comes from the most dynamic of the world’s strategic regions in Asia. Its characteristic attributes of schematic integration, normative directionality and cross-sector symmetry, all the while maintaining actor sovereignty, conform with Chinese and Southeast Asian regional perspectives. China’s new foreign policy perspective of “harmonious world” (和諧世界, *hexie shijie*) calls for multilateral cooperation and assistance (see *Xinhua*, 2009), while ASEAN has long pursued this approach, as well as a nested (mandalic) expansion of relations with other organisations and actors. Herein lies an Asian rendering of the relationship between regionalism and economic security in an era when regions are more than geographic expressions. They may also be part of the global ‘chain-gang’, but with powers to challenge the prevailing financial and governance system by keeping their eye on the longer-term horizon.

**Constructing Global Economic Security**

Constructing the future of global economic security is first and foremost a contemplative exercise on the part of the international stakeholders – not only the great powers but also civil society. Where does the world want to be? For example, the UN Millennium Development Goals project has articulated the desired state of affairs in 2015. What is needed? What needs to be overcome? Thus, for example, if a country is to survive and prosper, what is required (poverty alleviation, education, economic and political ‘transparency’, cultural wealth?) and what needs to be overcome (correspondingly, sources/structures of
poverty, availability and accessibility of education, ways and means to circumvent corruption, encouragement and reward for cultural enterprises rather than allowing ‘cultural amnesia’ to set in). The IMF has one view of constructing the future of ailing nations. It lends them money on condition that certain policies are adopted, and this is known as IMF conditionality, while the implementation of conditions is called ‘structural adjustment programs’ or SAPs. This represents an appropriate acronym in that SAPs do indeed sap the lifeblood of a nation that must cut back on social welfare programs to meet IMF guidelines.

Are there other approaches? UNICEF Bhutan, which has translated the guiding principles of the Convention on the Rights of the Child (CRC) into a mandala – blending the Buddhist approach to life with the basic framework of the CRC – does provide a possibility (see Figure 1).

![Figure 1 UNICEF mandala](http://www.unicef.org/bhutan/mandala.htm)

What is a mandala? (See Culture Mandala; Dellios, 2001, 2004.) While the word comes from Sanskrit to denote a sacred circle, the appearance and experience of mandala is universal – and universalizing. Integrated mandala patterns may be found in nature (the flower and the snowflake) as well as in cultural expression (as illustrated by the Tibetan and Navaho sand-paintings, the ‘rose windows’ of Gothic cathedrals, as well as the Chinese bagua symbol with its yin-yang centre). The mandala
might be viewed a fitting metaphor to act as a model for a more balanced conception of economic security, one that recognizes culture as central to human resource development. In this instance, a globalizing world can be understood as a unity, in which cultural and material divisions – as well as connections – are more readily discerned. The mandala exhibits three key attributes necessary for a more balanced global socio-economic existence. They are the integrating elements of the relational, the educational and orientational – whereby cultural and ethical direction serves to bestow meaning in people’s lives. In the opposite direction, a disintegrating world scenario would feature a loss of relationships and hence alienation, a re-education process that serves prevailing ideologies, and the subsequent disorientation that comes from losing one’s sense of place, direction, and self.

A mandalic view of global economic security is more constructive of desired futures than descriptive of prevailing conditions. After all, the UN Millennium Development Goals are unlikely to be fulfilled by 2015, though progress can be made. The American growth model has not been replaced, though a shift in values is accompanying a shift in power. China, India, Russia, Brazil, Indonesia, Turkey and other emerging markets are not without their fragilities and potential ‘bubbles’, though their continued development will improve the standard of living of their population and create a market for their aspirations – such as better health, education, employment opportunities, housing, infrastructure. A mandala is a diagram of relationships toward ‘harmonious’ development. ‘Harmonious society’ and ‘harmonious world’ have been the 21st century catch-cries of China’s Communist leaders. They have drawn on their Confucian cultural traditions to augment the salience of their Socialist political outlook. If China as a core state of the East Asian region (which itself is suggestive of a mandala formation) continues to thrive, it will be difficult to discredit a Confucian-inspired ‘harmony’ ethic.
Conclusion

While the search for energy and the rise of strategic regions are defining features of the prevailing international scene, the typically Eastern art of contemplation is needed to re-imagine a world in which global economic security becomes a reality for all. Already the United Nations has articulated its Millennium Development Goals in a bid to break the spell of ‘high politics’ and present the traditionally ‘low politics’ of human security as a priority task in global governance. Neither the UN MDG nor the mandala model of constructing a balanced future are idealistic when one considers the expanding dimensions of global development. Large industrializing states like China and India are as energy-dependent as the developed West. Together they are in need of innovative approaches to the problem of long-term survival. How to meet the rising expectations of citizens from developing and transitional economies are more immediate concerns for one side of the globe, while restoring economic confidence is the focus of the other.

Globalization is an increasingly multi-faceted experience that involves many layers and levels of governance. Global governance, which in this chapter was highlighted in the so-called ‘low politics’ of the UN MDG, and regional politics, which revealed the emergence of strategic regions of influence, are evolving towards more integrated, mandala-like, forms. At the same time, they are liberating cultural energies necessary for sustaining life beyond mere survival. The quest for energy resources will preoccupy nations for a long time to come. The primary challenge for global economic security is how well they coordinate politically. Strategic regions are likely to prove to be the most effective sites for this undertaking.
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Chapter 3
Economic Globalization and Economic Security

Economic globalization and foreign economic security

The world history counts numerous steps of evolution from an isolated “natural economy” where people of each community around the world were producing goods consumed solely by local inhabitants – to a global economy, where almost everyone consumes most of the products manufactured in the rest of the world. In other words, economic globalization is not in a virtual dimension any more. It is our daily life and a prevailing trend in the world economy along with other tendencies and developments. People and nations strongly depend on each other not only in protecting the environment and maintaining peace, but also in producing and consuming most demanded goods and services, in developing acceptable monetary and banking systems and other vital preconditions.

First and most vital precondition for economic globalization is peace and stability in the country, surrounding region, as well as in strategic trade and economic partner countries. There is no growth without peace and there will be no long term peace without real economic growth. Also, none of the countries may be successful in being integrated into the world economy without being integrated in the region and without utilizing cooperative advantages regionally. Regional cooperation, therefore, is another precondition for globalization. Regional economic security is also essential to construct and maintain local economic security. It is the ability of all regional players to accept common principles for cooperation and implement them in accordance with their national interests, international standards and prudent consideration of international laws, bilateral and multilateral agreements based on careful use of resources and protecting jointly shared environment. Local economies are all impacted by the global trends and
developments. The difference is that some of them recognize this impact, others try to cope with local issues by relating them to local sources of problems. Local economic security is largely influenced by the global security atmosphere.

Geopolitical strategy of the state depends on national interests and objectives for economic development. In turn, geopolitical circumstances define foreign policy and impact on the structure of foreign markets, the system of promoting the penetration of competitive goods to those markets, not to mention the efficiency of market economy and economic globalization. None of the economies may survive isolated from the rest of the world. Open market economies are strongly connected with each other due to the attempts of countries to better utilize national competitive advantages. Moreover, due to the ever growing volumes of international trade supplies of many products create certain dependence on imports from various countries turning into global interdependence. The more diversified are the sources of imports from a number of nations, the more independent is the economy from external sources. Furthermore, limited number of countries represented in imports of the nation allows to establishing control over consumption of goods and services, as well as on many industries, erecting dependence, hence creating an essential threat to economic globalization.

Foreign debt is a significant factor impacting foreign economic security of any nation. Foreign debt is by and large the liability of state expressed in foreign currency that arise from loans, government bonds purchased by foreign citizens, as well as interests, dividends due to foreign residents, and others. Growing amount of foreign debt not only affects foreign economic security, but also leave less opportunities for careful consideration of national interests and funding industrial production projects while designing strategies of economic development due to the terms and requirements by foreign lending governments or organizations.
The unstable rates of growth of economies and numerous hardships create unstable basis for the national currencies and for their exchange rates. In addition it is hard to underestimate the high level of dollarization in most of the developing countries. In other words it demonstrates that even the local population in those countries trusts the foreign currency more than the local currency. It creates adequate grounds for foreign economic security in terms of nation’s capacity to serve the foreign debt by proper foreign currency reserves. The situation had been changed somehow after the introduction of EURO. Although growing part of the savings are being kept in euros, and the trend toward euroization is becoming more evident, it only leads to the formation of a bipolar currency system in the world economy and can never be a remedy for the non member countries of euro and dollar zones. It is obvious that collective actions need to be taken to strengthen the national currencies to reduce and eliminate growing disparity between the foreign debt and available foreign exchange reserves. The unstable state of local currency along with unexpected high fluctuations of exchange rates may impact negatively on economic growth and turn into critical issue for foreign economic security. Many countries with transition economies face serious obscurities in setting up accurate parity and exchange rate while introducing new national currency or during the monetary reform that may later lead to hyperinflation or deflation that may further drop the level of competitiveness of goods and reduce export volumes.

Openness of economy is the level of dependence of local economy from international markets and global developments. Openness in terms of institutions is the level of liberalization of trade and foreign exchange regimes of the nation. As a result, entrepreneurs and companies face essential bottlenecks while doing business abroad and foreign companies have an access to local markets. Dependence from limited number of goods in exports is a serious risk for foreign economic security since the unpredictable fluctuations of prices, and demand on external markets may change the state of affairs locally, reduce the
production volumes and lead to an economic disorder and cataclysms. Therefore, diversification of exports is needed along with the search of new markets for consumption to lower the external dependence. Otherwise strong dependence may be established from limited number of goods in exports that might have a negative impact on economy’s competitiveness and result in relatively low volumes of foreign trade turnover and negative balance in trade. The same may be caused by strong dependence from imports and reduction of local industrial production output. In turn, negative balance in trade will further worsen the balance of payments and the nation may end up with financial default and inability to deal with the balance of payments crisis – a serious threat to foreign economic security. In addition, underdeveloped infrastructure and transportation facilities, lack of adequate export and foreign exchange control and lack of required discipline against smuggling of goods at customs, as well as illegal imports, contraband, trafficking of restricted goods and services are among essential foreign trade related threats to foreign economic security.

Another threat for developing and transition economies is prevailing share of raw materials and natural resources and shrinking volumes of finished goods in exports. Countries that trade with oil, gas, other natural resources, or semi-finished goods attempt to exchange their export items to new technologies and modern equipment to produce finished goods. Before the gap is being filled, developed nations record new achievements in science and technology and improve the level of competitiveness of their economies. However, not always the competition in foreign markets is free of subsidies and other elements of protectionism, thus creating unequal conditions for competing parties. More liberalized foreign trade of host nation against protectionism in foreign trade from abroad and too much openess of local market and unfair foreign economic competition, including dumping are among major challenges in modern economy. Weakness of local market against subsidized imports of goods and services is a significant problem for many nations.
However, openness of the economy has no alternative in current world. International organizations like WTO, UNCTAD and others deal with unfair trade practices and set up rules and standards for economic policy to reduce obstacles in foreign trade. Although openness has no alternative internally and externally, it may turn into vulnerability of national economy to foreign financial and economic recessions by its dependence on key international currencies and commodities. Protectionism cannot help to overcome the consequences of external impacts. Instead, high level of competitiveness of local economy may allow the state to better cope with negative influences.

Growing deficit of the state budget in many countries is being financed by external sources thus creating foreign economic dependence from external sources. Even the local sources of funding the deficit may turn into an external one when state bonds are not properly allocated and well marketed initially. State bonds are issued with different redemption dates. To encourage investment opportunities the gained profit is tax-exempt. Because of a lack of interest by local public the main portion is being sold to foreign residents (foreign citizens, banks or companies) hence transforming the local debt into a foreign debt and increasing the dependence from abroad.

FDI are vital for economic growth, however, too much inflow of capital from one or two countries creates conspicuous dependence from them and turns into a serious threat to foreign economic security. This might be a typical trend in transition economies where strategic partners in political arena try to become major trading and business partners and increase the amount of FDI and cross investments. In some developing countries local legislation better treats foreign business people and companies compared to locals. Many laws provide tax brakes, investment privileges and other incentives whereas local investments are paid less attention and importance, thus leaving a space for foreign dependence and endangering foreign economic security. It is hard to estimate the gains and the losses when the nation acquires sufficient amount of FDI, and have less
control over their further goals and face a problem to integrate foreign owned enterprises into the overall national program for economic development. Therefore, pure economic achievements may be overweight by sovereignty loss and de facto separation of industries and fields or territories from the rest of the economy and its intended macroeconomic objectives. Investment diversity applies not only to the number of countries but also to the size of investments. While the country benefits from substantial amount of FDI, its’ possible reduction in later years may seriously affect by and large the national economy thus resulting in slowing down the rates of economic growth. Therefore, FDI need to be diversified in terms of industries and in terms of companies and countries investing in local markets. In case of seizing the terms of cooperation by one or two investors will not affect significantly macroeconomic growth. Otherwise, monopolized investments in many sectors may put at risk foreign economic security of any nation.

Mass outflow of capitals is a significant threat to foreign economic security. While unattractive investment environment is cause of mass outflow of funds, dependence of the nation from “hot money” is another threat to sustainable development. This form of short term foreign borrowing may be interrupted, hence cause a significant damage to the implementation of large scale economic projects and further outflow of capitals. Legally it may be in a form of transfers from local commercial banks to foreign banks. Among illegal forms of outflow of funds are artificial decreases of prices while exporting goods, and artificial increases of prices during the imports (the difference between the fictitious and real prices are being transferred by foreign business partners to the accounts of local business circles in Western banks), as well as advance payments for such imports that never follows and other fabricated cases for mass outflow of capitals. According to UN data annually, 300 billion dollars are being “laundered” as a result of illegal trade of narcotics, weapons, underground business, prostitution and others.

While the developed nations create attractive environment for intellectual work and further enhancement of professional skills
of population, most of developed nations suffer from such a threat as “brain drain”. Moreover, in some countries the outflow of skilled labor is being fully or partially compensated by the new comers whereas in others it turns to an irreversible trend. As a result, government spending on educating professionals is being drained with no benefit to the nation. It is no secret that a large number of population living under hard social conditions, especially the intellectuals, are compelled to sell their accumulated knowledge and valuable data or migrate to industrialized nations. Some countries prefer to systemize such works and conduct their full-range marketing in various parts of the world through international organizations and major companies via fairer business contracts. Other countries use local intellectual potential through official dispatch via intergovernmental agreements of temporarily unemployed specialists whose know-how is not being used in the host nation for the time being. The advantages of this option are also obvious and enable

- to allocate less means intended for unemployment benefits;
- to provide clear-cut payment for skilled labor and their families;
- to levy state tax from the income of the people sent on mission, providing foreign currency inflow to the state budget;
- to improve the skills and knowledge of local specialists in different areas that in other cases require additional means from the state;
- to guarantee on interstate level the return of professionals to homeland with acquired intellectual capacities and material resources.

In sum, the following are among the major threats to efficient economic globalization:

- increasing volumes of foreign debt;
- growing disparity between the foreign debt and available foreign exchange reserves;
- unexpected high fluctuations of exchange rates that may impact negatively on economic growth;
- setting up unjustified parity and exchange rate while introducing new national currency or during the monetary reform that leads to hyperinflation that hurts consumers or deflation that may drop the level of competitiveness of goods and reduce exports;
- too much openness of local market against subsidized imports of goods and services, unfair foreign economic competition, including dumping, economic espionage, etc.;
- dependence from limited number of goods in exports;
- relatively low volumes of foreign trade turnover and negative balance in trade;
- dependence from imports;
- balance of payments crisis;
- underdeveloped infrastructure and transportation facilities for foreign trade;
- lack of adequate export and foreign exchange control and lack of required discipline against smuggling of goods at customs;
- illegal imports, contraband, trafficking of restricted goods and services;
- prevailing share of raw materials and natural resources and shrinking volumes of finished goods in exports;
- liberalized foreign trade of host nation against protectionism in foreign trade from abroad, vulnerability of national economy to foreign financial and economic recessions by its dependence on key international currencies and commodities;
- growing deficit of the state budget being financed by external sources;
- scarce or non-diversified sources of FDI;
- mass outflow of capitals because of lack of confidence for investments;
- dependence on short term foreign borrowing – “hot money”;
- “brain drain”;
• other regional and global economic threats affecting local economy.

Foreign economic security risks are being measured by allowed limits or ceiling beyond which they turn into threats. Some of the indicators are described in the table below:

**Table 1  Main indicators of foreign economic security**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Allowed limits (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign debt to GDP ratio in %</td>
<td>25</td>
</tr>
<tr>
<td>Share of foreign borrowing in financing the deficit of state budget</td>
<td>30</td>
</tr>
<tr>
<td>Foreign currency to local currency ratio</td>
<td>10</td>
</tr>
<tr>
<td>Amount of cash foreign currency to the amount of cash money</td>
<td>25</td>
</tr>
<tr>
<td>Share of imports in local consumption, total, including food products</td>
<td>30</td>
</tr>
</tbody>
</table>

Economic threats are diverse and not always predictable due to dynamic changes in the world economy and their overall impact on regional and local developments. Some of the local economic threats as low level of competitiveness of local products may turn into an issue of foreign economic security by creating certain dependence from imports of foreign goods. For most of developing countries the mass outflow of capitals, low level of competitiveness of local products compared to foreign goods on international markets and growing volumes of foreign debt are among major foreign economic threats. These are direct consequences of such local economic threats as outdated equipment and technology, lack of incentives for innovations and unattractive investment climate, as well as low quality of life, mass unemployment and poverty.

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Based on mentioned threats and indicators, we may define foreign economic security as a state of economy when a harmony is established between the openness and protectionism and a balance is kept for the ability in sustainable development and integration into the world economy. In other words – foreign economic security may assume short term protection of infant industries to achieve required level of competitiveness to be prepared for penetrating new markets and strengthening economic globalization through sufficient capacity of the entire chain of foreign economic relations to withstand various external challenges and risks affecting national interests.

**Economic security: fair trade and competition**

Economic security is a preservation of minimum conditions needed to encourage enduring improvements in human resources and capital productivity and thus a better quality of life for people, including the maintenance of a fair, secure and competitive business environment contributing to the growth of knowledge-based economy, local and foreign investments and national security.

While competition is a precondition for better utilizing competitive advantages of nations, national security interests force to place some limitations on market forces to maintain the minimum of self-sufficiency and economic growth locally.

Considering the major trends in modern economy it is not the “free trade” and the “free competition” among key features that are feasible to expect for the healthy business environment and economic security, as “fair trade” and “fair competition”.

**Money laundering** is a major obstacle to fair competition due to the appearance of substantial amount of “dirty money” to be invested in relevant fields of the economy among competitors, thus creating unequal conditions in a free market economy. While many companies and prospective investors seek favorable
conditions for borrowing from the banks at possible lower rates, requested quantity of “laundered” cash money is being invested in high profit areas. It may also result in criminal activities and criminalization of economy. Funds from illegal activities are being deposited to unregulated banking in offshore zones then being transferred to other countries and being used for different purposes. “Alternative”, criminal forces attempt to control the situation in parallel with existing governments in weak economies with influential funds at their disposal. Many developed and developing countries agreed to combine efforts against suspicious transactions and use of such funds through setting up a black list of banks involved in criminalization of economy. Others, like the United State, cut these banks off from US payment system, prohibit wire transfers to certain countries. In 1995 the US government used executive sanctions to freeze US assets of companies or individuals doing business with known traffickers.

**Shadow economy** is a set of unregistered activities in the production of goods and services that escapes duties and deals with the revenues earned from monetary or barter operations that would otherwise be taxed by the authorities. SE representatives are the “privileged” competitors to the companies and individuals acting in a taxable sector of economy and a serious impediment for fair trade and competition.

**Double accounting** is another threat to fair trade and competition. Being an essential part of “shadow economy” it is based on maintaining two different bookkeeping formalities: one for tax authorities and another – for company’s internal use. This technique allows to escaping or minimizing taxes otherwise payable to the state or municipal budget. As a result, the cost of produced goods becomes less than those of the competitors considering the payment of requested tax and affecting fair competition. Legal procedures and punishment, however, have less effect than motivations. Implementation of principles Basel 2 provides better conditions for business through preferential loans and other incentives for trustworthy taxpayers makes the accounting more transparent.
Monopolies and clans. Depending on particular size of the market, and business environment and existing legislation different forms of monopolies, oligopolies, monopsonies may be formed in specific industries, even in exports and imports of various goods and services. It frequently lead to the dictate of prices by a few number of companies or clans and establishing control over industries and sectors of economy. These forms are considered to be among the most essential threats for economic security and construct a solid barrier to form a market based competitive economy. Diversification of export articles and companies engaged in the imports of selected goods along with strengthening the anti-trust legislation may significantly reduce foreign economic dependence and facilitate the implementation of fair business practices.

Non-tariff barriers are among serious threats to fair trade and competition and include:

- Host country laws and regulations concerning intellectual property protection;
- Complicated procedures while importing or exporting products, unjustified delays caused by inspections by customs authorities;
- Changing and convoluted requirements for licensing;
- Discriminating between local and foreign goods through encouraging consumers to buy local products;
- Protectionism in various forms, including subsidies and other unfair practices violating the principle of equal conditions for competition;
- A range of restrictions related to sanitary conditions, health care and safety of products and other barriers.

Non-tariff barriers can be imposed by the host governments, as well as by regional blocks and even by international organizations. World Trade Organization (WTO) sets up rules and regulations to eliminate unjustified use of non-tariff barriers and unfair competition.

Protectionism may include the above forms of non-tariff barriers but also be expressed in providing better conditions for
business through zero interest or preferential loans, engage representatives of government initiated businesses in trade missions, certain local and regional projects and so on.

**Corruption** is a common “illness” for many weak economies when the given position in the government or business structure is being abused for the sake of personal or special group interests. It can be expressed in protective measures aimed to artificially raise the level of competitiveness of agreed goods and services for anticipated compensation or bribery. In some developing and transition economies government officials are directly involved in unfair business practices and taking advantage of given positions.

**Subsidies** are serious barriers for fair trade not only locally, but also regionally and globally. It frequently ends up with dumping in trade, therefore penetrating local and foreign markets due to unfair competition. WTO implement policies aimed to reduce subsidies in trade and create fair conditions for competition. It has a power to enforce sanctions against member countries to stop subsidizing internal trade and exports.

**Trafficking** of goods or contraband are among other methods to escape duties or violating laws when it comes to special restrictions in trade with restricted articles for imports or exports. They cause material damage while fleeing from fiscal obligations and elicit direct hazard to the health and life of many people.

**Hidden commercials.** While advertising is a mean of promoting the products and services in local markets for all, some companies take advantage of restricted methods to influence on the sense of humans through the use of the so called 25th still. Any movie consists of stills that in turn contain twenty four stills per second. The 25th still that is even harder to detect for human vision is being used for a hidden message influencing on people’s mentality and may create a will or demand to buy certain products that are being advertised “behind” the movie or a show. Hidden commercials may be used in newspapers when an article contains capital letters of subsequent sentences that in sum may form a sentence like: BUY THIS BRAND OF BEER or other messages.
**Currency interventions** and changes in prices vs. competitiveness. Any competitive economy is vulnerable in terms of economic security and may be subject to interference by external forces. In particular, currency interventions by interested parties (e.g. competitors) may cause revaluation of national currency and bring up the prices of goods expressed in given currency: as a consequence, the competitiveness of goods fall accordingly, making local markets economically insecure and week.

Unpredictable and unexpected changes in legislation, in particular, in tax code, customs code, investment laws, etc., create unfavorable business climate and leave local and foreign investors in uncertainty and confusion, hence giving rise to major obstacles for fair trade and competition.

**Sudden bankruptcy and liquidation** of competitor companies consent to escape further obligation in front of existing laws and regulations while others continue to carry responsibilities to better serve the customers and increase the state revenues. Fabricated bankruptcies turn into a form of unfair business practices and are subject to adequate legal procedures by the state.

**Industrial espionage.** As the knowledge turns into real power in modern economy, anticipated level of competitiveness depends on innovations, exchange and use of achievements in science and technology through visiting scholars, experts, businessmen and other lawful means and sources. However, some companies and business people in an attempt to avoid relevant expenses and time for research and development for improving competitiveness of products use secret, persuasive, and deceptive ways of acquiring economic intelligence\(^{23}\) and progressive technologies. These methods are well known – traditional and advanced – innovative. Information, environmental technologies, aerospace, military – industrial complex,

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\(^{23}\) Economic intelligence is significant commercial data related to technology, finance, government that may help to raise the level of competitiveness of a company or economy as a whole.
biotechnology, astronomy, chemical, dual use technology, telecommunications, metallurgy, alternative sources of energy and nuclear physics are among most vulnerable spheres for economic piracy, stealing trade secrets, information on upcoming trade campaigns, as well as data on trade and pricing, investment policy, contract details, commercial secrets, supplier lists, planning documents, research and development data, technical drawings and computer databases.

These, in sum are usually known as different forms of industrial espionage – a practice of one private company spying on another. Civil and criminal charges can be enforced on such activities for compensating the loss of contracts, jobs, contracts, markets and competitiveness. Frequently industrial espionage is being conducted by recruited agents, computer hackers for penetrating targeted databases of companies and banks or by bribing employees or visiting scholars having access to needed information. In addition, commercial secrets might be obtained through break-ins, theft, photocopying, monitoring telephone conversations, hold ups of foreign businessmen and others. Some legal methods also exist: creating joint ventures, academic exchange, mergers and acquisitions, permitted visits to business facilities and unwelcome call for sensitive data.

Industrial espionage, **counterfeiting goods and services** is turning into a major challenge to economic security, threatening economic competitiveness and causes tremendous losses\(^\text{24}\) in terms of money and jobs. However, majority of losses are not reported since companies are reluctant to inform shareholders about the threats they might face while dealing with them.

\[^{24}\text{According to American Society for Industrial Security (ASIS) intellectual property losses from foreign and domestic espionage exceed }$\text{300 billion annually. Over 1,600 incidents of economic espionage were reported by U.S. companies. High-tech companies appear to be more vulnerable, followed by manufacturing and service industries. Based on FBI and the US Chamber of Commerce figures US companies lose about }$\text{2 billion a month to corporate espionage.}\]
Thus, the following are considered to be among major threats for fair trade and competition:

- Money laundering;
- Criminalization of economy;
- Shadow economy;
- Double accounting;
- Monopolies and clans;
- Non-tariff barriers;
- Protectionism;
- Corruption;
- Bribery;
- Subsidies;
- Dumping;
- Trafficking of goods or contraband;
- Hidden commercials;
- Currency interventions;
- Unexpected changes in legislation;
- Sudden bankruptcies;
- Industrial espionage;
- Counterfeiting of goods and services.

Even though the methods to defend against mentioned threats vary from case to case, however the following measures might be considered to implement for reducing relevant risks: adopting and enforcing laws and regulations concerning unfair business practices, proper storage and control over sensitive documents, safeguarding software and data from unauthorized penetration, adequate controls on visitors access to certain facilities, employees training on sharing responsibilities concerning economic espionage threats and job security.

In sum, unfair trade and competition force many companies doing business within the legal framework to give up and cease

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25 The US Economic Espionage Act of 1996 provides strict sanctions to protect commercial secrets and related data.
the production process thus resulting in mass outflows of capitals from one sector of economy to another or from one country to another.

Aside from the efforts of local governments to deal with mentioned issues, it is hard to overestimate the role of international organizations to establish favorable environment for fair trade and competition.

**Shadow economy and economic crime**

It becomes extremely hard to estimate the actual volumes of SE due to the ever changing and advanced methods of hiding the revenues being used by the key players in SE compared to transparency in prevailing regular taxable economy. However, it had been estimated that the average size of shadow economy (SE) as a share of GDP is close to 39 percent in developing countries, 23 percent in transition economies and 12 percent in 30 developed OECD member countries. Among the major causes of SE are improper or inadequate regulations set by local government creating obstacles for fair business practices. Complicated tax code is another fear for the taxpayers. In addition, depending on the level of economic development bribes, extortions and other forms of informal taxation may also force to hide revenues from authorities through double accounting, barter trade and others. Nevertheless, it is hard to prove whether or not the SE has a destructive effect on GDP growth or vise versa.26 It is also known as informal or underground economy and is not always limited to economic activities within the borders of one country. Therefore, governments are concerned about the growing turnover from illegal activities and attempt to practice regulating and controlling functions and improve detecting measures like the revelation of an essential increase in cash transactions,

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26 Friedrich Schneider concludes that around two thirds of income from SE is being directly spent in the taxable economy.
“excessive” consumption of electricity and others. Among different ways to calculate the figures related to the SE are direct, indirect methods and model approach. It also needs collective measures worldwide to work out effective means to fight the causes and consequences of SE. One of the incentives to tax the SE is to provide advantages to entrepreneurs and businessmen through monetary and fiscal policies. Advanced forms of regional monetary integration and global coordination of monetary policies will impact positively on substantial reduction of “shadow economy” through financial and banking integration by making credit money available to those companies adhering Basel 2 principles and maintaining monetary and financial transparency for financial service providers.

SE is not a new phenomenon in public life. It had been an essential challenge for many centuries revealed in ancient manuscripts in Egypt, Rome, and other countries. And the methods to escape taxes had been improved since then continuously.

According to the theory of Prof. Arthur Laffer (known as Laffer curve\(^{27}\) marginal tax rates growth results in a decrease in tax revenue when the tax rate becomes too high. Hence growing capacity of SE especially in developing countries and transition economies is mainly caused by increased pressure of formal and informal taxes as well as payments to state pension and other funds. Consequently, the state budget revenues are being reduced and expenditures intended to direct to social programs vital importance also become deficient. This, in turn, compels the state to increase the tax liabilities and force many entrepreneurs to escape from paying duties and further decrease the share of formal economy and the state budget revenues. Aside from the scarcity of revenues, natural resources are also being dislocated among formal and informal sectors of economies and serve different objectives locally and outside the nation. As a result, an uncontrolled outflow of natural, financial, human and other

resources may also cause damages to the economy and the state. SE is significantly linked to foreign trade of goods and services, not excluding trafficking of illegal drugs, people, arms, money laundry and other “services”. Contraband trade with permitted goods and services also impacts on state of economy. Over eight trillion dollars are the estimated volumes of world shadow trade.\(^\text{28}\) In other words, global SE may be compared to the taxable economy of the United States that has the biggest GDP in the world. In sum, this further complicates the process of gathering, analyzing and calculating reliable data about the current trends in domestic markets, therefore impacting on human development reports and status of economic indicators. In particular, careful consideration of SE may alter the figures of GDP, inflation, unemployment, and others. It may impact strongly on exchange rates fluctuations depending on different transactions.

Interestingly, according to some experts, SE contributes to the overall economic growth by providing new jobs, reducing social burden of state in form of paying salaries to “shadow employees” and adding more material value to the GDP. Shadow labor is a growing concern for both developed and developing countries. First, because the funds spent to educate people through primary and higher education by the State appears to serve not the interests of nation, but narrow interests of private business. Second, an essential part of the labor markets becomes a shadow labor market where the unwritten laws and regulations confront those set by the State. Third, sometimes formal and informal sectors of the economy overlap in time meaning that the employee registered in one company may work for another business during the same working hours. Also, the working hours in an ordinary business may be prolonged by the employer with hidden and frequently unfair compensation. Also, shadow labor market involves people who are not allowed to occupy the job designed for different profession, skills or background. It may involve labor without security check where needed, proper work

\(^{28}\) WTO International trade statistics  
http://www.wto.org/english/res_e/statis_e/its2006_e/its06_toc_e.htm
permit, as well as an abuse of child labor. Finally, illegal immigrants become a growing source for a cheap and unregistered labor force. Developed nations of European Union employ over 10 million people illegally.  

29 Italy has the biggest share of shadow employment totaling from 30 to 48 percent of the overall employment.  

30 Another concern for the State is the fact that once people are used to work in the shadow economy it will be extremely difficult to turn them to the taxable sector. A shadow network is being created with more relaxed liabilities and common business and personal interests.

SE can be defined as a set of all currently unregistered activities that contribute to the officially calculated GNP or as market based production of goods and services, whether legal or illegal, that escapes detection in the official estimates of GDP.  

31 More specifically SE deals with the revenues earned from the production, distribution and consumption of goods and services related to monetary or barter operations that would otherwise be taxed by the authorities. “Gray economy” is another form of SE where the taxable income is presented in symbolic figures compared to the actual income. The very existence and the size of SE largely depend on political will of the state as it may be applicable to corruption.  

32 Therefore, SE and shadow politics are closely interrelated and depend on each other.

Based on some calculations the biggest share of SE as percentage of GDP is registered in Nigeria (76%), Thailand (71%), and Egypt (68%). Countries of former Soviet Union and Eastern Europe are not in a better position, however, trying to use international aid.


32 Current state of corruption in different countries are being reported by Transparency International.
to reduce the portion of “parallel” or “second economy”.\footnote{Calculations are based on Lacko (29), table for developing countries in Africa, and on Loayza (7) for those in Central and South America.}

Developed countries like Spain, Ireland, and Greece have more than 20% and are “leading” in the list of OECD countries.\footnote{Source: Calculations using the physical input method (Lacko 28-31) and the currency demand approach (Schneider 10, 13), Johnson and others (15, 33).}

Among various ways to reduce SE countries financial liability amnesty may be used for those countries that face the threat of financial default and inability to brings ends meet in the economy with an aim to restructure the economic system and revise economic policy.

Generally speaking the size of SE is also an indicator of efficient economic policy. The less is the portion of underground activities the more attractive is the formal business environment. Consequently an economic harmony is feasible to establish between the reasonable level of taxes, adequate generation of income for public expenditures, minimal share of SE due to successful anti-corruption campaign and the rule of law. Unjustified changes of mentioned components may result in growing size of the SE. Therefore any reduction of SE may contribute to the GDP growth and increase the level of competitiveness of the economy.

**Food Security**

Food products play great role in human life and due to the problems associated with food security, including the reduction of world food production may turn into a global problem.

Food security is an important component of economic security and national security. Concepts to reach anticipated level of food security are being developed by the governments, international structures, and adequate legislative framework is always essential to implement corresponding economic policy.
Food security has different meaning in different countries. For developing nations it is mainly the supply of the minimum amount needed to eliminate hunger and starvation. Food security relates also to the quality of food, as well as vital nutrition composition in consumed products. One of the contemporary threats to the human health and food security standards is expected from genetically modified organisms (GMO). Therefore, for developed nations food security take account of safety standards, eradication of negative impacts from artificial components and GMO and the ability to provide diversified, healthy and high quality food stuff pledging the principles of social justice, and ensuring the minimum amount of food stuff needed in case of food crisis resulted under unexpected emergency circumstances.

Food security is based on United Nations Food and Agriculture Organization (UN FAO) calculations stating that the human being need to consume 2600 kilocalories and not less than the life threatening amount of 2150 kilocalories per day. UN FAO encourages all nations to follow these standards and provides professional, technical and other assistance to all member countries suffering from food shortage, hunger, and undernourishment. However, the amount of calories consumed per day varies in different parts of the world depending on different levels of social and economic development: 2300 kilocalories – in Africa, 2200 kilocalories in Russia and some other Commonwealth of Independent States (CIS) countries, 3500-3600 kilocalories in the USA and European Union.  

Food security may be defined in many different ways and all definitions take account of three basic principles: presence, availability, accessibility, and use of food. It is the task of the government to make imported or locally produced, safe, and high quality food available to the population. In addition, food products need to be sold in competitive prices in sufficient quantities during their distribution thus making food accessible.

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to the general public and guarantee the principles of social justice. Finally, mentioned quantities of high quality and diversified food assortment must be consumed efficiently to eliminate hunger and provide means for human health and work.

**Food security problems in developing and developed countries**

After the collapse of the global colonial system in 1940s and the creation of new independent countries growing interest was generated in the world poverty problems and economic development. According the data of UN FAO in nine of the 12 CIS countries, at least 5 percent of the population is undernourished, in many of them at least 20 percent of the \(^{36}\) population suffers from hunger and are classified by the UN as low – income food – deficit countries, with an annual gross national product of less than US $1,505 per capita.

One of the evidences that the majority of the poor in most of the lowest income countries live in rural areas and earn their living from agriculture is the share of the workforce involved in the agricultural sector: in transition economies it is almost half of the population. However, the share of profits gained as a result of agricultural activity is low in the general profits of agrarian farms. As a result of fast privatization of the land in many CIS countries farmers were unable to use the economies of scale, purchase required machinery and tools, compelled to pay more for fertilizers and seeds. Many farmers do not own or have an access to tractors, mini tractors, trucks, ploughs, cultivators, seeders, hay mowers, grain combines, feed combines and any other kind of mechanical equipment and farm machinery.

In addition, food legislation and the control mechanisms are outdated in most of transition economies. Also, there is a lack of

cooperation among state governing agencies, as well as absence of classification of standards, related to food security and hygiene legislation, modernization of food laboratories, effective system of national food security control, mass training on food security and hygiene rules.

Obvious security intentions in EU, NAFTA and Japan often lead the governments to subsidies some branches of food industry, which may lose competitiveness and be forced out by transnational companies if they act according to the economic laws of supply and demand. In other words many companies in food related industries are under state protectionism policy. Therefore, the state sometimes chooses productions of highly paid labor force and high cost price to cheap, compatible foreign products which make the country depend on supplies of particularly first necessity products of strategic importance.

WTO Doha and Cancun rounds of negotiations disclosed new prospects to reduce global poverty by some 140 million persons by the year 2015. After the Doha round, then, we can expect major benefits, up to some US$600 billion of additional income by 2015 shared by both developed and developing countries.

The interaction of poverty and poor people with the world economy may be demonstrated with the help of the following statistic data. Each poor person in the world faces almost twice the level of trade barriers as an average rich person. In addition, there are nearly 2.7 billion people who can spend daily less than US$2. Market penetration is an essential problem for solving poverty issues, since it gives export opportunities to developed nations markets and impacts positively on the overall process of improving the quality of life in less developed world. In case

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37 Peter Einarsson Agricultural trade policy as if food security and ecological sustainability mattered. Review and analysis of alternative proposals for the renegotiation of the WTO Agreement on Agriculture, November 2000, Forum Syd, Stockholm, Sweden.
39 WTO Ministerial Conference in Cancun, Mexico, 10-14 September 2003.
developed nations agree to reduce or eliminate subsidies, they will be compelled to export majority of goods at a very high price.

Without the political will of the rich, it is almost impossible to It is critically important that the rich countries take action to break the gridlock. According to UN data more than one billion of the world's six and a half billion people live on less that $1 day, and 2.7 billion live on less than $2 a day. Low-income countries need investments of $70 to $80 per head per year from 2006, rising to $120 to $160 per year in 2015, it says, adding that many middle-income countries could fund those investments themselves, given adequate debt relief and appropriate, specialized technical assistance\textsuperscript{40}.

**Figure 1  Income Gaps**

There is a vital need to use the potential to speed up growth in developing countries further; to raise incomes and reduce poverty. Today more than 840 million people are starving in developing countries, and 17\% of the world population experience hunger and it may be doubled in coming two decades if proper actions will not be taken by all nations and international structures.\textsuperscript{41}

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\textsuperscript{40} UN Secretary-General Kofi Annan report (3000 pages) on January 17, 2005, containing recommendations how to reach the MDGs of halving extreme poverty by 2015 and going beyond to eliminate it by 2025.

\textsuperscript{41} [http://www.jubileeresearch.org/media/daily/daily100602.htm](http://www.jubileeresearch.org/media/daily/daily100602.htm)
The role of state, international structures

Since anticipated level of food security is not likely to be reached by market forces, it becomes one of the indispensable duties of state in terms of providing sufficient amount of healthy food, looking for the quality and safety, as well as keeping the nation relatively independent from external sources. These functions make almost inescapable to implement economic policy of protectionism. Moreover, government subsidies make agriculture a profitable business for many farmers particularly in developed countries. It has been estimated that the subsidies per one cow in European Union are even more than the income of one farmer in many CIS countries.\(^2\) Government subsidies allow to reaching requested level of food security by maintaining around two percent of the employment share in the United States.\(^3\) This is also due to the increase of production efficiency, and innovations in agriculture. Developing countries are not able to compete with industrialized nations in subsidizing their agriculture from the state budgets because of scarcity of resources, therefore requested levels of food security are harder to reach and maintain. This causes a loss of food independence expressed in increase of food products exports from developed nations to the developing ones. The role of the government for new independent states after the collapse of Soviet Union was limited to lifting the taxes and letting the farmers to compete with each other internally and fight with the new trends and external market forces isolated from each other, without an economic policy or strategy. As a result, many former Soviet block countries became unable to feed most of the population and looked for humanitarian aid and import the products that were considered articles of exports from mentioned states. Food insecurity became a real threat for many nations. The role of the government was underestimated and the role of the market was overestimated in several transition

\(^2\) Godfrey Eneas, Understanding the Impact Of Farm Subsidies On Third World Farmers, [http://www.jonesbahamas.com/?c=47&a=5065&sid=b9c9d87ed424e6e499628e0815b602bd](http://www.jonesbahamas.com/?c=47&a=5065&sid=b9c9d87ed424e6e499628e0815b602bd)

economies. Many representatives of the government were actively involved in the process of privatization by acquiring assets for a symbolic price. The government fixed prices of bread and other goods were lifted and the new business circles have created monopolies and shared between themselves the main areas of food supply, imports and distribution. The overall decline in consumption of food and non food items was moderate compared to the reduction of real wages, income and the purchasing power because of the continuous aid from abroad.

Despite the fact that the global exports of food are growing, the world population continues to increase even more rapidly. The only way to reach global food security is to synchronize the food production with the needs of people in food worldwide through fair and equal distribution. This task also cannot be accomplished by private sectors or even by the local governments unilaterally. International organizations like UN FAO, WTO and others need to provide more of the anticipated professional, technical and financial assistance to solve issues related to global food security.

Recognizing that the misery of poverty is the portion of the largest part of the world’s population leads to such questions as why is it so, what are the causes, and how can it be alleviated. These issues are among primary concerns of the state. The underlying question in this regard is what the state can do to assist solving the poverty issues. Most of the people in the world look at their governments to solve their problems. In turn, the state sometime agrees to get more responsibility to deal with social and economic problems. As a result, people might expect more of their governments than they might offer, not to mention that some officials promise more than they can do. It becomes obvious that in many cases the government becomes a part of the problem but not a body that attempts to elucidate the problem because of corruption and other deficiencies.

In past decades industrialized nations have donated food and other related economic assistance to less developed countries. Significant amount of assistance has been conducted through the
World Bank, UN FAO, WTO, and other organizations. In most poor, food – vulnerable countries, the best potential resources are the people and the productivity of the land and water. These mean that the eradication of hunger mostly depends on investments human capital and productivity. Investments in education, pressed water, healthcare and social security are expected to be very profitable for the nation the years to come.

It becomes apparent that the attempts made towards the eradication of hunger are too slow. This underlines the urgency of immediate, determined and truly action. The heads of 173 state and government gathered at World Food Summit (WFS) held in November 1996 at FAO headquarters in Rome, pledged their political will and their common and national commitment to achieving food security for all and to an ongoing effort to eradicate hunger in all countries, with an immediate view to reducing the number of undernourished people to half their present no later than 2015. According to information and analysis available, in particular in the State of Food Insecurity in the World (SOFI), the current annual rate of reduction in the number of undernourished people in the world is eight million, which is far below the average rate of 20 million per year necessary to reach the target set by the WFS. Experts had calculated that in order to solve the food security problems in coming decade, almost 75% more food need to be produced globally, which in turn, need to intensify the production, careful treatment of soil, efficient use of pressed water, as well as financial, human, energy and other resources.44

**How to reach food security**

Given the major principles of availability, accessibility and quality standards, food security issues may be solved efficiently by joint efforts of farmers, consumers, private companies, governments,

44 Forest Resources I. Overview of program features, Problems and Issues Addressed, Chapter Two. [http://www.fao.org/docrep/X1375e/X1375e03.htm](http://www.fao.org/docrep/X1375e/X1375e03.htm)
as well as regional and international structures. In particular, food security depends on

- essential improvement of competitiveness of local farmers through the use of innovations, new technologies, special equipment for mountainous regions and other;
- fostering efficiency of agriculture utilization to develop proper irrigation system;
- implementing poverty reduction target programs;
- creating legislative framework to develop agriculture and provide healthy food to population;
- implementing projects to create storages and package refrigerators, organizing greenhouses productions, bee-keeping, gathering berries, herb gathering, centers for milk storing and freezing, slaughter houses, and packaging production;
- obtaining spare parts, machine amortization and importing or producing high quality fertilizers;
- creating prerequisites of non agricultural activity in rural settlements to increase the level of employment and the purchasing power of population;
- conducting research, education and extension allowing dissemination of new farming practices and technologies;
- developing high-level food laboratory space both for inspection purposes and research activities;
- establishing training partnerships with European, North American and Asian institutions on food security and hygiene rules, exchange of information and experience, and acquisition of knowledge on food among international experts;
- protecting local market and consumers from imported low quality food products;
- better utilization of local resources and supporting import substitution;
- reducing food dependence from external sources by accelerating growth in local food production;
- supporting implementation of high quality safety standards in food processing production locally;
• encouraging proportional growth of food processing production and distribution of high quality food in all regions and districts;
• creating sufficient reserves of food supplies in case of food crisis and under unexpected emergency circumstances;
• providing means to consume requested amount of calories to low income families;
• professional assistance ensuring consumption of adequate calories and healthy food;
• ensuring stability of prices while protecting local markets and subsidizing farmers preventing the process of forming monopolies and controlling prices;
• promoting exports of local food products and keeping the share of food stuff in overall imports below 20%;
• providing tax advantages, preferential low interest soft loans, grants and other means for the newly-created food treatment productions by increasing the volumes of agricultural food procurements, thus maintaining certain social sustainability.

All the mentioned measures are not sufficient to meet most pivotal challenges of food security. The increase of consumer’s purchasing power would have an important impact in terms of access to food and additional food demand.

Regional and global food security needs special attention to international trade: the lists for food certificates need to be clarified and harmonized in order to simplify customs procedures, reduce costs and improve transparency. Regional efforts are required to efficiently utilize cooperative advantages, as well as to better control food quality and safety standards.

Cooperation with regional and international structures is needed with the aim of providing technical assistance to harmonize nutrition standards and guidelines with international requirements and to evaluate the present laboratory system at the national, regional and local levels to determine training and equipment needs.
Energy security and current realities

Energy security depends on a variety of local and external economic and political factors. In most of the countries, energy security rely on economy's dependence on energy, emergency and technical capacity, alternative sources of energy, efficiency of energy production and consumption, as well as on trends and developments in world markets affecting energy prices and other aspects. Therefore, the definition itself is based on revelation of the main essence of energy security components.

Energy may be defined as an ability of each and every physical system to function. It is also a vital precondition for the entire economy to grow and for human development. Current relationship between the use of energy and the GDP growth rates and the perceptible and the forthcoming developments in energy markets, as well as the fact of unequal allocation of resources in the world economy makes energy a strategic commodity. Therefore, aside from the variety of approaches to define energy security there is one thing in common while observing the essence of energy security by experts, business circles and governments: anticipated level of energy security cannot be achieved by the self-regulating market forces. This, in turn reflects government performance to maintain energy security. In other words, energy security depends on given role and performance of government.

Government actions are required to gain sufficiency in energy production and supplies, and reduce existing dependence from external sources without endangering and harming the interests and priorities of other economies, companies and people. This means, according to Adam Smith, that the government need to be more than a night watchman for the economy or if not improving the efficiency, than to don’t harm. Consequently, government interference needs to be proper and delicate and be

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45 According to Hippocrates.
both economically and politically accountable to assure energy security. In addition, state price and supply controls can be justified for a short period of time and sustain energy independence through stimulating energy conservation, efficiency norms, utilization of alternative sources and better use of renewable resources. Using the two basic functions of the government – controlling and regulating – in any country despite the level of economic and political development, it may be the initiator to develop and utilize new technologies in energy sector and intervene to improve distributional efficiency, fairness, and overall economic stability. In addition, it is aimed to fix the market from possible failures and handle foreign trade deficits, inflation and the overall balance between consumption and investment.

During the oil crisis periods nations continue the look for substitutes, and prefer such renewable sources as coal, solar, wind, water, and geothermal. Aside from mentioned sources existing supplies for the capital consuming process of producing electricity include the following sources of energy: oil, gas, nuclear, and biomass. Each of mentioned sources has strong points and shortcomings.

Energy security is not only the aptitude of the state to provide needed amount of energy to secure the normal functioning of the economy and the general public. Although energy security means mostly satisfaction of energy needs of the industries and consumers in required quantities, however, the quality and efficiency of energy production, distribution, supply and use is also relevant in local and global markets. It is also the ability to diversify available reserves and use alternative sources along with the traditional ones.

Energy security is the better use of modern technologies of producing power from traditional and alternative sources thus reducing the reliance of domestic market from external sources and the negative impacts of external market forces volatility.

Since the first major energy crisis in early ninety seventies, the unit costs had declined for solar and wind energy. Also, wind
turbines and solar panels are more secure and environmentally safe than other forms of power stations. All these possible sources represent the production side of the energy security that allows the enterprises of different branches of economy to operate based on uninterrupted supplies.

By and large the level of energy demand depends in industrial needs of the economy and impacts on consumption side of the energy security. Light industry production, for example, consumes less than a quarter of heavy industry production in many countries. Energy consumption in cities is at least twice more than in rural areas in terms of per capita use. Given these figures, saving energy and its' more efficient use becomes a priority related to energy security, more specifically for industrialized nations where the share of population in cities and the share of finished goods from industrial production are bigger than those in developing countries. Also, the overall cost of energy consumption in developing countries is almost twice more in the share of GDP than the same indicator in developed nations. Also, higher rates of growth (recovery rates) in developing countries compared to one digit rates of growth in developed nations (sustainable development) requires higher rates of energy consumption, not to mention the difference in levels of mechanization, computerization, and automation. From the other hand, industrialized nations heavily depend on oil and nuclear energy whereas such developing nations as China, India, Russia, and others use coal as one of the main sources of energy.

For many countries energy security is also the capability to maintain sufficient reserves of oil and gas reserves for the public and industrial consumption and emergency response ability under unexpected circumstances resulting in supply disorders and interruptions and availability of means to sustain reasonable levels of price for the public even during the periods of oil and gas shortages in local markets. Taking into consideration the nature of oil and gas supplies, in particular their non-renewable feature, some countries holding mentioned strategic reserves prefer to import and keep national reserves for the years to come.
in order to lessen unforeseen turmoil. From the other hand oil import dependence creates not only economic, but also political and diplomatic complications not always allowing to agreeing on peaceful solutions of the hardships. Diversification of sources for the oil imports may reduce the risks but not eliminate it since the establishment of such strategic alliance as OPEC in 1960. Real trends are clearly reflected on the overall balance of trade and demonstrate the level of dependence of nations from petroleum.

**Table 2  Petroleum Balance of Trade for Selected Countries in 2001**

<table>
<thead>
<tr>
<th>Importers Country</th>
<th>Oil Imports as % of Consumption</th>
<th>Exporters Country</th>
<th>Oil Exports as % of Consumption</th>
<th>Oil as % of Export Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>31</td>
<td>Canada</td>
<td>41</td>
<td>14</td>
</tr>
<tr>
<td>France</td>
<td>96</td>
<td>Iran</td>
<td>176</td>
<td>85</td>
</tr>
<tr>
<td>Germany</td>
<td>95</td>
<td>Nigeria</td>
<td>640</td>
<td>98</td>
</tr>
<tr>
<td>Haiti</td>
<td>100</td>
<td>Norway</td>
<td>3042</td>
<td>57</td>
</tr>
<tr>
<td>Iceland</td>
<td>100</td>
<td>Saudi Arabia</td>
<td>477</td>
<td>90</td>
</tr>
<tr>
<td>Japan</td>
<td>98</td>
<td>UK</td>
<td>45</td>
<td>8</td>
</tr>
<tr>
<td>Jordan</td>
<td>100</td>
<td>Venezuela</td>
<td>399</td>
<td>73</td>
</tr>
<tr>
<td>USA</td>
<td>55</td>
<td>Vietnam</td>
<td>111</td>
<td>20</td>
</tr>
</tbody>
</table>


Consumer’s dependence on petroleum continues to grow. It is demonstrated by the fact that the share of transportation in overall oil consumption in many countries is up to 65-70%. However, there is some difference in consuming petroleum in different parts of the world depending on levels of economic development. Currently, the average oil consumption for all automobiles is more than 20 percent higher than developed nations, while for light trucks China’s is over 25 percent higher. In any way, the demand and the oil prices continue to grow with
the growth of world population and the needs of the global economy. As a result, the cost of many goods and services (containing petroleum component) continue to raise and hurt the competitiveness. For this very reason and despite the differences in used diplomatic, political, economic tools and methods, almost all oil importing countries are concerned about discovering real alternatives and substitutes to oil. So far, recommended ways to reduce external dependence are: diversification of sources of oil and gas imports, implementation of energy conservation and energy saving strategies, invention and utilization of efficient technologies of producing and consuming energy, in particular, reducing losses or waste in exploitation, processing, conversion, transportation, storage and end utilization process, as well as developing substitutes to the existing sources of energy and its carriers.

One of the more efficient and proven solutions to reach the desirable degree of energy security is energy conservation. Research shows that its’ net costs are 6.1, 6.2 and 7.0 times cheaper than the costs of wind energy, hydropower and nuclear power as programs for reducing fossil fuel use and corresponding CO2 emissions. Conservation of energy may be defined as an attempt to lessen the amount of energy consumed for the same needs with the help of various tools (new technologies, new systems of production and incentives to save energy, legislative measures, shift from production of goods to service industries, etc.) According to the International Energy Agency, “the supply and demand relationship in the energy system is not determined primarily by energy supply, trade or energy markets but by end energy services.” According to another international structure – The World Bank, – ‘market forces’ only contribute to approximately 20% of energy conservation. Just the opposite is true for the market when it comes to immense consumption of energy in case of profitable business projects. Energy conservation can be greatly supported through corresponding resolutions, even ammendments to the existing laws making gradual improvement in this area somehow obligatory and by encouraging investors to choose more efficient use of energy. For example, energy and environmental
protection taxes may be imposed on companies overlooking energy conservation objectives and lifting such taxes from those put into action energy efficiency benchmarks. Companies and branches of economy and regions may be promoted by providing long term preferential loans and by other economic policies. Government may also spend sufficient funds and look for international co-financing research and development on energy conservation projects, and their implementation.

Substitutes and alternative sources are always important to judge about the chances to achieve energy security. Replacement of oil with other substitutes in the local economy is one of the major concerns of developed countries. Solar, geothermal, biomass, and wind powers do perform the role of alternative sources and are considered to be environment-friendly, however, they need more production costs and are mainly sporadic. One of the efficient solutions to find better energy storage carrier is hydrogen. One of the alternatives to the existing energy sources is hydrogen. It can be produced through water electrolyze and compared to methanol and other types of gas, it is an environmentally safe and clean burned gas from various sources. Therefore hydrogen may be used as an alternative to petroleum with its economic and political complications. The use of hydrogen allows to consume enormous quantities of energy, reduce the existing dependence from foreign supplies, minimize environmental threats, encourage the invention of new technologies, industrial equipment, and consumer goods. However, the substantial use of hydrogen is associated not only with large amounts of investments in R&D, adequate infrastructure, but also with the danger of H-bomb, explosion at Hindenberg, hydrogen bubble at Three Mile Island nuclear catastrophe. In addition, the so called «dirty» or «clean» type of hydrogen matters in case of revealing the impact on surrounding environment.\(^\text{46}\)

\(^{46}\) Price elasticity coefficient is defined as the percentage drop in demand per 1 percent rise in price. For example, in the United States if the price of gasoline rises by 20 percent, demand would fall by 7.6 percent, assuming a price elasticity coefficient of 0.38. See: Wang Qingyi “Ten issues regarding energy conservation in China,” China Energy, No.5, 2005; Energy
An increase of the level of diversification of energy sources impacts positively on energy security and sustainable development. At the meantime, new sources may acutely harm the ecology. The role of the government is to protect the environment from possible pollution of the energy sector. Finally, it is always challenging to harmonize the political, social, economic, and environmental interests. Although the energy sector is being treated as a natural monopoly in the sphere of public utilities, private monopolies may threaten economic and national security in general with various causes and consequences to the ordinary citizens – consumers. The principle of social justice presumes, in particular, to provide electricity at competitive prices and granting some compensation to people with inadequate purchasing power.

In sum, energy security is the ability of the state to make available requested amount of energy supply to the public and industries at competitive (reasonable) elastic prices and with less harm to the environment from diverse, preferably from renewable sources – both traditional and alternative – through the use of adequate infrastructure, modern and efficient technologies that bring to more conservation and secure reservation of needed quantity of energy in accordance to principles of social justice and lessening the dependence of economy from foreign sources through political diplomacy and diversification of available sources controlled by the government. Finally, it is also the capacity to maintain reliability of the entire energy system operations and actually safeguard energy supplies, physical and informational energy infrastructures from various internal and external threats.

Monetary Integration

In order to better understand the essence of monetary security (MS) it is significant to disclose the role of money. The reason why monetary integration is considered to be the peak of economic integration is because of the change of the role of money itself in the global economy. Since the time of Karl Marx when the famous theory on the money functions was written, the role of money had been changed considerably. Measure of value, means of payment, means of circulation, means of hoarding and of world money underwent serious evolution during the past two centuries. First, the gold does not perform the function of world money. Convertible hard currencies – US dollar and euro mainly perform this function, although none of the central banks worldwide ceased gold from liquidity reserves for MS reasons. Second, credit money and non-cash circulation had reduced dramatically the amount of money in circulation and thus limited the function of money as means of circulation. Other functions of money also experienced essential transformation, however the role of money and monetary relations play greater role than the basic functions. During the dawn era of capitalist production monetary relations served the process of production and the relations in the process of production determined the nature of monetary relations. Today monetary relations not only gained weight and sovereignty, moreover, they may be strong enough to impact on the process of production and determine its’ further destiny. Depending on the nature of monetary relations, the supply and demand equilibrium, production process can be more or less costly, therefore – more or less competitive, and in turn be continued or ceased. Financial markets themselves maintain significant impact on the process of production. Given the new and changing terms surrounding local, regional and global economies, the means to reach sufficient level of MS is being seriously modified thus having different impact on various nations depending on the level of economic development.
The overall nature of MS had been changed as well. From a part of local and regional problems of economic stabilizations MS associated with financial risk management and floating exchange rates and mass currency flows became a priority issue for the nations worldwide. MS deals with currency interventions, exchange rates fluctuations, inflation or hyperinflation rates, as well as to work out better rules and regulations for security houses, other non-bank financial institutions, and non-monetary policies related to unfair competition, subsidizing exports and dumping causing major obstacles for sustainable development. MS considers the significant impact of money on economic policy, through better use of banks for monetary and currency intervention and others. High level of MS allows further developing monetary integration and reducing the costs of economic transactions associated with foreign trade, foreign direct investments and others, thus leading to an increase of economic efficiency and competitiveness of goods and services.

Basic ingredients of MS based on monetary integration relate to the freedom of foreign economic relations, alterability of exchange rates, international liquidity, and sovereign means of regulating the balance of payments along with the data on foreign holding of key currencies need to be taken into account. Therefore, MS is based on the convergence of monetary policies primarily depends on the efficiency of coordinating the exchange rates and the adjustment of inflation, if needed. This in turn, presumes a move from regulating the strategies on currencies and exchange rates to a well designed monetary policy.

MS creates confidence and brings together trading and strategic partners, reduces high transaction costs of doing business in many currencies, manage and control the processes associated with devaluations and revaluations of currencies and to block spreading the negative effects of deficient monetary and

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economic policy from country to country. MS is more obtainable in regional blocks and benefits nations participating on higher levels of economic integration, particularly the on the highest level – political and economic union such as the MS reached through the formation of European Monetary System in 1979 and introduction of single European currency – Euro in 2000.

MS may also result from gradual elimination of obstacles to further trade liberalization, and currencies exchange rates fluctuations risks, later – by coordinating monetary and fiscal policies, introducing single currency or average value of the basket of currencies and finally, fixing the rules and regulations in local legislation and international agreements.

MS is mostly demanded whenever there are natural foundations for economic and political integration and when the currencies still create problems for business practices and economic, financial and monetary disorders (market imbalances). Also, it might be included in the agenda when the “short sales” of some currencies at global financial markets further depreciates them against other key currencies, and when the governments are escalating their debt through the increase of money supply and non-backed debt guarantees.

Gradually, more sophisticated forms of monetary integration allowed countries to reduce the currency risks and make the debtor keener to pay the debt obligations due to the concern of punishment measure from other nations. This mainly applies to regional monetary integration. Each of mentioned factors, particularly the change of interest rates is able to bring to a chain of changes of others and consequently cause a change of exchange rates as well.

Today more than ever MS is linked to political, economic, and financial integration. MS may only be based on strong political integration and commitment. Therefore, it seems almost infeasible that the activities of the European Central Bank in the European System of Central Banks could be possible without a

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48 Risk associated with the change of debt obligation because of the currency devaluations or revaluations.
capable European Parliament. From the other hand political integration necessitates monetary and financial integration and compels economic policy makers accountable to better coordinate economic policies, attract investments by making exchange rates more predictable. In turn, the later may be reached by regulating the balance s of payments and the residues of trade turnovers, dynamic changes of mass flows of capitals, monetary and currency interventions, inflation or deflation and the interest rates. Links between monetary integration and political integration are becoming more active along with the shift from one form of economic integration to another\(^{49}\). In turn, political integration is considered an essential precondition for the foreign policy in all areas undergoing minor or major transformations. Also, changes in interest rates lead to distributional outcomes since the distribution of income and wealth is more evident expressed in public spending and taxes.\(^ {50}\) In addition, local government’s fiscal tasks of taxation remain the backbone of both political and economic independence. Broader international monetary and fiscal integration compels to come up with a proper mechanism of political integration to accomplish these goals. Fairly equal taxation of incomes and profits need to be translated to their equal distribution and to a reasonable social well fare in all countries. This will allow implementing proper monetary policies with thorough political surveillance to reach desirable level of MS.

MS inevitably presumes financial integration, predominantly being fixed in precise laws and regulations called fiscal legislation. Finally, some countries participating in monetary integration always encounter different problems to be solved at the others expense. Bigger demand for loans in one country, for example, may bring to certain increase of interest rates in all countries. However, given the current state of liberalization of monetary relations and global capital markets, it might be lower than expected regionally. Otherwise political integration may put

\(^{49}\) Free Trade Area, Customs Union, Common Market, Economic and Political Union.

\(^{50}\) Eichengreen, Barry, On the links between monetary and political integration, University of California, Berkley 1996.
certain limitations and restrictions to the monetary integration foundations through the changes in relevant laws and regulations avoiding deficit spending, hyperinflation, etc.

Current perceptible trends of diminishing “currency risks”51 and growing disinclination of participating nations to over-borrow at others’ expense due to anticipated sanctions by others clearly displays the advantages of monetary integration and its’ relationship with the financial integration. Moreover, countries that are still reluctant to sacrifice another portion of national sovereignty for the monetary integration realize that have nothing to lose but benefit in case of financial integration. The latter is being recognized as a close cooperation between governments, Central Banks, state and commercial banks, and non-bank financial institutions to minimize and better manage credit risks for financial security for the sake of free and fair competition.

Financial defaults in a number of countries call for more focused consideration of preventive measures in order to avoid monetary, banking, and financial defaults and achieve MS. Even countries economically involved in diverse regional blocks are motivated in monetary and financial integration. Economic cycles strongly depend on given favourable or reverse monetary conditions promoting foreign trade of nations: natural or artificial appreciations of currencies hurt export industries while competitors benefit from opposite trends.

An overall trend towards coordination of monetary policies concentrating on exchange rate targeting and on currency boards becomes extremely essential. Since the first years of the twenty first century banking not always and not accurately reveals the features of deteriorating industry: instead, capital markets better indicate the real situation.

More attention is being paid by the experts to risk management and monetary vulnerability. In order to have a

51 Risks associated with the change of debt obligation value because of currency appreciation or depreciation.
realistic look at coming years it is indispensable to consider the experience of current and past challenges to design and implement economic and monetary policies. From 1944 to 1971 the post-war economies were recovered and further grown in a free market environment, whereas forced fixed rate system and artificial low price of gold seriously harmed economic growth worldwide. Such basic ingredients of the cost of gold as wages, transportation costs, expenses related to the production of gold grew steadily having no impact on the price of gold. At the meantime the currencies of fast growing economies in Germany, France and others became stronger, however, accepting the dominant role of the US dollar in world markets. European Union countries, being among developed market economies contradict the market laws by limiting the competition mainly within the region; equalizing different trends through monetary, financial, and political integration: many countries like Spain, Portugal, and Greece still need to catch up and continue to take advantage of high levels of competitiveness of others. In case of opposing broader economic convergence, limited monetary integration aimed to sustain stability by such artificial means as currency interventions, increasing or decreasing money supply and others may not be able to hide current discrepancies: it might only delay the time of economic and political collapse. Effects of the US dollar and Euro appreciations are different at home and abroad with their different impact on local and world economies. Lessons from the monetary integration in former Soviet Union with the single currency for 15 nations and the “rouble zone” are not yet analyzed to be considered for the future.

Further efforts to reduce the risks associated with MS depend on a wide variety of factors and trends. Despite the discussions on the prospects of the return to the fixed rates system, it appears unrealistic due to two basic factors: the growing interest of those who makes money on floating rates is incomparable to those making theoretical assumptions, and fixed rates monetary system might recreate serious impediments to for money supply resulting in high prices, inflation, unemployment, thus slowing down the
overall economic growth. Monetary integration may be achievable mostly on a regional level. While almost no sign of monetary integration on global level appears feasible in the years to come, however, international efforts will be needed to reduce currency and credit risks around the world. Given the growing interdependence of local economies, monetary integration at the coordination level will be required and meetings of heads of nations on monetary issues will become more common and frequent measure of counterbalancing monetary and financial shocks and achieving MS.

In coming years regional monetary integration and global coordination of monetary policies can impact positively on substantial reduction of “shadow economy” particularly in developing countries through financial and banking integration by making credit money to those companies adhering Basel-2 principles and maintaining monetary and financial transparency for financial service providers. Considering further loss of economic independence in parallel with expanding and intensifying monetary integration self-adjustable fiscal stabilizers will be of more use, therefore financial transfers will be a better alternative to the exchange rate changes in case of compensating distinctive market imbalances. Also, monetary integration will bring to continuous transformations of economic, financial and banking systems of participating nations.

Globally, MS is less achievable since there is no precise monetary system in the world economy. Monetary systems are becoming more diversified based on regional trends and developments. Currencies of emerging market economies like CIS countries are floating, others are in managed float, key international currencies (US dollar, Euro) are in frequent changes due to interventions, and other national currencies are tied to convertible currencies.

Competitive advantages of nations will require different approaches to solve MS issues for each sector and branch of industry and the national economy. Balances of payments and trade balances will heavily depend on the outcome of bilateral and multilateral monetary integration. It is also possible that
national currencies may become gradually oriented to the world basket of commodities prices. Coming to EURO, it may be used further not only by EU member countries, but also others (countries in CIS, Africa and the Middle East), that aside from geographical considerations, might prefer stable currency with predictable exchange rate to better solve the issues related to local, regional and global MS. Japanese yen and Chinese Yuan might emerge as international key currencies backed by markets composing centres of power in the world economy. EURO and the US dollar will find better means and ways of co-existence without major exchange rates shocks, but rather considering interests of sustainable growth of the world economy benefiting all parties for a long run. Based on current trends, MS becomes more feasible regionally with possible introduction of “amero” or other single currency between North and South Americas, as well as in South and South East Asia, Africa and CIS. And the role of gold may change but not similar to the role performed in the past\textsuperscript{52}: it will be considered as an indirect factor of monetary stabilization by regional and global institutions.\textsuperscript{53}

\textbf{Investment Security}

Investment Security (IS) is such an order of segments in the in the investment environment, and its institutions when pledged growth, and protection of socially oriented economy, and financial markets along with the sum of financial relations, and processes of nation. IS is also the ability and readiness of investment institutions to create mechanisms of utilization and

\textsuperscript{52} Considering the reality where US and EU may never base their currencies on gold, R. Mundell looks at three things for signs of inflation in the economy: at the money supply, at interest rates, and at gold. It is evident in the bond market. In case of significant eruption of the gold price there will be an increase in inflationary expectations and people may sell bonds that will lead to an increase of interest rates.

protection of interests of national economy, and finances within the framework of investment policy implantation.

Attractive investment climate is a vital precondition for efficient investment activities in priority sectors and for generating new sources for tax revenues to the state budget. Insuring investments from non-commercial risks and passing them from the investor to the insurance company for a fee plays a major role in supporting investment security. Insurance of investments allows to creating needed conditions for setting up investment funds, as well as providing government guarantees for implementing priority investment projects.

Insurance protection of investment projects is being done by and large in case of following groups of risks related to: changes in market structure and reliability of partners; emergencies as natural disasters, fires, robberies, etc.; technology crash and intellectual property protection; non returned loans in foreign trade and others. In parallel to it systems of insurance, re-insurance and providing guarantees from non returned loans may be created to strengthen the trust in investment returns.

Search for foreign investments is justified since the local sources may not be sufficient to support the growth of the real sector of economy with justified economic strategy and policy of long term investments. Issuing Eurobonds in different denominations of local and foreign currencies and selling local securities to non residents are among various forms of attracting foreign investors. However, if the debt of foreign investors is being re-financed by issuing new state bonds in world markets, then the foreign debt of the State also starts to boost. In case of sudden and simultaneous order to redeem the bonds in big volumes of foreign debt the State may face financial default and economic crisis. From the other hand increasing volumes of foreign debt is resulting in vast amount of obligatory payments, and to erosion of state budget. In order to maintain investment security for sustainable development state bonds need to be issued considering
the volume of foreign liquidity and budget resources for their payment.

IS may be maintained through foreign direct investments in joint ventures and establishment of foreign subsidiaries. In this case IS for the nation is also an advantage to foreign investor in terms of:

- access to raw materials and natural resources;
- penetrating new markets;
- utilizing the resources of qualified labor with relatively low cost for its reproduction;
- implementing the achievements of research for introducing new competitive products in foreign markets.

Besides providing proper level of IS locally, participating in joint ventures gives an opportunity to the host partner:

- to have an access to foreign technologies benchmarks;
- accumulate new sources for local investments;
- utilize foreign experience and “know-how”;
- use better systems of production and management;
- reduce unjustified imports and expenses in hard currency;
- increase the volume of local finished goods exports.

At the meantime, IS may become feasible due to the state strategy program to attract foreign direct investments, particularly in the production of consumer goods, in construction, and other priority areas by state guarantees in developing countries, when needed. IS may also be defined as an ability of State to eliminate economic threats related to the creation and maintenance of healthy and competitive investment climate. Among them – political instability, crime rate, unstable activities or malfunctioning of related industries, high level of inflation or hyperinflation, subjective treatment of bureaucrats in starting up a new business or modifying the terms for maintaining the existing one, expressions of discriminations, unfair competition, ever-changing Tax code or Customs code, to name a few.
IS is not only the task of the host government and local businesses, it strongly depends on the behavior of other players, too. Among them – foreign citizens, companies, organizations, associations and other entities allowed to make investments in accordance with the local and international laws and regulations, as well as foreign governments and international organizations. All mentioned players may invest in all different spheres of activities except those that are forbidden by law for foreign residents, are under direct government control, or require special license to practice particular type of business.

In order to generate sufficient amount of foreign investments investors need to be given IS in form of providing favorable and attractive conditions for investment activities. Advantages are intended to encourage foreign business activities in local markets while reinvesting earned profits, gathered funds and resources in the same or other areas. Investment advantages are being provided when the volume of investments reach anticipated volumes in designated priority industries of host nation or special investment projects as information technologies, modern equipment and service industry.

Overall, IS of the nation need to be based on the strategy of growth of the financial market, since its’ dynamic structure may strongly impact on sustainable development and make the economy attractive and competitive.

IS cannot be viewed apart from the other forms of economic security. Acceptable level of IS may be reached when the economic welfare of the host nation, economic priorities of economy are in harmony with the interests and the rights of foreign investors.

In sum, IS may be defined as a state of economy when local and foreign investors have equal and sufficient trust to contribute required amount of funds in form of human, natural, financial, industrial and other resources in the overall process of economic growth.
This means that investment security need to be granted high priority by the Government in terms of eliminating investment risks, including expropriation, repudiation of contracts and discrimination and by granting a status of most favored nation treatment to investors. IS becomes more feasible not only by the efforts of local Government. Membership in World Bank's Multilateral Investment Guarantee Agency (MIGA) clearly demonstrates given nation’s commitment to create attractive investment climate and protect the interests of foreign and local investors. International Centre for the Settlement of Investment Disputes also plays a key role in reaching the goals related to IS. Usually the State creates Investment Promotion agencies or departments based on corresponding laws, particularly, Investment Promotion or Foreign Investments Protection and other Acts protecting against expropriation, cancellation of contracts and discrimination and others.

In some cases foreign investments are being politicized: certain advantages are being granted to strategic partners rather than to everyone. IS assumes actions against threats to national interests. In particular, "Exon-Florio Amendment" provided selective executive branch screening on national security grounds of foreign acquisition of control of businesses in the United States. This allows the President the authority to block the activities in case foreign owners "might take action that threatens to impair the national security" and if other laws "do not, in the President's judgment provide adequate and appropriate authority" to protect the national security. While protecting investment security, relevant threats must be considered: lobbying to set rules for protectionism; complicated tax policies and tax code discouraging foreign investors; the risk of apparent xenophobia.

IS may not be established in a country where either local or foreign investments are dominating. Threatening dependence from external sources may be established in case of dominating foreign

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(sometimes politicized) investments with a lack of local investor’s trust, and unattractive climate will be present in case of rare, occasional and insufficient foreign investments and prevailing share of local investments. A balanced and effective approach to reach anticipated level of IS may be adequate degree of diversification of investment sources locally and internationally. In some countries tax brakes or certain limits for investments are established to promote more local and foreign investments. IS is also related to better investment opportunities in small towns and remote territories in order to equalize the levels of economic development between urban and rural areas.

**Intellectual security**

Knowledge and intellect are among crucial facilitating factors for the long term success in the economy. Competitive advantages of nations may be utilized in a knowledge based economy. Knowledge based economy requires adequate intellectual capacity to feed different industries with innovations and new technologies and boost their level of competitiveness. In turn, knowledge based economy call for adequate knowledge based management. In other words knowledge based economy may survive and be further developed due to knowledge based management and good governance.

Each nation is concerned about the state of intellectual property protection, therefore, IS is closely linked to the issues of intellectual potential, and intellectual property rights. Initially this term was used in October 1845 Massachusetts Circuit Court ruling in the patent case. A year later it was mentioned in the work of French author A. Nion “Droits civils des auteurs, artistes ei inventeurs” published in 1846.55

IS is an essential part of national security. It is not only related to other forms of economic security but also serves as a

foundation for most of them. In many countries IS is a vital economic, social and political issue. In case of failure to reach sufficient level of IS, intellectual crisis may turn into a serious problem affecting economic, information, and national security. Considering the nature and the growing importance of IS, it became one of the most vital preconditions of growth for the world economy. From the other hand, IS is footing for such a major trend in the world economy as transforming the knowledge into an ever-increasing value and fast growing, essential part of exports.

Thus, IS is not only a local issue. It becomes a major challenge for the world economy. International organizations and agreements play vital role in setting up rules and regulations to reduce the risks associated with IS. World Intellectual Property Organization (WIPO) was established in 1967. Later, in 1994 and Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) was signed within WTO. WTO is dealing with such products of intellectual activities as copyrights (software, books, movies, music, painting, photographs), patents on new inventions (authors are given patents to prevent unauthorized use of their work for certain period, usually for 20 years), trademarks and service marks (a sign of a product or service of a business), industrial designs (appearance, style and design of an industrial object – furniture, textiles, etc.), and trade secrets (non-public information, knowledge related to commercial practices disclosure of which may harm the business).

IS may be defined as the ability of State to provide adequate protection of results of intellectual activities, as well as efficient use, successful re-production and improvement of quality of human intellect and its' capacity. By and large human intellect largely depend on genetic heritage, therefore, any contravention of IS may cause genetic consequences of nation. In turn, any change of genetic foundation has direct impact on IS of nation.

The state of IS of the nation is determined by intellectual potential and intellectual resources, in other words by the number and the quality of educated and skilled labor working with certain academic background.
IS has internal and external aspects and comprise of intellectual interests, intellectual threats and intellectual protection.

Intellectual interests are long term and require efficient utilization and re-production of accumulated intellectual capacity of nation and its further development. Being among basic needs to sustain competitive edge in the world economy, IS smooth the progress of the State to reach projected level of economic development, maintain acquired political sovereignty, as well as economic weight and image.

IS threats may be driven by local or foreign sources (factors) – individuals, groups, companies and organizations that create essential problems and threats to IS. Among the major threats to IS are but not limited to:

- insufficient demand for the skilled labor and well educated specialists;
- improper compensation for intellectual activities;
- lack of intention and efforts among young people to get higher education and to be employed in different fields of science and technology development;
- shortage of jobs for the university graduates compelling to change the skills and qualification;
- “brain drain”; 
- intellectual “aging” and lack of interest in obtaining scientific degrees in relevant fields of science;
- piracy of results of intellectual activities and inventions;
- industrial espionage;
- “reverse engineering”; 
- unauthorized or improper use of intellectual property;
- plagiarism;
- intellectual poverty;
- electronic crime;
- other types of intellectual crime.

It becomes complicated if not indeterminate to estimate the material and moral damage caused by each of mentioned threats to IS of the nation. Being a product of mind, the intellect usually
is being generated through research, development, individual creative activities and is hard to register for accounting purposes and bookkeeping in company’s “balance sheet”. The difficulty is mainly driven by the differences between physical and intellectual properties. Patent and copyright violations are not treated the same way as ordinary theft of physical goods and in most cases are subject to civil liability. Also compared to physical goods, intellectual property laws are usually part of federal not state laws.

Intellectual protection is expressed in actions and steps taken to prevent various threats and reach desirable level of IS. In turn, measures may vary from being reactive – in case they are aimed to deal with the consequences of intellectual property rights violations or negative trends to the proactive ones – attempting to prevent, reduce or minimize the risks associated with intellectual activities of people.

Reactive measures are related to:

- drafting and adopting laws to strengthen control and protection over intellectual property rights;
- enforcing laws to punish violations of intellectual property rights;
- working out concepts and strategies in science and technologies to fill the existing gap between the intellectual potential of the country and the latest achievements in international arena;
- adopting and implementing new standards and benchmarks in various fields of science and technology.

Laws related to IS are different in different countries to protect from IS threats. Today many nations adopt new laws on IS. However, one of the first laws firmly describing the essence of intellectual property protection and considering specific features compared to other properties and the need and extent of punishment was the Bayh-Dole Act passed in 1980. Nevertheless, there is another view that strengthening IS and intellectual

property protection may contradict public interests, not allowing to spreading widely the new inventions, books, music and other intellectual work and that the term confuses these issues and its use is being promoted by those who gain from such confusion of IP protection terms.\textsuperscript{57} From the other hand, patents, copy rights, trade marks and others also mean providing exclusive rights leading to some kind of intellectual monopoly that might not always match public interests. Therefore, aside from such unauthorized use of those products as piracy, plagiarism, and others, it forces some people and entrepreneurs to find substitute goods and services.

Considering the growing importance of spreading new inventions and products of intellectual work, an important document called Geneva Declaration was adopted in 2004 on the Future of the WIPO suggesting that it should focus more on the needs of developing countries.\textsuperscript{58}

Proactive measures include:

- appreciating intellectual capacity of employees, new inventions and innovations;
- conceiving proper conditions for better use of intellectual potential of individuals and institutions;
- creating demand for skilled, qualified, and knowledgeable labor;
- educate employees to raise the awareness about company’s trade secrets and inventions, and the ways to minimize the risks associated with IS;
- raising salaries, wages and other material and moral incentives of work for scientists and other intellectual people;
- government assistance in market research for the results of intellectual activities;
- encouraging individuals and companies to improve competitive edge of the economy in global markets;

\textsuperscript{57} Richard Stallman, \url{http://www.stallman.org/}
\textsuperscript{58} 2004 Geneva Declaration on the Future of WIPO, available at \url{http://www.digital-copyright.ca/node/view/478}
• involving academics and intellectuals of related fields in decision making process on various micro and macro levels.

Many authors or inventors establish pools to combine their efforts in related fields: Business Software Alliance (BSA), Recording Industry Association of America (RIAA), and others.

Considering current trend and developments in global markets countries attempt to better utilize their competitive advantages through shifting from reactive measures to mainly proactive strategies in order to improve existing intellectual potential and guarantee proper IS for the nation.

**Demographic security**

Demographic security is an essential part of economic security and deals with the reduction and elimination of threats related to the structure and changes in human population. In particular, it deals with overpopulation, aging, graying, urbanization, migration, brain drain, ZPG, and others, to name a few. Demographic security is in an interdependent relationship with human security, food security, energy security, environmental security, and other components of economic and national security.

**Population growth trends**

Human population had been reproduced six times more on Earth starting in the year 1800. (Bleier, 2007) It began to multiply fast during the Industrial Revolution. The number of people in the world was around 500 million in 1650, and two centuries were required before it grew to twice that population. Eighty 80 years later – in 1930 the number of people reached two billion (Pirages, 1997) in 1950 this number was around 2.5 billion, (Bleier, 2007) and less than 40 years took for approaching four billion. Presently, 6,7 billion inhabit the world (Pirages, 2004) and by adding more than 215,000 people to the world's population daily according to one source (Bleier, 2007) and 95 million annually according to other sources (Asian Development Bank, 2007; Irvine, 1994/95), or 800 million people in a decade (Tobias, 1994), it may end-up with 8.2
billion people in 2025. Eighty five percent of this number will reside in today’s less developed countries (Population Resource Center, 2005). This population growth has put a significant burden on the land, thus reducing the space for wild plants, animals, fish and birds. Also, it becomes tougher to open new jobs, provide more conditions for living, including various social benefits especially in less developed parts of the world taking into account that the richest 20 percent of humans make 83 percent of GWP whereas 20 percent of the poorest people manage to make only 1 percent. Also, the top 20 percent had 60 percent of the income, leaving just 40 percent for the rest. The richest 1 percent nearly doubled their share (Sklar, 2005). This trend is less likely to change significantly in the years to come.

Overpopulation

Overpopulation is a local trend turned into a global concern and considered to be among major threats to demographic security. Moreover, many regional problems as growing nationalism, racism, ethnic and religious conflicts, increasing of military spending, environmental degradation, polarization of society, as well as global social and political problems are being presented as direct consequences of non-controlled human fertility.

Graying, aging, ZPG

Interestingly many of consequences are also taking place in developed nations (the United States, Japan, EU countries) where the fertility rates are extremely slow and the latest achievements of science and technologies results in longer and better life, "birth dearth", and "graying" societies, thus provoking conflicts between different generations, between retired elderly people with chronic diseases and young working people who provide means to support social security and Medicare policies. (Boskin) The conditions are socially even worse in those developed nations where the number of births and deaths are more or less equal and thus close to zero population growth (ZPG). It has been estimated that the number of people below fifteen years is reducing and the share of those above retirement age and benefiting from longer
life expectancy is growing. In such OECD countries as Germany, Italy, Spain, Denmark, Sweden, the number of people under fifteen and over sixty-five is nearly equal, in others – over 14 percent of the population is beyond 65 and only 20 percent is under 15 (The Population Council, 2001). More and more people will receive pension and medical benefits while less young people will have to work harder to pay taxes for the benefits of elderly citizens. It is the estimate of OECD that in 2030, 27 percent of the population of Switzerland and 26 percent of the population of Germany will be over 65. 20 percent of the population in the United States and Japan will be over 65 (Erica L. Groshen and Thomas Klitgaard, 2002). In sum, the graying trend will change the aged dependency ratio (the ratio of those over 65 compared to those of working age of 15-65) globally: in the United States this ratio will reach .32 from the present .20 by 2030, in Switzerland the ratio will raise from .21 to .47 and in Germany from .22 to .44. (Aging Population 1988) The population of Japan is aging faster than that of the United States. The share of Japan's GDP released to social expenditures is expected to grow from 14 to 27 percent between 1983 and 2025. (Martin, 1989) Paradoxically, aging is not only typical for developed countries. Regardless the efforts of Chinese government to implement a one-child family policy, it is estimated that by the year 2040, 35 percent of people will be over sixty years that is 5 times more of present ratio. (Chesnais and Shuxin, 1992) Thus aging population and graying societies turn into equally disturbing concerns for both developing and developed nations.

One of the underlying issues of demographic security is the maximum number of people that can be sustained in the world. Recent trends reveal signs of degeneration or as some forecasts suggest – population default in case of a disaster to the extent of the Black Death that reduced the population of Europe by half in the fourteenth century. (Bleier) In addition, food shortage may be among the limiting factors to further growth of global population. In mid 1990s the global prices of wide grain had increased by 50% while the global reserves of grain had dropped to a record low of 49 days (the previous lowest level was in 1973 when reserves...
were only for 55 days). (Bleier, 1994) This in turn illustrates the threatening trend towards decline of per capita grain production, as well as seafood capture, and the reduction of per capita irrigated area that may allow to feeding only 750 million people more in coming years. (Brown, 2004) Today more than a billion people are hungry, and have no stable sources to earn food.

Some people believe that in parallel with the improvement of the quality of life for poor people human birth rates will decrease as it had happened in Germany, then in some CIS countries. However, economic growth in China, Turkey, and many others did not lower fertility rates, but had increased them (Tobias 1994).

**Wars**

It is hard to underestimate the role of wars in decelerating the world population growth. According to some calculations in 1950 – 1962 there were around ten wars worldwide with one thousand and more deaths. During the next twenty years this number had almost doubled, then mushroomed fast in 1983 up to thirty and did not decrease since then, including fifty and more countries particularly in 1990-1994. (Renner, 1996) Deaths are not the only consequence of wars. All armed conflict end up with high number of refugees. It has been estimated that the registered refugee numbers has grown from 15 million people at the beginning of the decade to 23 million people. There were around 2.5 million refugees since 1950 up to 1975 in addition to 27 million non-registered refugees in different parts of the world and more than 10 million illegally migrated people. One of the harmful outcomes of dramatic political and economic changes in developing nations and countries with transition economies are the so called economic refugees with an approximate number of 100 million people (Capdevila, 2005) compelled to look for better conditions for living and social welfare. There are some other limiting causes of population growth deceleration in the world such as communicable diseases (HIV/AIDS, malaria, tuberculosis, etc.), high mortality rates and diminishing births in newly independent states, industrialized nations and Asian countries.
**Environment, AIDS**

Continuous search for more resources through exploiting mother nature carry remarkable and deepening destruction on the biosphere, many kinds of flora and fauna had disappeared, others had been harmed significantly. Demographic changes bring to further corrosion of the ozone layer, global warming, acid rain, and growing vulnerability to infection and fatal viruses.

Overpopulation, ZPG, graying, aging, urbanization, and other demographic trends have their diverse impact on environment. High fertility rates demand sufficient food, infrastructure and other resources to sustain adequate quality of life. However, based on real developments, it becomes obvious that high rates of population growth results in essential dissonance with the resources of used land, running to ecological relapse, high exposure to different illnesses, civil, ethnic and other conflicts (Homer-Dixon, 1991). In case required means are not available locally attempts to attain resources somewhere else abroad becomes quite explicable (Crosby, 1990). These occurrences are being aggravated taking into consideration poverty levels in developing countries. Interestingly, more than the half of population in less developed countries currently lives in environmentally vulnerable regions. *(World Resources 1992-1993)* Notwithstanding endless efforts of local and international human health related organizations number of diseases continue to threaten the lives of people worldwide. Given fast growing number of global population this struggle becomes more and more complicates and less effective in terms of the number of infect people and victims of illnesses. Microorganisms become a subject of particular concern (Garrett, 1994). Among special threats to human health are chemicals, GMOs and pesticides (Pirages, Cousins, 2005) According to World Health Organization data in addition to other risky chemicals the mammary glands of each mother in the world are presently infiltrated with DDT and that 25 percent of all humans on Earth are vulnerable to chronic intestinal parasitic infections *(World Health Report, 1995)*. Other data warns that 2.4 million people die from AIDS annually that is one twentieth part of all
deaths from different causes. (Bongaarts, 1996) Evidently there are fewer chances to survive in this unprecedented battle with microbes—bacteria, viruses, infections and diseases (Emerging Virus, 1990).

Urbanization, migration, refugees

Human mobility is among key features and current trends in the ever changing world. People changing their birthplace for various reasons are not always welcomed by the host nations, and do frequently face discrimination, create stress, hostility, political instability, and tensions whether they change the towns within the same country or cross the national borders (Galtung, 1990). This is the case when migrants move from South to North or from East to West. The differential population growth rates like the rates of some Muslim and non-Muslim neighboring countries are among other challenges for demographic security resulting in significant relocation of people from one country to another. Majority of people in more than 40 countries is Muslim and approaching to the half of population in another seven. Comparative analysis suggests that the annual rates of growth in mentioned countries are almost three percent whereas their neighboring less developed nations registered 2.3 percent growth rates (Weeeks, 1989). A decade prior to the collapse of Soviet Union, the population of the Russia had grown at 0.7 percent annually at the same time as the populations of such Muslim states as Turkmenistan, Uzbekistan, Kyrgyzstan, and Tajikistan had growing at 2-3 percent annually. Moreover, 17 percent of the USSR population was Muslim and this part was growing at four times more rates than those of Russians (Central Intelligence Agency, 1990) It had been estimated that in 2025, there will be six times more people living South compared to the number of inhabitants in the industrialized North (1996 World Population Data Sheet). There is also the following observation on demographic issues related to the trends in North and South: it appears that the actual development aid may not be passing through North to South, but vise versa. Another assumption is that developing countries may have been subsidizing the developed countries totaling hundreds
of billions of dollars annually, in particular, $400 billion net goes from Latin America to the industrialized nations, and according to the UNDP data the total "aid" from the South to the North of $500 billion a year; whereas the overall aid to the developing nations from the North is around fifty billion dollars. (Tobias, 1994).

High fertility rates in rural areas of developing countries force many people to move to cities for anticipated social welfare and economic progress. The same is true while crossing the national borders in search of better conditions for life, and the number of political, economic refugees, and legal, illegal migrants is always difficult to estimate. Despite the efforts of the developed nations in North America and European Union (EU) to improve the immigration laws and strengthen the border control, however, around 300,000 people illegally cross the border and decide to stay in the United States each year, (The Floodgates are Bursting, September 9, 1991 and Weiner, 1995) and almost a million more into EU (Kalish, 1992). Aside from illegal migrants millions of migrants cross national borders quite legally each year and there are many people employed by legal contracts outside their homeland. Mobility is also typical inside developing countries – from towns to cities, and is defined as an increasing process of urbanization with its social, economic, environmental, political and other consequences to the nation, region and the world economy. According to official data 36 percent of people on Earth were living in cities in mid 1960s. This indicator had gone up to fifty in early 1990s (The World Bank, 1992). Intensive process of urbanization results in expanding "mega-polices" and "mega-cities." Some forecasts draw the following demographic picture for the year 2034: Mexico City and Shanghai will approach 39 million, Beijing 35 million, Sao Paulo 32 million and Bombay 31 million (Bouvier, 1984). This in turn requires providing adequate housing, sanitation, transportation, jobs, security, and other amenities, maintaining order and preventing epidemics. In the year 2025 some expect to count over five billion people living in urban areas with a big number of them in developing countries (World Resources 1996-1997) and with an estimated half of the developing nations poor people will reside in urban areas (World Resources 1988-89, 1996-1997).
Finally, as a consequence of urbanization some 476,000 hectares (1 hectare = 2.47 acres) of agricultural land in developing countries passes to urban possession (World Resources 1996-1997).

**Demographic threats and Malthusian theory**

In late 18th century Thomas Malthus suggested that the number of people need to be in harmony and balance with food supplies because all humans actually follow similar laws as all other plants and animals (Malthus, 1798). However, like other representatives of the Mother Nature people are also unable to limit fertility rates, eradicate hunger, poverty, illnesses, wars and only the nature’s self-regulating functions may create anticipated balance in numbers. One of the disturbing outcomes of overpopulation is the growing poverty around the world. The number of hungry people is not decreasing, but growing daily. Many people doubt that having serious difficulties in feeding people today what is expecting the world in the coming years having essential cut of natural resources, rising pollution, and ecological relapse expressed in global warming, acid rain, ozone layer erosion, reducing forest zones with more inhabitants in the world. One of the major concerns continues to be the scarcity of resources for sustainable development and the growing gap between rich and poor people.

Some predict that the human population will reach nine billion by the year 2045 (Homer-Dixon, 1994), others see it as early as before 2035, (Bleier, 1994) and another forecast based on present fertility rates estimates 13.7 billion in 2095 (U.S. Census Bureau Data). Finally a minimum number of 7.5 billion and a maximum of 9 billion in 2050 had been calculated by the United Nations and U.S. Census Bureau. (United Nations, US Census Bureau).

**Taken actions**

Several efforts were made to solve demographic security issues globally. In 1974 World Population Conference in Bucharest, Romania firstly demonstrated political fragmentation
between North and South. Developed countries attempted to pass the World Population Plan of Action with clear indication of family planning principles. Limiting high fertility rates were a central issue at 1984 International Population Conference in Mexico City, as well as at the Rio de Janeiro "Earth Summit" of 1992 and the 1994 Cairo conference. All projected actions had failed since the religious groups, gender-related organizations and political leaders from less developed nations strongly opposed the adoption of resolutions for immediate action. In 1989, however almost eighty countries committed to give four percent of developed nations’ foreign aid for family planning and had adopted Amsterdam Declaration with a jointly drafted plan to balance the global birth rates and provide contraceptives to the three quarters of women globally. In 1994 the U.N. International Conference on Population and Development again called for firm action on family planning. Since the global forums are not always fruitful in terms of actions, developed nations attempt to solve global problems and had initiated several projects. Kennedy Administration started to promote population growth limitation with adequate funding from the US state budget and supported the United Nations Population Fund with relevant programs in 130 countries. Later administrations continue to fight with demographic threats by spending needed funds and expanding links of cooperation with other interested parties. (Donaldson, 1990) Collective actions are needed to keep people from moving to already unsafe and environmentally risky territories and stimulating economic growth in rural areas.

**Solutions**

As it can be seen from actions taken previously anticipated solutions become more complicated. Some suggest that two hectares (about 5 acres) per person are needed to maintain average person in a developed country. (Irvin, 1994/95) Consequently more than twelve billion hectares are needed to support current population number. Arms race spending also cut the funding that could otherwise be directed to solve demographic issues and social welfare. Arable land and environmentally vulnerable
territories need to be preserved for the years and generations to come and keep them away from solely commercial interests. Risky chemicals and pesticides need to be restricted for food processing industries worldwide. Proper actions by local governments and international structures may minimize 40 million unintentional pregnancies annually stop 70,000 annual deaths from insecure abortions most of them taking place in less developed countries (Bleier, http://desip.ige.org/Monster.html). Tax deductions for dependents also work in the opposite direction of limiting fertility rates (Bleier, 194)) For solving issues related to aging and graying population countries like Japan try to develop robots to replace workforce that will decrease in coming years and other nations try to pass a growing portion of tax burden to the shoulders of immigrants in order to feed elderly people in host countries (Hiatt, 1990) As it can be seen from the contemporary trends, reduction and elimination of many demographic threats may not be feasible only due to the measures taken by local governments. Demographic security largely depends on coordinated regional and global efforts and international cooperation.

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Chapter 4
The Social Consequences of Economic Globalization

“Yet it's bad economics to pretend that free trade is good for everyone, all the time. “Trade often produces losers as well as winners" declares the best-selling textbook in international economics (by Maurice Obstfeld and yours truly). The accelerated pace of globalization means more losers as well as more winners; workers' fears that they will lose their jobs to Chinese factories and Indian call centers aren't irrational”.

Krugman (2004)

Introduction

If mainstream international trade theories overwhelmingly point out the welfare to be gained by all countries in reducing trade barriers, some of these theories also clearly imply that trade liberalisation is not neutral, e.g. in terms of income distribution. International trade competition, alongside with technological change, has been considered as a possible explanation for increased wage inequality in some industrialised countries.

In some recent theories, free trade is shown to be potentially detrimental to technologically lagging countries. If this would be the case, trade liberalisation could actually hamper rather than spur economic growth in developing countries.

In this chapter, a critical review is proposed of some theoretical and empirical arguments in favour or in opposition to economic globalisation as a way to reduce the welfare gap between developed and developing countries or as a threat to the social cohesion in (ageing) developed countries.
In the Long Run: Lifting all Boats?

With the publication, in 1776, of the classical landmark *An Inquiry into the Nature and Causes of the Wealth of Nations*, Adam Smith provided a first theoretical argument for the mutual gains from international trade. He showed that countries have an incentive to produce more of the goods that they can produce more efficiently (i.e. requiring less hours worked) than other countries and to export the produced surplus of these goods, in exchange for goods the other countries produce more efficiently.

In 1817, David Ricardo presented his theory of the *comparative advantage*, showing that contrary to the conclusion of Smith's theory of the *absolute advantage*, even a country that cannot produce any good more efficiently than another country, can improve its welfare relative to the autarky level, if it exports the goods that it can produce, compared to its trade partner, relatively more efficiently. Countries with an overall lower productivity level can therefore also gain from international trade.\(^{59}\)

Almost a century after Ricardo, Eli Heckscher and Bertil Ohlin linked the comparative advantage of a country to its relative endowment of production factors.

A country should export the goods that require much of those production factors it is relatively well endowed with.

This factor-proportions theory corroborated Ricardo’s main conclusion, namely that all countries can reach a higher welfare level under free trade than under autarky.

The Heckscher-Ohlin (HO) model, which was further elaborated by e.g. Ronald Jones, Tadeusz Mieczyslaw Rybczynski, Paul Samuelson, Wolfgang Stolper and Jaroslav Vanek, relied on a number of rather restrictive (neoclassical) assumptions and starting with

\(^{59}\) Keynes warned that the law of comparative advantage only applies if all nations have domestic policies that assure full employment. If not, countries can increase domestic welfare by forcing sales on foreign markets and restricting imports to maintain domestic full employment (Davidson 1999: pp. 11-12).
Wassily Leontief in 1953, empirical tests of the model did not seem to be very supportive (e.g. Bowen, Leamer and Sveikauskas 1987).

More recent empirical tests (e.g. Davis, Weinstein, Bradford and Shimpo 1997 and Hanson and Slaughter 1999) bolstered up the theoretical framework, though the fact that most of these tests are supportive of the HO model for interregional trade (within countries) suggests the importance of geographical distance.

The decreasing importance of distance, due to falling transportation costs and improved communication channels, is by many believed to be a driving force in economic globalization, suggesting that in the future empirical work could be more supportive for traditional trade theories that ignore transportation costs (e.g. the Heckscher-Ohlin model).

In some (endogenous) Growth models the gains from international trade are somewhat more ambiguous.

Grossman and Helpman (1991) stressed the importance of international commerce to facilitate knowledge transfer and spillovers but consider a number of cases in which international trade may actually slow down economic growth. If a country is relatively poorly endowed with high-skilled workers, trade liberalisation could reduce domestic R&D activities and shift production to stagnant traditional manufacturing industries. Even when considering international R&D spillovers such a country may grow more slowly under free trade than under autarky.

If spillovers are local, small countries performing little own R&D could specialize in traditional industries and even cease some innovative activities that would continue under autarky.

Governments of technologically lagging countries could *level the playing field* by encouraging domestic R&D activities though the impact of technology (and trade) policies will depend upon whether knowledge spillovers are local or global in scope (Grossman and Helpman 1991: pp. 337-339).
Aghion and Howitt (1998) also underlined the equivocal effects of trade liberalisation in models of dynamic comparative advantage in which technology is considered as an endogenous factor, intertwined with the world market.

Recently, Samuelson (2004) showed how even in a traditional simple (Ricardian) model with two goods and two countries with different productivity levels, technological progress in the lagging country could benefit the latter but hurt the more developed country, i.e. reduce the mutual gains from international trade. He points out that this conclusion holds in multi-factor models. Gomory and Baumol (2000) also find that, when accounting for rapid technological change and economies of scale, an increase in one country’s productivity could harm all other countries.

Theories explaining the mutual gains from international trade have an outspoken long-run focus. As pointed out in this section, recent theoretical models are more ambiguous even with respect to the long-run gains. However, the recent globalization debate seems to focus more on the short and medium-run (social) consequences than on the potential long-run economic gains.

**Meanwhile, in the Short Run:**
**Some Boats turning Turtle?**

Free trade advocates feel backed up by mainstream trade theories to urge developing countries to open up to international trade as the best development strategy as well as to hackle most developed countries for only paying lip-service to the case of trade liberalisation, raising trade barriers (e.g. the Multi-Fibre Arrangement or export subsidies for the agricultural sector) with respect to those goods for which developing countries have a comparative advantage and disguising protectionist demands as genuine concern for social and environmental conditions in developing countries.
The sometime appraisal of import substitution as a way to initiate the industrialisation process in developing countries\textsuperscript{60} gradually made way for a consensus on the virtues of a free market export-oriented development strategy, though in assessing the dynamic economic growth performance in East Asia, the World Bank (1993) conceded that, in addition to export-orientation, some degree of subtle import substitution and other types of state intervention probably enhanced the competitiveness of the Asian Tigers and Pussycats.

The successive General Agreement on Tariffs and Trade (GATT) rounds, culminating in the establishment of the World Trade Organization (WTO) in 1995, resulted in a gradual but substantial multilateral reduction of tariff and non-tariff trade barriers, which undoubtedly contributed to the considerable rise in world trade.

As the increasing number of demonstrations at meetings of the WTO show, a large number of non-governmental organizations and all kinds of less organized activists tend to disagree with the undiluted benign nature of the integration of all countries into a global shopping-centre.

A number of economists took the resounding objections into consideration.

Dani Rodrik, when wondering whether globalisation may have gone too far, believes that much of what passes as analysis (followed by condemnation) of international trade is based on faulty logic and misleading empirics but argued that economists have adopted an excessively narrow view on the impact of globalisation and did little to close the yawning gap that separates the views of most economists from the gut instincts of many laypeople (Rodrik 1997: pp. 3-4).

\textsuperscript{60} Prebisch (1950) reasoned that the persistent deterioration in the relative world market prices for raw materials harmed (Latin American) developing countries with a comparative advantage in primary goods. He therefore perceived inward-oriented policies as the appropriate way to support development through industrialisation.
Poverty in Developing Countries

Stiglitz (2002), after recounting the virtues of globalisation for developing countries, fancied that for many in developing countries globalisation did not live up to the promises vowed by its supporters. According to Stiglitz, whereas in the 1990s world income increased by 2.5 per cent (on average), the number of people earning less than two dollars a day increased by 100 million. Stiglitz objects to the Washington Consensus, advocating privatisation, capital markets liberalisation and slimming of state intervention (i.e. reducing expenditures on healthcare and education), which he believed to have favoured commercial interests above the cause of environment protection, democracy, human rights and social justice.

In his view, not so much the WTO should be called to order but rather the Washington-based Bretton Woods institutions IMF and the World Bank, which have more power to push trough their free market agenda than the WTO. The latter is anyhow more of an umpire, observing the free trade rules agreed in consensus by its member states and arbitrating trade conflicts.

Jagdish Bhagwati dispatches the reasoning of his Columbia University confrère Stiglitz as Jurassic Park economics, trying to revive dinosaurs, which we hoped we had slain.

He brought forward the results of Xavier Sala-i-Martin, another Columbia University professor who, using data from 125 countries, stated that the number of people living on less than two dollars a day actually declined by nearly 500 million in the period 1976-1998.

Honouring the Columbia University idea of good-fellowship, Stiglitz apparently retorted Bhagwati’s compliment: “That is part of Bhagwati’s charm, that he’s such a curmudgeon.” (Hilsenrath 2002).

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61 The term Washington Consensus appears to have been introduced in 1989 at a conference organised by the Institute for International Economics to denote the consensus view of Washington-based international institutions like the IMF and the World Bank, the US government and the Federal Reserve Board, with respect to policies that were promoted, if not imposed, in developing economies (van de Ven 2003: p. 16).
Crafts (2004) fears that Lucas (2000), when forecasting that global income inequality will decrease in the 21st century, due to neo-classical growth convergence, could have been overly optimistic. Crafts quoted New Geography theories, which consider the catch-up of a number of developing countries (e.g. Asian NIC) as a transition process of a happy few, favoured by location, rather than as an indication of general convergence.

Bloom and Sachs (1998) suggested that the disadvantageous geography of Sub-Saharan Africa could rather than political, social and demographic conditions, be the main explanation for the chronic poor economic growth performance of this region. Throughout history, tropical regions have lagged behind temperate regions and Sub-Saharan Africa is the most tropical region in the world, with a climate, soils, topography and disease ecology that raised unparalleled obstacles to growth.

Freeman (2004) judges that the battle between the adherents of the Washington Consensus and its discontents, though informed by trade theory, is largely empirical, but stated that both sides tend to exaggerate the impact of trade in the globalisation debate.

He contends that other aspects of globalisation, like immigration, capital flows and technology transfer have a far greater impact on labour markets and views the high volatility of capital flows as a potentially disruptive menace for developing countries.

Apparently, even sparring-partners Bhagwati and Stiglitz agree with one another that capital controls might had reduced the financial turmoil in some Latin-American and Asian emerging economies in the 1990s (Hilsenrath 2002).

The Asian financial crisis and the collapse of the 1990s poster country for globalisation, Argentina, appear to have somewhat detuned the exuberant praise of the Washington Consensus by its adherents and Freeman contents himself with the indulgence of the managing director of the International Monetary Fund that labour standards may benefit rather than harm the global economy (Freeman 2004: pp. 4-5).
Reviewing the empirical evidence on the impact of trade openness on growth and poverty in developing countries, Dollar and Kraay (2004) conclude that both individual case studies and cross-country growth regressions support the view that globalisation enhances economic growth and on average tends to reduce poverty in developing countries.

However, Winters (2004) subjoins that the evidence also shows that trade liberalisation alone does not boost growth significantly and that institutions play an important role in translating trade openness into economic growth.

On the other hand, Rodríguez and Rodrik (1999) believe that serious methodological problems do not permit to provide a clear-cut answer to the question whether lower trade barriers allow countries to grow faster and claim to find little evidence that lower tariffs and non-tariff barriers to international trade are significantly associated with higher economic growth.

Feenstra (2001) concludes that whereas few economists tend to doubt the beneficial effects of international trade, despite its impact on income distribution, evidence in support of the gains from trade, static or dynamic, is surprisingly thin.

But then again, Baldwin (2003) restate that the conclusion of most researchers that lower trade barriers, in combination with appropriate and stable exchange rates, prudent monetary and fiscal policies and corruption-free administration enhances economic growth, remains valid.

As the foregoing indicates, there is no consensus among economists about the impact of globalization on the position of developing countries. It seems however fair to say that if trade liberalisation offers developing countries a way to spur economic growth and raise the welfare of their inhabitants, history and common sense make it clear that liberalisation should be met with policies and institutions that allow countries to seize trade opportunities and that this may imply some degree of state intervention. However, the extent of state intervention that
explains part of the strong growth performance of some Asian NIC fits awkwardly with nowadays principles of “fair” international trade competition and is probably not an option for developing countries that are member of the WTO.

Today, the situation in many developing countries is still appalling and van de Ven (2003) rightly states that apart from environmental depletion, the closing of the indecently wide North-South divide is the true challenge of globalisation. Rich countries have the moral obligation to support developing countries in their search for a decent development level.

It would, however, be unfair to blame economic globalisation for everything that goes wrong with developing countries, as the situation of many poor countries was deplorable long before globalisation became a buzzword.

**Inequality in Developed Countries**

David Ricardo considered (homogenous) labour as the only relevant production factor. Therefore, income distribution between different factors was not an issue.

With the multi-factor Heckscher-Ohlin model income distribution was brought into prominence.

The Stolper-Samuelson theorem, i.e. one of the four core theorems of the HO framework, states that if a country opens up to trade with another country, the relative reward of its scarce production factor(s) will fall. So even if there is an overall net welfare gain from international trade, trade liberalisation is not Pareto-optimal, i.e. though all countries at the aggregate level may win, there could invariably be losers in all countries.

However, the fact that international trade is not neutral does not provide a valid argument against trade liberalisation. If there are net gains from trade, trade liberalisation in combination with income redistribution could result in a Pareto optimum, improving the welfare of all individuals.
Moreover, the Stolper-Samuelson theorem only holds if some goods are jointly produced in the countries considered. If countries would fully specialize, e.g. high-skill abundant countries in the production of high-skill intensive goods and low-skill abundant countries in low-skill intensive goods, there would be no competition between countries and trade liberalisation would, as argued by Bhagwati and Deheijia (1994) create a tide that lifts all boats, i.e. benefit all production factors in all countries.

Bhagwati (1998) reasoned that economies of scale could result in an improvement of overall efficiency due to trade competition, which could outweigh negative Stolper-Samuelson effects.

However, as pointed out before, Gomory and Baumol (2000) have shown that when accounting for economies of scale, a productivity gain in one country may actually harm all other countries.

Burkett (2000) and Schott (2003), using data for a panel of developed and developing countries, find indications that relative factor endowments are too divergent across countries to support a single-cone Heckscher-Ohlin model. However, countries do not appear to be fully specialized and there are a number of goods that both developed and developing countries produce.

Deardorff (2002) shows that with two cones of diversification, countries can produce the same goods with the same production techniques but with different relative intensity of production factors, given differences in factor rewards (which do not necessarily equalize as predicted by the Factor Price Equalization theorem in a single-cone HO model).

When in the 1980s the relative wages, as well as the relative employment, of low-skilled workers dropped dramatically in the United States, import competition from Newly Industrialised Countries (NIC), which was on the rise at about the same time, was soon to be lined up as a usual suspect.
The public prosecutor could invoke the Stolper-Samuelson theorem, which predicts that when a high-skill abundant country starts trading with a low-skill abundant country, the relative wages of low-skilled workers will fall in the high-skill abundant country and rise in the latter.

In the European Union, the trend in the relative position of low-skilled workers was rather mixed, with some countries witnessing a severe increase in wage inequality (e.g. the United Kingdom) and some countries were the unemployment of low-skilled workers rose substantially (e.g. Germany). This different pattern may still be explained by a common cause though, affecting countries in a distinct way, due to cross-country institutional differences.

Labour market institutions (collective bargaining, minimum wages, unemployment benefits) are often blamed for causing high unemployment rates in a number of EU countries, as they are assumed to prevent market-clearing adjustment of wages though the evidence to support this view is not overwhelming (e.g. Agell 1999, Howell and Huebler 2001 and OECD 2004).

Different methodologies have been proposed to test the claim that international trade with Newly Industrialised Countries deteriorated the labour market position of low-skilled workers in industrialised countries.

In the mid-1990s, following the early empirical work, economists seemed to reach a consensus of opinion as to the at most limited impact of international trade. Skill-biased technological change (SBTC) ended up in the dock as the more likely culprit.

However, more recently a number of prominent trade economists uttered that the consensus may have been overhasty. Some new empirical methodologies and non-Heckscher-Ohlin theoretical models have been proposed that do not permit to exculpate international trade that easily.

Moreover, most empirical studies considered the situation in the United States. Relatively little research on this issue has been
performed on data for EU countries, and if so mostly only for a single country. The substantial differences in institutions, trade flows and specialisation patterns between the United States and most EU countries, but also within the European Union, should warn against the extrapolation of previous results.

Estimations for a panel of EU countries in the 1980s and 1990s suggest that international trade competition from the NIC did affect the position of low-skilled workers in the EU, be it in terms of a rising skill premium or increased unemployment, though it is not likely to be the dominant explanation for the weakened labour market position of low-skilled workers in most industrialised countries (Cuyvers et al. 2003 a, b).

According to Arbache, Dickerson and Green (2004) the empirical evidence on the East Asian NIC seems to support the view that trade liberalisation reduced wage inequality, as predicted by the Stolper-Samuelson theorem, but for a number of Latin American developing countries which opened up to trade more recently, wage inequality seems to have increased.

Krugman (2004) discounts pretending that free trade benefits all the people all the time as bad economics and reasons that the accelerated pace of globalisation implies not only more winners but also more losers. He does not dispatch workers' fears of losing their jobs to Chinese factories or Indian call centres as irrational.

If a shift in the output mix or trade pattern of a country can be modeled smoothly in theories, in practice these shifts are very unlikely to progress smoothly or painless. When, for example, the comparative advantage of a nation in textiles drops as a result of trade liberalization, this country’s textiles firms will probably not start producing telecommunication satellites. If they do not succeed in seizing a reasonable share in a top-end niche of the textiles market they will more probably have to close down. The social impact of the closing-down of large production facilities has been depicted elucidatory by Michael Moore, in his 1989 documentary Roger and Me, in which he showed the devastating effects on his hometown Flint (Michigan), when General Motors
decided to fire 30,000 workers at its local plant, at a time when it was making record profits.

There could be a substantial lag between the job destruction due to the closure of firms and the job creation due to the entry of new firms or the expansion of existing firms, in sectors where the country supposedly has a new or increased comparative advantage. This time lag may lead to severe political pressure in favor of protectionism and fierce opposition to further liberalization, the more if the lost jobs and the jobs that are created are geographically remote.

Concerns in most industrialized countries with respect to globalization seem increasingly focused on the effects of relocation of activities to low-wage countries.

Whereas previously low-paid workers were affected, white-collar workers are now starting to feel the heat, which might explain the increased awareness of politicians. Some believe that the fact that the recent expansion in the United States is one of the weakest in terms of job creation, can be explained by companies trying to raise the productivity of domestic workers relentlessly or outsourcing jobs to countries where armies of workers can be employed at a fraction of the wages in developed countries (e.g. Herbert 2004).

In Europe, many multinationals have (or consider to) relocate(d) a large number of their production activities to countries in Central and Eastern Europe or Asia.

ICT jobs or high-tech activities, i.e. the kind of jobs that are supposed to substitute for the relocated jobs, do not seem out of reach of the relocation trend.

Stephen Roach, Morgan Stanley’s Chief Economist, reasons that the transfer of well-paid jobs from developed countries to low-wage countries may reflect a structural shift that could explain why recent economic recovery in most developed countries is rather disappointing in terms of job creation and why the negotiations in the recent WTO Doha Development Round
are so laborious and have provided provisionally so little results, indicating that, both in developed and developing countries, the gains from further trade liberalisation are no longer taken for granted. Taking seriously the legitimate concerns of those that are affected by international trade should enter the political priority.

Amiti and Wei (2004), find that although outsourcing of services increased substantially, it is still at very low levels and that moreover in many industrialized countries (e.g. the US) insourcing” dominates “outsourcing”.

Cuyvers, Dumont, Rayp and Stevens (2002) review previous estimations of the impact of foreign direct investment on labour demand and perform own estimations on a panel of EU countries, with respect to investment in Central and Eastern European countries (CEEC). Using firm level data, labour demand elasticity was estimated within a flexible cost function framework. Activities of CEEC affiliates were found to have a significant impact on employment. In addition to the sector component, the component accounting for FDI spillover effects, often ignored in previous estimations, is also found to be significant and as substantial as the direct effect.

**Immigration**

In most trade theories, international factor mobility (e.g. labour migration) is considered as an alternative to free trade to achieve efficient worldwide division of labour.

This argument is often put forward to promote the reduction of international trade barriers as a way to reduce immigration flows from developing countries, as immigration seems to be an even more sensitive issue in industrialised countries than import competition.

Fears of large flows of immigrants from the Central and Eastern European Countries (CEEC) resulted in a phased acceptance
of free movement of people between the joining and the established EU member states.

As immigrants in industrialized tend to be low-skilled they can be expected to raise the supply of low-skilled workers. All other things equal this will increase the skill premium, or given sticky wages, increase the unemployment of low-skilled workers. However, available data on relative labor supply in OECD countries suggest that if anything, the relative supply of high-skilled workers increased, which indicates that changes in labor supply cannot explain the weakened position of low-skilled workers, unless official data on labor supply severely underestimate the amount of clandestine low-skilled immigrants.

Abraham and Konings (1999) point out that the fact that, except for Germany, after the fall of the Berlin Wall and the Iron Curtain, the opening of Central and Eastern Europe did not result in large inflows of labor in the European Union can partially be explained by the reluctance of policy-makers to accept a substantial inflow of (low-skilled labor), given the high unemployment rates of low-skilled workers in most EU countries. They view trade integration as an alternative to labour migration, allowing CEEC to produce at home and allowing established EU countries to avoid the social tension that may result from large-scale migration.


Statistics on legal migration show that from the mid-1980s the net inflow of immigrants rose noteworthy in the European Union, peaked in the beginning of the 1990s due to the opening of the CEEC and refugees from violent conflicts, to decline again from 1993 onwards as a result of tighter controls. Germany, the Netherlands, the Nordic countries and the United Kingdom received a large part of the immigrants. With the exception of Austria, Germany, Italy and Portugal, the number of foreign born as a percentage of total population hardly changed between 1988
and 1998 in most EU countries (Coppel, Dumont and Visco 2001: pp. 6-10).

Whereas studies for the United States generally fail to find an impact of immigration on employment, in some studies a small negative effect is found for European Countries, though this effect seems to occur in the short run as for the long run there are even indications of a positive impact.

Though most studies suggest only a small negative impact of immigration on wages, some estimates provide a more substantial impact when disaggregating labour by skill level. As immigrants are on average more low-skilled than domestic workers this seems in line with standard theoretical assumptions (Coppel, Dumont and Visco 2001: pp. 15-16).

Some OECD countries like France, Germany, Japan, The United Kingdom and the United States are promoting the immigration of high-skilled workers to match the high demand in some skill-intensive sectors with growing difficulties to recruit qualified domestic workers (e.g. Information Technology).

Given the ageing of the population in most industrialised countries, shortages of (skilled) workers are likely to become more acute in the future.

It is however not easy to fine-tune the level and composition of immigration and recruiting high-skilled workers from developing countries could induce a brain drain in developing countries.

Coppel, Dumont and Visco warned that although migration can partly offset the slowdown in population growth in OECD countries, it cannot, on its own, resolve the budgetary implications of ageing populations.

Moreover, the economic development of emerging economies could reduce the incentive for emigration from developing countries.
The Sustainability of the Social Model in Industrialised Countries

Sapir (2003) argues that the sustainability of the European (social) model is threatened by rapid changes in demography (ageing), technology and globalisation whereas, ironically, all these factors increase the demand for social protection.

Rodrik (1997) believes that the more footloose capital becomes, the harder it will be for governments to sustain social insurance, as this implies increasingly taxing the most immobile production factors, i.e. labour, which will have to compete with a vast supply of workers in developing countries.

Sapir (2003) pointed out that GDP per capita of the EU stagnated at about 70% of the level in the US, since the beginning of the 1980s. Europe’s unsatisfactory growth performance is viewed as a serious threat to the sustainability of the European (social) model. A reorientation of European micro-and macroeconomic policies towards a more innovation-oriented (e.g. through higher investment in R&D and education) and a more flexible economy is advocated as the best way to proceed.

In a response to the Sapir Report, Blanchard (2004) objects that Europe has performed better in the last three decades than is typically perceived, pointing out that productivity levels in Europe are rather similar than in the US. In his view Europe, however, contrary to the US, used productivity growth to increase leisure time instead of income.

De Grauwe and Polan (2003) find no evidence of a race to the bottom with regard to social spending in industrialised countries. For a panel of OECD countries they actually find a significant positive correlation between a country’s social spending (unemployment, disability, health care, pension, family services and housing) and its world competitiveness. There does not appear to be much evidence for reverse causation, i.e. competitiveness allowing for high social spending.
The authors favour the explanation that a strong social system, limits social conflicts, raises investment in human capital and supports risk-taking, all of which can spur innovation, productivity and growth.

OECD (2004) found strong evidence that labour unions reduce wage inequality. This appears to be the only robust association as they did not find unambiguous evidence with regard to indicators of collective bargaining and the evolution of aggregate real wages or some non-wage indicators of labour market performance (e.g. unemployment rates).

Though the OECD does not preclude that a more detailed analysis that considers the interaction between collective bargaining and some labour market policies could provide more conclusive results, i.e. results in line with the orthodox view that most labour market institutions (rigidities) result in poor labour market performance, they grant that the inconclusive results could also indicate that substantially different institutional setups may lead to similar levels of macroeconomic performance.

This implies that labour market institutions (employment protection, collective bargaining, minimum wages...) will not necessarily be impaired by increased international trade competition.

Conclusions

Economic globalisation, i.e. the increased interdependence of countries through rising flows of goods, services, capital, labour, ideas and knowledge, has been spurred by trade liberalisation, deregulation and technological progress.

Though – at least theoretically – globalisation holds the promise of rising wealth for all nations in the long run, in the short and medium run it changes the lives of millions of people and not always for the better, in developing as well as in developed countries. Without accompanying policy measures international trade competition and technological change leaves
many poorly off. Trade liberalisation is no guarantee for developing countries to witness strong economic growth. Even if the welfare of countries is increased, changes in international trade specialisation do not occur without friction and import competition from emerging low-wage economies and technological change can harm the labour market position of low-skilled workers in developed countries.

The negative effects of economic globalisation do however not provide a valid argument in favour of protectionism. The case for the mutual gains from free trade is still very plausible and a return to the beggar-our-neighbours-and-ourselves-while-we-are-at-it isolationism of the 1930s should by all means be avoided. Policy makers would do well to consider the (social) effects of economic globalisation, both in the short and the long run, and to develop policies that allow for an equal distribution of the gains from trade.

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Chapter 5
Economic, Political, Legal and Cultural Grounds of Competition

Introduction

Comparative advantages involve the differential spatial distribution of natural or created resources that operate at the industry or national level. Competitive advantages involve the superior deployment of competencies and resources that enable effective competition at the firm level. Both comparative and competitive advantages wax and wane in time and, in a globalized world, are available to different extents to domestic and localised actors. One important role for government is encouraging the growth of different forms of advantage and enabling actors to use them singly or in combination to help drive economic growth for, preferably, all members of the economy. Advantages include not just those relating to macroeconomic variables but to a much wider set of concerns, including the cultural, political and legal. As business practitioners know full well, all of these areas are replete with ideas and issues that can be used to obtain an advantage. Former colonial links, broadcasting, cultural hegemony, enforcement of the adoption of political systems and enlistment in or denial of membership of international legal standards are all areas that may be used in this way. The current chapter highlights different types of grounds for competition and delineates their main features and future prospects.

Nature and Significance of Competition

All human societies provide incentives for success, although the nature of that success and of the incentives themselves varies widely. Most countries correlate educational achievement with a subsequently higher income and this is a policy designed to
encourage overall social and economic growth. However, short-
term dislocations of earning ability and access to jobs occasionally
disrupts that correlation. For example, skilled construction workers
can obtain piecework contracts which sudden improvements in
technology enable them to complete with unanticipated ease and
hence achieve a much higher rate of earnings than academically
qualified individuals. In a more extreme case, in the Cambodia of
the Khmer Rouge, anyone demonstrating academic ability or
expertise was routinely imprisoned or murdered as a potential
traitor. Since most people will, most of the time, act in the
pursuance of incentives and avoid disincentives, states can affect
the behaviour of individuals and organisations by altering incentives
and disincentives. However, this is not always guaranteed to
work as all societies demonstrate unwanted and unanticipated
results of incentives on a regular basis.

Competition within the private sector is fostered by a
business infrastructure which is supported by the public sector
and which helps to support the functioning of markets and
regulates the behaviour of people within them. Recent high-
profile corporate scandals in the USA provide further evidence, if
any is needed, that lack of appropriate external regulation
inevitably leads to corruption and fraud because of the high level
of incentives for people to behave in that way. However,
maintenance of fair markets is not the only role of the state in
promoting competitiveness. As Dunning has obser
died: “The
competitiveness of countries is becoming increasingly dependent
upon their ability to create new assets; but in order to do so firms
domiciled in one country may need to extend their markets and
their supply capabilities into other countries which offer the
greatest commercial opportunities” (Dunning, 1997). Despite the
often intense controversy surrounding the role of government in
business, a consensus has emerged in at least some parts of the
business and management studies community about the kinds of
activities with which government should be concerned. These
include the fostering of research and development at university
and industry level, the encouragement of the creation of clusters
of spatially-bound linked industrial activities, the search for new ways to tap existing comparative advantages and the creation of more opportunities internationally through trade diplomacy. Understanding how these activities may be used by the state and the firms it supports is the purpose of the following sections of this chapter.

**Economic Grounds of Competition**

The ability to produce goods and services of appropriate quality at a lower cost than competitors will always be an important one. Depending on the nature of production, low labour or energy costs may be significant in delivering low costs. In other cases, the presence of a well-developed transportation or business infrastructure may be influential. More generally, it is the combination of factors that will be telling, since advantage in one area is often offset by disadvantage in another. This is demonstrated by the ‘curse of oil’ phenomenon which is used to help understand why resource-rich countries are often poorer than those without access to them.

**Factor Costs**

The factors of production are labour, land, machinery and capital. The less that each or all of these factors cost, the lower the prices that may be offered by firms making use of them. They may be depressed by government intervention in markets, subsidies or by erecting barriers against imports. For example, the US government unilaterally imposed tariffs against steel imports for political reasons to protect inefficient American steel producers in contravention of international trade treaty obligations (Krugman, 2004, pp.385-7). In China, the enormous size of the labour market and the fact that so many millions remained for years under-utilised in agricultural areas has acted to keep unskilled and semi-skilled labour costs low in that country. However, there are signs that the under-utilised pool of labour is becoming
mobilised to such a degree that basic labour costs are starting to rise (Hutton, 2005). All factor costs are subject to basic market forces – that is, the laws of supply and demand – and, in the long-term, these are hard to defeat. However, they may be subverted more or less effectively in the short and medium terms, through government intervention or market distortion or manipulation. The privatisation of the electricity industry in California led, it has been claimed, to the withholding of supplies of electricity by providers so as to maximise short-term profits at the expense of the state government and of the people and industry of the state (Krugman, 2004, pp.299-326). In the long term, these distortions may be overcome through the increasing mobility of factors, for example by importing electricity from further afield. One of the effects of globalization has been to intensify both the supply of and demand for factors of all kinds. Consequently, competition to deliver affordable labour, capital and managerial expertise has also intensified. International outsourcing of functions such as call centres, software application coding and development in countries such as India and Malaysia demonstrate examples of countries taking advantage of these opportunities.

Macroeconomic Indicators and Policies

The ways in which governments can affect the macro-economic variables of their states include intervention in interest rates, exchange rates and the supply of money. Governments will customarily enact policies through the medium of central banks, which have a varying degree of independence and autonomy depending on the country involved. As the perceived need for legitimation by the financial markets continues to increase internationally, there is a tendency to provide more independence to the central bank. However, both governments and central banks in developing countries are frequently placed under considerable pressure by the international institutions and representatives of the governments of the north.
The following sections consider both the sovereignty of states to make their own decisions autonomously and also the ability of firms to influence government policy.

**Ability of States to Enact Independent Macroeconomic Decisions**

The consideration of states frequently begins from the presumption that they are able and willing to come to and enact their own decisions in terms of macroeconomics. This is not always the case as various factors act to constrain states from this autonomy. Firstly, membership of international economic groupings or organisations may affect macroeconomic policies. The World Trade Organisation (WTO), the Organisation for Economic Cooperation and Development and regional organisations such as the EU and the North American Free Trade Area (NAFTA) all place constraints on the independence of member states. Generally, the principle of Most Favoured Nation (MFN) status, by which a concession for one trading partner must be offered to all, is obtaining acceptance throughout the developed world, for reasons of expediency if no others. Second, the power of international financiers and other market players is sufficient to give pause to most states who plan to enact policies which the private sector considers to be ‘anti-market’ or ‘anti-competitive.’ This includes nearly all forms of regulation, including environmental and labour force protection, as well as any proposed form of government intervention to support domestic firms. Opposition to government plans may be enforced through lobbying or direct personal contact, enlisting support from Ambassador or other Embassy staff who can deploy soft (or even hard) power on behalf of the firms involved or through market actions. Oil companies, for example, can fight proposals from governments to put in place windfall taxes by threatening to withdraw their corporate headquarters altogether to another country where tax rates are lower or non-existent. However, more common perhaps is the use of financial markets to punish governments taking
actions considered detrimental to the private sector or to reward those who are deemed to support the market. The significant amounts of power wielded by institutional investors in the UK, for example, have great influence on share prices and, therefore, on the actions of managers.

Finally, developing countries over the last two decades have been forced to adopt the so-called ‘Washington Consensus’ if they wish to apply for development assistance or even debt relief. The Washington Consensus consists of a number of different policy areas, some of which have encouraged some critics to characterise it as being a representation of neo-liberalism, which is an ideology followed by a comparatively small number of primarily American politicians who have attracted a reputation for right-wing beliefs and unilateralist action in the international sphere. These policies include financial austerity, privatisation of state-owned assets, flexible labour markets, poverty reduction targets and others. While in some cases, the Washington consensus policies may be helpful to a developing nation, the problem arises that a singular model of policy ‘reform’ has been insistently upon by the IMF for countries to qualify for relief from short-term financial difficulties. This is problematic in that the same model has proved disastrous in application in countries in which institutional and societal arrangements differ (e.g. Stiglitz, 2002, pp.133-79). Nevertheless, it is used by the World Bank as a prerequisite of any form of lending and the Bank’s control of the discourse of development, to which borrowers are also required to subscribe, convinces those borrowers of the continued necessity of obtaining ever more Bank financing (Goldman, 2005).

**Ability of Firms to Affect Government Policy**

Firms may wish to affect government policy both to improve competitiveness generally and also to improve their own competitive position. States will be responsive to firm requests insofar as these are perceived to be in the national interest or, in the event of
corruption, insofar as both sides benefit from a particular policy change. Right-wing governments are traditionally and correctly believed to be more market-friendly and to provide more concessions to business and individual firms within business overall. The changes in environmental protection enacted by US President George W Bush, for example, benefited oil companies by enabling them to drill for oil in Alaska, for example. President Bush and his chief advisors are closely associated with the oil industry. The connection between policy and political support is intensified when firms make direct contributions to a political party that is then elected. The Labour government of British Prime Minister Tony Blair was engulfed in controversy when people believed there was a connection between campaign contributions made by Bernie Ecclestone, the Formula 1 car racing magnate, and a governmental decision on advertising considered to be favourable to players in the sport (Rawnsley, 2001, pp.91-105). These high-profile examples should not deflect attention from the high level of interaction between firms and government in most countries. Of course, in some cases government and business can cooperate fully in what is believed to be the national interest. During the period of maximum growth in South Korea, government enabled the large, diversified groups known familiarly as ‘chaebol’ to increase in size and scope so that they would be better able to fulfill the export-oriented import-substitution policies that helped transform the country from one of the poorest in the world to becoming a member of the OECD. State-controlled firms in Taiwan, similarly, worked in cooperation with government towards a similar goal.

**Political Grounds of Competition**

Politics concerns governmental processes aimed at governing and administering the internal and external interactions of a nation. Governments are constrained by many types of national and international sanction from doing whatever they want but they nevertheless have a great deal of latitude in designing
actions aimed at improving the situations of their people. This provides an additional dimension for competitiveness and competition. In terms of competitiveness, firms prosper or fail in part as a result of the efficacy of supporting government agencies to support them as compared to firms supported by other governments. In terms of competition, governments are relevant in influencing trade rules and institutions and in helping to shape consumer behaviour and attitude domestically and internationally, in addition to direct and indirect interventions in domestic production patterns. This section will consider the different types of ‘hard’ and ‘soft’ power by which governments are able to seek to bring about change and the use of these forms of power through bilateral and multilateral forums. The issue of imperialism and decolonisation will be considered, as well as the nature of transnational populations and production.

‘Hard’ and ‘Soft’ Power

State power may be divided into two broad categories: ‘hard’ and ‘soft’. ‘Hard’ power is physical in nature and mostly related to the military sphere but also includes pure financial muscle. The units of the American navy that patrol the seas around the Straits of Malacca, often shadowing tankers taking oil to China, are a powerful image of hard power.

The term ‘soft power’ was coined by the American Joseph Nye to describe the other type of power, the power that may be summarised as ‘the ability a country has to attract others to do its bidding by virtue of the legitimacy of its policies and the values that underlie them’ (Nye, 2004). Soft power draws upon cultural, historical, societal and political dimensions, among others. It includes the admiration of a colourful past and cultural products which inspire tourism and overseas education, adoption of political or social institutions or purchasing consumer goods items from a country with a reputation for manufacturing or engineering excellence. Developed states seek to develop their soft power through the sponsorship of overseas networks of national cultural
institutions (e.g. the British Council, the Goethe Institute), subsidizing the education of international students and hosting activities and services at overseas Embassies. The maintenance of national reputation, which is an intangible measure of soft power, can shade into repression of personal expression. Many authors and social critics around the world have faced censure and police action to prevent them making statements seen as being derogatory to the state.

**Multilateral and Bilateral Forums**

States can use their power and influence through both bilateral and multilateral forums to shape public opinion and institutional arrangements in ways that will favour their economic growth. Important multilateral forums include the United Nations, the World Trade Organisation and regional associations such as the European Union (EU) and the Association of South East Asian Nations (ASEAN). Multilateral forums are more difficult places to wield influence insofar as one state controls just one vote but do provide opportunities to mobilise powerful alliances, such as the Group of 77 at the United Nations. Even so, soft power can be effective in bidding contests. The awarding of the 2012 Olympic Games to London, with its opportunities for significant regional development, were attributed in no small part by the personal appearance and lobbying of British PM Tony Blair.

Bilateral forums more commonly feature a direct head-to-head form of confrontation and so represent direct power contests. Nevertheless, states can use access to or association with soft power institutions as a negotiating tactic. When dealing with the World Bank, policy makers in developing countries are offered the opportunity to travel to the Washington headquarters to take training courses. In similar vein, universities in North-West England use tickets to Old Trafford to watch Manchester United as incentives for foreign students to sign up and study there.
Imperialism and Decolonisation

One of the strongest, most complex and most contentious link between two countries is that of a previous incidence of colonisation. This is on occasion characterised by absolute resentment and distaste (e.g. Japanese colonisation of Korea and French colonisation of Vietnam) and on other occasions by a much more contingent and fractured response, even if oppression may have been no less severe (e.g. British colonisation of India). Colonisation generally involves the imposition of administrative and bureaucratic arrangements onto the colonised drawn from the coloniser and a system of duality in terms of language and possibly religious and cultural beliefs in which those capable of utilising the language and thought systems of the elite may, if accepted as socially compatible, obtain higher status, income and social access than those unable to use them. In some cases, indigenous people are forced into institutionally designed positions of subservience and outside ethnic groups are imported to supervise the indigenous people, as happened in British Malaysia or Hong Kong. In any case, social groups frequently cohere on the boundaries of the coloniser and colonised which are composed of people who aspire to the status and privileges of the former. If the members of such groups are placed in positions of power in post-colonial situations, then the psychic link between the two countries can be seen as a positive relationship, irrespective of the sentiments of the majority of people. Similarly, when members of the colonised country travel to the coloniser and establish a community there, this can provide the basis of a network that can be used to create successful businesses.

No matter what the level of bitterness or indeed sanguinity attached to the relationship, it is likely that in the absence of a complete pogrom of the former colonising power’s soft and hard power institutions that there will be an ongoing relationship between the two societies.
Transnational Populations

Owing to the processes of international migration, coupled with differentiated sources of cultural influences, groups of transnational citizens have been created in different parts of the world. This phenomenon is sometimes associated with dislocation from personal identity and community and hence, sub-optimal for those experiencing it. In other cases, people are able to cope very well. Communities of young ethnic Chinese who have migrated from homes in Singapore or Malaysia to America or Australia, for example, have both multiple sources of culture to inspire loyalty and also none sufficiently strong to dominate all forms of behaviour. Members of religious groups such as Islam can also feel multiple inspirations of belonging or, its obverse, alienation, in cases where the spiritual needs of one form of identity are challenged by the secular needs of others.

The presence of members of transnational populations within a state represents a potential comparative advantage because of their membership of international social networks that can be mobilised with a view to accessing resources across borders. The development of the Thai economy currently, for example, is benefiting considerably from the many Sino-Thai people able to use familial contacts to promote economic activities. They are aware of trends and opportunities in more than one country.

Legal Grounds of Competition

The institutions that make the rules of the game are the institutions best placed to benefit from those rules, particularly if they are able to prepare for changes in rule architecture prior to them coming into effect. Laws may be enacted with domestic or with international impact. To make them effective, they should be enforceable and appropriately policed, since laws which are not respected lead to the whole of the administration coming into disrepute. In this context, laws or regulations range from the requirement placed by the South Korean government on imported
goods to be labelled in the Korean language to the struggle to reduce licensing fees for generic drugs in the developing world. Clearly, the use of laws in this way may appear simultaneously as a trade barrier or a defence of public health, depending on the standpoint. Insofar as countries are able to enact and enforce legislation independently of other commitments or firm-level pressures, then that legislation may be used as the basis of competition.

**International Trade Law**

International trade law is extremely complex and only partly codified. Its basis is in the treaty law of medieval legal thought which held that only the holder of the throne had no constraints in action other than what was mandated by specific, formally observed treaties. Trade law has been the responsibility of the World Trade Organisation (WTO) since its establishment on January 1st, 1995, when it assumed the duties previously held by the General Agreement on Trade and Tariffs (GATT), which had led the post-WWII attempt to stabilize the world economy. In 2005, it had 148 members and the number has been increasing steadily over the years. The WTO arranges international trade law on the basis of the Most Favoured Nation (MFN) concept. This requires states who offer a concession or privilege to one country to offer it to all other countries. By contrast, states are by this principle unable to discriminate against individual others on political grounds. Hence, Arab states unwilling to deal with Israel find themselves unable to obtain the benefits associated with membership of the WTO. States in such cases may sign up to international conventions and then permit social movements to do their political work for them. The rise of Non-Governmental Organisations (NGOs) and the improvements in information technology that enables simple and swift international communications have made it much more possible to organise consumer boycotts of products or companies which have a reputation for wrongdoing in some sense. The continuing imbalance of supply over demand in many consumer goods markets makes
the threat of boycotts particularly difficult for firms in those sectors to counter. For example, food from genetically-modified organisms has attracted a reputation as being unhealthy or dangerous, which owes more to the low level of discourse concerning scientific matters in the public sphere than to any real understanding of the research. Nevertheless, firms in this industry find consumer resistance to their products even when host governments can correctly point out that they are fulfilling all legal requirements.

**Cultural Grounds of Competition**

The cultural grounds of competition involve both the fostering of elements of national or regional culture to promote competitiveness and the use of artifacts or images of cultural production to enhance competitiveness of goods and services. An example of the first type is the encouragement of a neo-Confucian attitude by the government in Singapore to produce a highly qualified labour force which has been able to adapt rapidly to new applications of technology and create their own. An example of the second type is the use of imagery of double-decker buses and Buckingham Palace to help sell British English language teaching material. It is similar, therefore, to the concept of ‘soft power’ described above, although it represents only one part of that domain of influence.

This section of the chapter will consider various aspects of culture and its application to competition, including the ways in which artifacts of cultural production such as television and radio broadcasts are transmitted to the public. Before this, there is a consideration of the nature of entrepreneurial and non-entrepreneurial societies, as this is widely considered to result from cultural factors. After all, most definitions of culture focus on shared values, norms and beliefs that both unite one set of people and set them apart from other sets of people.
Entrepreneurial and Non-Entrepreneurial Peoples and Societies

Some societies or communities are better able to produce people with the effective entrepreneurial skills that are considered to be important in promoting economic growth. Insofar as societies represent single instances of cultures, then cultural factors influence the ability of some states to compete more successfully than others. The idea that certain cultures may be correlated with greater entrepreneurial ability was first formalised by Weber (e.g. 1904) and, though persuasive, is flawed in assuming a static form of culture. Dana (1995), for example, notes that the Theravada Buddhist element in Laotian culture looks down on business and entrepreneurs there have, consequently, not flourished. However, this is not true of neighbouring Thailand and, in any case, a similar situation has been true of Confucianism in China for many centuries and yet, given an opportunity, Chinese become as entrepreneurial as anyone else. While comparisons between different cultures to determine which is more effective or successful may be invidious, it is nevertheless true that there are differences in levels of success. Gertler argues that culture in this context is a complex construct and that in action “… it is the outcome of regulatory forces emanating from a set of socially constructed institutions for the governance of investment and the use of labour” (Gertler, 1997). In other words, culture itself is not a variable affecting business decisions at an individual level but it is manifested at the macro-level. Governments may look, then, to deploy this characteristic as an advantage in the economy at the firm or industry level.

Clearly, if societies may be considered to be more entrepreneurial than those of competitors, then they will have a competitive advantage because of that. Fostering such an attribute would be a long-term endeavour and would require considerable expenditure of resources. State attempts to control or influence the character of their people have historically been at best of mixed success.
Globalisation of the Distribution of Cultural Media

The more that the distribution of cultural media may be controlled, the more that cultural grounds of competition may be influenced. As the internet increases in importance in commerce, the more that its configuration in terms of language possible and business architecture also increases. Although Chinese and other languages are becoming more prevalent and important in terms of disseminating information, the decision to restrict the awarding of domain names to English on the basis of security is likely to be influential in the vital trust-building activities that help determine customer purchasing behaviour. This privileging of certain languages provides advantages in competitiveness to those whose people are able to take advantage of that language ability and disadvantages those whose people find it difficult to do so. One of the world’s more important service industries is the teaching of English language. This is contested, largely invisibly, by agencies of national governments who wish to encourage customers to become locked into their own brand of language in the hope that this will lead to brand loyalty to products from that nation.

The confluence of film, television, internet and radio has provided transnational cultural icons that can have great resonance in countries around the world. This can involve products as well as people and these icons become instantly recognisable in numerous countries and, therefore, acceptable. Items such as blue jeans have become decoupled from their original context and have become transnational products.

International Advertising Industry

Increasingly, as the largest firms aspire towards truly globalised presence, they wish to have access to familiar business service providers wherever their operations happen to be. One of the more important business services is advertising and, consequently, when firms initiate activities in a new location, they may request that their partner advertising agencies also
open there too, if they do not already have a presence. As a consequence of this, the advertising industry has become highly internationalised. Although there have been attempts to adapt advertising production methods and styles to local tastes, it is nevertheless the case that managerial efficiency requires that commonality of approach support internationalisation of style and content. This helps to promote a set of cultural images and artifacts which are bound to specific nations and states. It is also part of a long-term process of mergers and acquisitions in the advertising industry internationally which acts to create a small number of very large agencies that dominate globally (Turnbull and Doherty-Wilson, 1990).

Control of International Broadcasting Media

The chaebol-controlled television stations of South Korea ensured that only advertisements of home-company produced products were aired and competitors were banned. The enormous market share of the operating systems of personal computers enjoyed by Microsoft enable that company to determine within quite strict parameters how millions of users interact with each other and with important or vital aspects of their worklife. The control of broadcasting media, in other words, helps to determine the ways in which consumer behaviour and attitudes may be influenced and shaped. Owing to the capital-intensive high-technology required to operate a modern satellite system, few participants are able to break into the market. Economies of scale and scope make the few players able to participate ever stronger and they are able to negotiate directly with state governments to determine levels and nature of market access. The Sky Corporation of Rupert Murdoch has managed to obtain important media holdings in most of the developed countries of the world and many of the developing nations as well. There has been considerable discussion on the extent to which this gives Murdoch, should he choose to execute it, power to influence political decisions and the social climate.
Local Responses

As states and communities come to realise the importance of and power inherent in control of broadcasting, they have in many cases sought to counteract international control by locally-produced and often small-scale responses. Such responses include the extensive use of the internet by bloggers and similar commentators, licensed or unlicensed community radio stations and even professional television stations such as Al-Jazeera, which may be state-sponsored. The government of the United Arab Emirates, especially that of the Sheikhdom of Dubai, has taken steps to create an international television station that both positions it as a centre of regional cultural activity and mediation and, also, a powerful commercial brand.

Consumer activism has become an important part of the modern commercial environment and this is represented in the willingness to use technology to gain access to voices and opinion from the non-formal sector that previously would not have been heard.

Conclusion

As high population, low wage cost countries such as China and India become ever more firmly integrated into the global economy, the ability of state to compete in terms of previous methods of lowering costs and increasing productivity is continually diminishing. States are faced with the choice of either racing to the bottom – that is, chasing low cost production to compete with the new entrants – or else develop new forms of competitiveness. In doing so, they are learning or in some cases relearning the virtues of innovation and skills enhancement as the foundations of competitive advantage. The economic, political, legal and cultural realms are all fertile areas in which to seek such innovation.
References


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Chapter 6
Competition and Strategic Alliances

Introduction

Strategic alliance is a form of inter-organisation cooperation for the purpose of achieving partner organisations’ strategic goals and objectives. Among the different forms of strategic alliances, R&D strategic alliances have been particularly popular among technology-based firms as these firms find it increasingly difficult to fund research and development at a desired level on their own (Yang et al., 1999; McCutchen et al., 2004). R&D strategic alliances provide the alternative to ensure that R&D efforts continue at an appropriate level (Corey, 1997).

While the number of companies engaged in collaborative research is increasing and the interest among researchers to study these types of alliances is growing, the research on R&D strategic alliances thus far is more or less limited to descriptive accounts of individual alliances. The descriptive case studies provide important intimate insight into the dynamics and evolution of such alliances (for instance, Gibson & Rogers, 1994; Grindley, Mowery, & Silverman, 1994; and Yasuda, 2004). However, they do not assess the aggregate effect of such alliance behaviour (Yang et al., 1999).

In addition, we lack an integrative theoretical perspective on the effects of R&D strategic alliances. The research field in industrial collaboration is riddled with the problems associated with multiple theories, research designs, and unit analysis as suggested by Osborn and Hagedoorn (1997). Against the background of this chaotic research field, the research on R&D strategic alliances can be traced back to three research streams. The first stream, deeply rooted in economics of science and technology, focuses on alliances as alternative mechanisms to markets and hierarchies for gaining market competitiveness (Link, 1990; Ouchi
& Bolton, 1988; Rosenberg, 1990; Saxton, 1997). These researchers view the nature of projects in alliances as of central importance. The second stream focuses on organisational learning and knowledge. The third stream, grounded in organization science, has emphasized the structural arrangement of interorganization cooperation as of vital importance (Cook, 1977; Harrigan, 1986; Sinha & Cusumano, 1991; Ring & Van de Ven, 1994). In this third tradition, the structural characteristics of alliance partners are the focus of study.

However, these research streams have not integrated project and structural characteristics in their consideration. Although economics of science and technology notes the importance of project characteristics, it ignores the critical role of structural characteristics in RDSAs. Similarly, organizational science perspective focuses on the importance of structural characteristics without embracing the importance of project characteristics. While the organisational learning knowledge approach taps into the the resources of the firm, it does not take into the account of the dynamics and nature of collaboration. This study attempts to take a more unified approach to explore the dynamic interaction characterizing these R&D strategic alliances, thus to explicate economic effects and organizational dimensions of RDSAs. A model is developed to incorporate both the economics of science and technology perspective and organizational science perspective by systematically examining significant structural and project characteristics of research and development strategic alliances using a sample obtained from the filings of R&D strategic alliances under the 1984 National Cooperative Research Act (see Graph 1). The contribution of this study is the unification of these perspectives and empirical testing of the effects of these characteristics on alliance outcomes using an important sample not systematically tapped before.
A Unified Model of R&D Strategic Alliances

Structural Characteristics

Alliance Stability. Alliance stability is hereafter defined as the state in which an alliance with a stable set of partners and a consistent commitment of financial resources. Transaction cost theory, game theory and organization learning have recognized the importance of organizational stability in cooperative arrangements. A stable partner relationship can minimize transaction costs through mutual commitment of resources and minimize transaction hazards by deterring erosion of valuable assets. Successful collaboration is achieved only with consistent efforts, repeated interaction, mutual adjustment over time, and growing trust among partners (Contractor & Lorange, 1988; Gugler & Dunning, 1993; Kogut, 1988, and Parkhe, 1993; McCutchen et al., 2004).

Previous studies have shown the link between stability and survival of an alliance (Killing, 1983; Kogut, 1988; and Daniel et al., 2002). The importance of stability in an alliance is manifested in a number of ways. Foremost, stability fosters trust among partners and individuals involved in the alliance. Trust is essential for the long-term relationship. A stable relationship allows technical professionals to build relationships, strengthen the exchange of technical information, and nurture mutual trust and respect. Stability derived from preserving continuity in cooperative relationships is fundamental to the success of RDSAs (Steele, 1990), whereas, instability may negatively affect the outcomes of the alliance (Kogut, 1988). Withdrawal of partners can undermine the alliance's ability to carry out tasks, while adding partners can also affect the outcomes of RDSAs as new partners often bring their own agenda. R&D alliances have been used as a mechanism for sharing information and know-how among competing firms.

Changes in membership, particularly withdrawal of partners, increase the chance of knowledge spillovers and may lead the
partners to resist knowledge-sharing within an alliance (Evan and Olk, 1990), which in turn can greatly affect outcomes of an alliance. These concerns over appropriability (the extent to which one can capitalize an investment) and spillovers (in terms of intellectual property), coupled with tensions arising from overall differences and conflicts among the objectives of alliance members, may impede their performance, increase costs, and even result in dissolution (Grindley et al., 1994). Equally important is a strong commitment of financial resources which is a precondition for organizational stability (Lorange, 1990). Lack of consistent financial contribution from partners can lead to change in alliance objectives or even abandonment of some objectives. Thus,

Hypothesis 1  
Alliance stability will be positively related to alliance outcomes.

Degree of complementarity. Previous studies have shown that complementarity influences the outcomes of an alliance (Marois and Tamym, 1996; Slowinski, et al., 1996; and Hinloopen, 2000). Kogut (1988) suggests that complementarity is the motivating factor for cooperative behavior among firms as an alliance could provide "a superior alignment of incentives through mutual dedication of resources along with better monitoring capabilities through ownership control rights." The primary economic reason for engaging in joint basic research is two-fold: a) to access partners' technologies, and b) to pool partners' financial strength to conduct research that would otherwise be too costly for any single firm. Firms form alliances to complement each other in different ways. Today, few companies possess all the necessary skills and technologies to bring a new product or service to fruition. This can be seen in the case of IBM and Apple's formation of Kaleida, a R&D strategic alliance, to exploit multimedia opportunities (Hamel & Prahalad, 1994). Ouchi and Bolton (1988) argue that a RDSA has an advantage over traditional contractual agreements in governing their relationship with one another in situations where the project at hand is complex or uncertain. For
example, Microelectronics and Computer Technology Corporation was formed in order to pool complementary industry resources to conduct basic research, and did so more efficiently than could be accomplished through traditional contractual agreements.

RDSAs are often formed to pool core competencies that are complementary between partners. For example, even the different size of participating firms can provide mutual benefits. Small firms may benefit from large firms' financial resources and regulatory savvy, while larger firms can profit from accessing the research prowess of small firms (Powell, Koput, & Smith-Doerr, 1996; and Neil et al., 2001). Sinha and Cusumano (1991) suggest that in two-firm RDSAs the ideal combination of partners is a large firm and a small firm. Neil et al (2001) and Yeheskel et al. (2001) found in their studies that partners in small-large firm alliances can equally benefit from entering alliances if they are in symmetric relationships. This arrangement will both combine complementary resources and reduce potential competitive threat to large firms since small firms will have minimal market share in the industry. Thus, small-large firm RDSAs exist primarily because they are compatible in their objectives and capabilities. Such a high degree of complementarity and mutual dependency provide the basis for positive outcomes. Therefore,

**Hypothesis 2**  
*Partner complementarity will be positively related to alliance outcomes.*

**Project Characteristic**

*Degree of Genercity.* Project characteristics have not received much attention in the literature although they may have a direct impact on the outcomes of RDSAs. This is particularly true with regard to the nature of the joint research project undertaken. The degree of genercity, i.e., how generic the technology is, may have effect on alliance outcomes. Transaction theory posits that strategic alliances resolve the problem of "appropriability" by creating a bonding mechanism by which each party plays by the rules to
share information and guarantee performance (Kogut, 1988). This is particularly true in the case of generic technology.

Generic technology is believed to be the key to sustaining technological leadership. It possesses the following characteristics:

1) Generic technologies imply a broad and unspecified set of applications. High appropriability of the research investment is not likely.
2) Considerable addition of value is possible through follow-up applied R&D.
3) Global time-based competition and reduced product life cycle do not allow firms to fully market and exploit R&D outputs, and thus make such basic research a major risky undertaking.
4) Individual firms can often use only a portion of the generic technology research project. Thus, wasteful duplication of resources can result when such effort is undertaken by individual firms (Link, 1990).

The more generic the technology the more it is capable of producing broad and indiscriminate benefits and ready to be acquired externally (Narula, 2001); generic technology also provides impetus for future advanced technology (Link, 1990). However, these characteristics may also become obstacles for individual firms that pursue generic technology. The length of time required to develop generic technology and potential multiple applications may present an opportunity for free riders.

Both transaction cost and agency theorists would agree that strategic alliances are capable of creating "mutual hostage positions" through joint commitment of financial resources to share the future gain or loss and thus strategically avoid free riding (Kogut, 1988). Alliances not only can ameliorate obstacles, they may also become mechanisms for creating the first-mover advantage, which helps firms to secure their market position through patent protection. This is important because firms financing generic research may not have sufficient time or resources
to appropriate the benefits of the research for themselves. By teaming up with strong potential competitors in the industry, firms can gain the first-mover advantage to appropriate benefits of generic research while shielding themselves from free riders and at the same time being able to afford long-term and/or large investment at reduced cost. Firms can still enjoy first-mover advantages while avoiding first-mover disadvantages because partners in the alliance may reduce the risk to the individual firms by sharing the costs of the negative consequences. And, most importantly, "free riding" may be minimized. Avoidance of "free riding" serves as a significant incentive for partners to make generic technology related alliances work (Rosenberg, 1990).

Thus, it is in the best interest of each party involved to behave responsibly to produce positive outcomes for the alliance and to avoid transactional hazards. Therefore,

**Hypothesis 3** Generity of technology will be positively related to alliance outcomes.

**Graph 1** A Unified Model of R&D Strategic Alliances

![Unified Model of R&D Strategic Alliances](image-url)
Research methods

Study Design

This study examines the R&D strategic alliances filed under the 1984 NCRA from 1985 to 1992. The unit of analysis is the individual alliance. The empirical study employed a two-phase approach. Phase one consisted of a preliminary analysis conducted on archival data on all the RDSAs and their associated firms filed in the Federal Register during the 1985-1992 time period. All the RDSAs filed during this time period were retrieved from Lexis/Nexis database. A data entry form was created to code the information on the name of the RDSA, the date it was filed, names and location of partner firms, and the project names and objectives listed for the RDSA. Additional information was collected on the industry sectors the RDSA and partners were in. Phase two was a questionnaire-based study designed to uncover underlying patterns of relationships between the outcomes of R&D strategic alliances and their antecedents. The survey instrument underwent iterative revisions. The questionnaire was developed based on the literature and theoretical frameworks described earlier in this paper. The questionnaire was pre-tested through in-person interviews with RDSA partner executives located nearby. In addition, expert opinion was garnered to provide additional critique and insight. The final survey instrument included an initial inserted page listing the objectives identified in the RDSA filing. This inserted page was tailored for each individual RDSA. The remainder of the questionnaire focused on structural and project-specific aspects of RDSAs.

Sample

R&D alliances were systematically collected from notifications of R&D alliances in the Federal Register available through Lexis/Nexis database. The questionnaire was sent to senior executives in charge of the alliance operations. Senior executives were identified from Standard and Poor's and Moody International.
The principal investigator and two research assistants contacted the executives by phone, discussed the intent of this study, and invited them to participate. If the executives agreed to participate, they were sent a priority mail package the same day. The package contained the questionnaire and a cover letter reiterating the key points discussed over the phone. Also included was a self-addressed, stamped-return envelope with a code on it. The respondent firms were promised that their responses would be kept confidential. The code was used solely for checking on whether the executives had responded.

A follow-up phone call was made four to six weeks later to those who did not respond within the suggested time frame of three weeks to ensure that respondents had received the questionnaire and to request if they could respond in due time. The combination of multiple mailings, phone contact, and offer of direct benefits to their firms resulted in mailing of 214 packages.

Response Rates. The goal was to achieve at least a 50% response rate, higher than the generally accepted 30% or lower response rate experienced in survey research. The objective was to provide as representative a group as possible. The survey strategy was to target the executives and managers who were most directly involved in the RDSAs and had knowledge of detailed information about the RDSAs.

The survey results indicated this strategy was effective. The first round of calls generated 102 responses, or 48%. A second round of calls was made six weeks later. In nine cases, surveys were sent again upon the respondents' request. The second round of calls resulted in 15 more returns. Thus, the total number of returns is 117, or 55% of the surveys sent.

Non-Response Bias. A comparison was made to assess the non-response bias, i.e., there could be significant difference between the respondents and the nonrespondents. Results from chi-square tests over year of filing and industry sectors indicate that there is no significant difference between respondents and
non-respondents \[\text{Chi}^2 = 21.16 \ (1,20) \text{ and Chi}^2=5.33 \ (1,7)\]. The distribution of industry sectors for the three groups is also similar.

**Definitions of Variables and Measures**

*Dependent variable.* The dependent variable in this study is the alliance outcomes. The alliance outcomes are measured by level of objective achievement. The difficulty with measuring alliance outcomes is well recognized (Smith et al., 1995; Yan & Gray, 1994). The difficulty becomes more acute when we deal with R&D strategic alliances which may take years to yield financial results (Saxton, 1997). In summarizing the state of research on intra- and inter-firm cooperation, Smith et al. (1995) pointed out that current research has narrowly defined outcomes as financial performance, while intermediate and non-economic outcomes (e.g., level of objective achievement) should be used to help explain why cooperation might enhance performance. Following Yan and Gray (1994) and Raveed and Renforth (1983), the outcome measures used in this research are objective achievement.

The first section of the questionnaire was devoted to obtaining information on the level of objective achievement. The specific objectives were drawn for each alliance from its filings as published in the Federal Register. (The statute requires that a statement of alliance objectives be part of the filing.) Respondents were asked to evaluate individual alliance objectives on a 6-point Likert scale (The Likert scale was recoded so that 1 is the lowest value and 6 is the highest value). The number of objectives for each RDSA range from 1 to 9. Specifically, the respondents were asked to rate each objective separately and then the respondent was asked to assess the overall achievement of objectives. The average objective achievement for each RDSA was calculated by summing the reported level of objective achievement for each objective and dividing by the number of reported objectives for that RDSA.
Independent variables. Stability and Generity of technology are composite variables. Aggregation of these measures into two variables was done based on the results of correlation and factor analysis. First, a correlation matrix was constructed and variables with r values greater than .25 were retained. Factor analysis was carried out on the retained variables. Both principal and component and Alpha factoring approaches with varimax rotation were used to extract factors. For variables to be included in the composite variables, factor loadings had to be .50 or better. This procedure resulted in two composite variables: Stability and Generity of technology. Stability refers to the degree of organizational membership stability in the RDSA. Measures of stability consisted of change in partnership, consistency of financial contribution, and change in personnel involved in the alliance.

Generity of technology refers to the degree to which the technology was generic. This variable was measured by a composite index of a) the number of potential applications that the technology could generate and b) degree of value-addition, i.e., the possibility of the technology generating continuous value for participants. To ensure the reliability of these two variables, alpha values were obtained.

Stability has alpha of .69 and Generity of technology .65. Given that there were only two measures for Generity of technology, .65 alpha value was accepted.

The degree of complementarity refers to the level of complementarity of skills and resources among partners. Complementarity of resources was based on content analysis of the response to two open-ended questions. The content analysis approach attempted to minimize the bias from respondents who represented only the viewpoint of the central administration of the alliance rather than viewpoints of the individual partners (see Appendix C).
Study Findings

The survey resulted in 117 responses of which 113 were useful. Of the 113 RDSAs, 41 were international RDSAs in which at least one partner was a non-U.S. company. The remainder 72 were domestic RDSAs in which all partners were U.S. companies. Of the RDSAs that responded, most of the RDSAs were filed under the NCRA in later years. The initial year of NCRA, 1985, saw a surge of 22 filings. This surge could be explained by the accumulative effect created by suspension of RDSAs waiting for the NCRA to be passed. In other words, these RDSAs were waiting for the law to be in effect to file with the government. In 1986 the number of filings fell to 6, but they have increased fairly steadily since. Most of the filings, therefore, have occurred in the more recent years. There were 27 RDSAs filed in 1992 and 18 RDSAs filed in 1991.

These 113 RDSAs were established in a wide range of industries, from high-tech industries, such as semiconductors, to low-tech industries such as forestry. However, there appeared to be some concentration on certain industry sectors. Of the 26 RDSAs established in the petroleum industry, about 50% of them were related to Petroleum Environmental Research Forum (PERF). PERF was formed under the auspices of the 1984 NCRA to stimulate and develop cooperative research and development projects for environmental pollution control and waste treatment for the petroleum industry.

The size of the RDSAs also varied to a great extent; 57.52%, or 65, RDSAs had between three and ten partners. Twelve, or 10.62%, RDSAs had over 20 partners, while the largest RDSA had 131 partners. Small RDSAs (i.e., two-partner) RDSAs, made up 21%, while larger (11-12 partners) RDSAs accounted for only 15% of the total RDSAs in the sample. Descriptive statistics for the variables and the correlations are reported in Table 1. Overall, the alliance executives reported a high level of objective achievement.
The mean of 4.93 on a 6-point scale indicates that on average these RDSAs substantially achieved objectives. Specifically, 23% of RDSAs fully achieved objectives, 38% of RDSAs substantially achieved objectives, 19% moderately achieved, and 5% slightly achieved or did not achieve objectives. The results showed evidence of a high level of objective achievement.

The correlation matrix presents relationships between the level of objective achievement and all characteristics using pair wise deletion. The results in Table 1 support the direction of hypothesized relationships which are generally positive.

The fitness of the model was tested and Table 2 summarizes the results of the linear multiple regression analysis for the independent variables with objective achievement as the dependent variable. Model 1 tests the effects of structural dimensions on alliance outcomes. This model is significant at p < 0.001 (F = 5.16, R² = 0.27.) The coefficients for the level of partner complementarity is significant at p < 0.05. Model 2 captures the effect of project characteristics. This model is significant at p < 0.001 (F = 8.35, R² = 0.16). The coefficients for value creation and applicability of technology was significant at p < 0.01; p < 0.05 respectively). Model 1 and Model 2 suggest that objective achievement is a function of both structural and project characteristics.

Model 3 is the full model including all six variables. This model allows a multivariate test of the hypotheses and demonstrates how structural and project characteristics simultaneously affect alliance outcomes. The full model is significant at p < 0.01 (F = 3.85, R² = 0.30). The full model shows that the model including both structural and project characteristics can better explain the variance than the one that excludes one or the other dimension.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std Dev</th>
<th>N</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td>1. Objective achievement</td>
<td>4.93</td>
<td>.89</td>
<td>97</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Change in partnership</td>
<td>4.18</td>
<td>1.47</td>
<td>108</td>
<td>.48***</td>
<td>100a</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Change in personnel</td>
<td>3.37</td>
<td>1.60</td>
<td>104</td>
<td>.34***</td>
<td>29**</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Financial contribution</td>
<td>4.18</td>
<td>1.17</td>
<td>105</td>
<td>.41***</td>
<td>.61*</td>
<td>.38***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Complementarity</td>
<td>3.52</td>
<td>.81</td>
<td>82</td>
<td>.34</td>
<td>.14</td>
<td>.31**</td>
<td>-.05</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Value creation</td>
<td>3.38</td>
<td>1.48</td>
<td>105</td>
<td>.35***</td>
<td>.08</td>
<td>.33***</td>
<td>.21*</td>
<td>.08</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>7. Applicability of technology</td>
<td>2.63</td>
<td>1.82</td>
<td>105</td>
<td>.33***</td>
<td>.07</td>
<td>.46***</td>
<td>.10</td>
<td>.21</td>
<td>.49</td>
<td>100</td>
</tr>
</tbody>
</table>

* The first line represents correlational coefficients “r”  
** The second line represents the sample size associated with coefficient “r.”  
* p<.05. ** p<.01. *** p<.001. 2-tailed significance.
Table 2  Regression Results with Objective Achievement as Dependent Variable

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Full Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>.31(^a)(2.49)(^b)</td>
<td>.22(5.30)***</td>
<td>.36(1.26)</td>
</tr>
<tr>
<td>Change in partnership</td>
<td>.08(1.66)</td>
<td>.09(1.52)</td>
<td></td>
</tr>
<tr>
<td>Change in personnel</td>
<td>.09(-.10)</td>
<td>.09(0.01)</td>
<td></td>
</tr>
<tr>
<td>Financial contribution</td>
<td>.12(1.43)</td>
<td>.12(1.00)</td>
<td></td>
</tr>
<tr>
<td>Complementarity</td>
<td>.12(2.30)*</td>
<td></td>
<td>.12(2.38)</td>
</tr>
<tr>
<td>Value creation</td>
<td></td>
<td>.07(2.51) **</td>
<td>.07(1.62)</td>
</tr>
<tr>
<td>Applicability of technology</td>
<td>.06(2.01)</td>
<td>.07(1.62)</td>
<td></td>
</tr>
<tr>
<td>R(^2)</td>
<td>.27</td>
<td>.16</td>
<td>.30</td>
</tr>
<tr>
<td>Adjusted R(^2)</td>
<td>.21</td>
<td>.14</td>
<td>.22</td>
</tr>
<tr>
<td>F-statistic</td>
<td>5.16***</td>
<td>8.35***</td>
<td>3.85**</td>
</tr>
</tbody>
</table>

\(^a\) N = 113, \(^b\)(..) = t statistic.
\(^*\) p<.05.  \(^**\) p<.01.  \(^***\) p<.001.

Discussions and Conclusions

The findings of the study demonstrate that both structural and project characteristics are associated with the level of objective achievement. The results of this study suggest strong empirical support for the links between organizational stability of the alliance and achievement of objectives. The findings highlight the fact that the more stable the alliance was, the higher the level of objective achievement the alliance could obtain. In other words, those RDSAs that had more stable partnerships and consistent financial contribution tended to be more successful in achieving the objectives they set out at the beginning. It appears those RDSAs that had partners coming and going frequently had a more difficult time in meeting their targeted objectives. Newcomers were less likely to have the same level of understanding of objectives as original members did and they were more prone to bring their own agenda to the table. Partners who opted to
withdraw would have to abandon the part of the project they were involved in and thus would affect the whole joint project.

The study also helps explain why success of any major R&D undertaking hinges on the consistent financial contribution from parties involved. Not only could withdrawal of partners destabilize the RDSA organizational structure, it could result in entrenching of funds. Decrease in financial resources could lead to not achieving, abandoning, or changing objectives. This finding is congruent with Lorange's (1991) observation that commitment of financial resources and continual financial support is one of the basic preconditions for a successful alliance.

Furthermore, findings provide support for the hypothesized links between complementarity of resources and achievement of objectives. The positive relationship is compatible with Sinha and Cusumano's (1991) position that if partners bring complementary skills and resources to the alliance, the alliance is more likely to become successful. The findings are in partial agreement with Sinha and Cusumano's proposition that firms are more likely to cooperate in areas where technology is less appropriable and/or benefits are small if they do not possess complementary skills and resources. Findings of this study are in congruence with the first part of the proposition but refute the second part of the proposition. Sinha and Cusumano narrowly define benefits as positive economic outcomes for the firms. Sinha and Cusumano's definition of benefits is incomplete. A portion of RDSAs in this study are environmental research groups. The firms in these alliances generally came from the same industries. These firms contributed equally in terms of financial and technical resources. They appeared to have low complementarity. These RDSAs engaged in cooperation not only for the benefits of the individual firm, but, more importantly, they dealt with broad macro environmental issues. Thus the benefits from joint projects may be relatively low to the individual firm, but high to the general public. The benefits to the general public are crucial from the standpoint of public policy makers and the social welfare.
The results also suggest that the degree of genericity of technology is a strong predictor of achievement of objectives. The findings provide strong support for the hypothesized positive relationship between the degree of technology genericity and achievement of objectives. As expected, those RDSAs engaged in developing more generic technology tended to have higher levels of objective achievement, whereas those engaged in less generic technology tended to have a lower level of objective achievement. This finding is in agreement with the earlier statement that firms are more likely to engage in RDSAs if generic technology is involved. Generic technology provides a hotbed for "free riding." Forming an alliance can minimize the effects of "free riding" since potential free riders are obligated to join projects. RDSAs thus ensure that parties involved in these projects make investment under circumstances where they are able to appropriate necessary benefits from the technology. Generic technologies are breaking down the traditional boundaries between industries so that "future global competition may be as much between a collection or cluster of technology-related industrial or service firms as between firms according to the end products they produce" (Dunning, 1993). Hence, firms not only have a great incentive to join forces in generic technology to avoid "free riding" and to cut down costs, they also have great incentives to make such alliances successful because this is the only promising way to develop such technologies, part of which will be useful to individual firms in both short-term and long-term without having to commit a large sum to a development fund individually. Accordingly, the RDSAs that are involved in generic technology should be expected to be more successful.

The study suggests that practitioners need to understand that structural issues are critical to a successful implementation process. Stability is a necessary condition for achieving alliance objectives. A stable relationship should allow firms to make long-term investment in cooperative projects and thus eliminate short-term nearsighted non-cooperative behavior. Complementarity in resources may provide synergy for joint projects, particularly
between large firms with financial resources and manufacturing/marketing expertise and small high-tech engineering with unique technologies. In addition, practitioners should not overlook the importance of the formation process, e.g., the nature of the joint project. For firms without prior collaborative experiences, forming RDSAs in areas where less appropiable generic technology is involved is recommended.

The study also has implications for government policy makers. The findings illustrate that the passage of the National Cooperative Research Act in 1984 paved the way for more inter-firm collaborative behavior. The resulting perception it instilled in firms of lowering impediments to cooperative R&D was an important factor in encouraging such activity. The positive response to the Act and high level of reported success for the RDSAs demonstrates the importance of a conducive legal environment for effective industrial R&D collaboration. Such legislative action and enforcement practices are needed to build the U.S. comparative advantages in certain fields in which the U.S. began to lag behind (Nelson, 1998).

The study provides a number of implications for future research:

1. Achievement of objectives is an appropriate measure of intermediate performance for R&D strategic alliances in cross-sectional studies. However, the high fixed costs of building strategic partnership can not be easily recovered until the alliance goes through the learning process for such relationship to generate returns. The expected returns depend on whether such learning occurs or sufficiently occurs (Lazonick & West, 1998). Thus, longitudinal studies are called for to provide insights into the organizational learning process, the impact of RDSAs on firms' competitive position in the market, and financial returns.

2. Future studies should improve construct validity by developing more accurate definition and measures for degree
of complementarity. This may be achieved by gaining access to more specific data at both firm and alliance levels.

3. The study was confined to the population of R&D strategic alliances that were filed under the 1984 National Cooperative Research Act; therefore, the knowledge generated in this study may not be easily transferable to other settings, because there could be some other mediating factors that might have affected achievement of objectives for these RDSAs.

4. Future research can enhance external validity by including a group of RDSAs that opted not to file under the 1984 Act. Such a sample would permit a comparative analysis to test if there is a significant difference between these two groups. In addition, further research is needed to determine how industry sectoral differences and other organizational characteristics influence the outcomes of RDSAs.

In conclusion, this study contributes to the literature on alliance behavior by unifying different perspectives and empirically testing a model of their effects on outcomes of R&D strategic alliances. Findings suggest that combining structural and project characteristics produces more explanatory power than either one of them alone. The study also demonstrates that it can be fruitful to use intermediate performance measures to assess the outcomes of R&D strategic alliances in cross-sectional studies due to the long-term nature of these alliances producing financial results.

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Notes

to allay fears of those seeking to conduct cooperative R&D by confirming in statutory form the application of rule of reason analysis to joint R&D ventures and eliminating the possibility of treble damage liability for those alliances which published in the Federal Register a notice identifying the parties and describing the venture's nature and objectives.

References


A diagnosis of the world financial crisis could serve as a viable foundation for assessing the national economy, thereby conducting appraisals, as well as drawing conclusions and making predictions. We believe that approaches to economic analysis should be grounded in territorial issues, including discernible and structural factors. The analysis of the prevalent global economic epidemic, therefore, should consider all three territorial factors.

From a global perspective, however, it is necessary to set apart the most fundamental dynamics of the financial crisis.

Firstly, under the rubric of economic liberalization, developed nations have called upon developing and emerging economies to adopt liberal regulations in the spheres of national and international trade. In so doing, sponsor nations have blatantly violated the ‘rules of the game’ creating competitive disadvantages for such economies by way of large-scale foreign trade subsidies. The central issue here is not free trade, but fair competition. In other words, subsidization has dealt a heavy blow to the competitiveness of both developed and developing nations. Whereas in developed economies, subsidized goods have fared away from being naturally competitive and, therefore, becoming continuously dependent on state subsidy for mere existence. On the flip side, in developing economies where it would be prohibitive for state budgets to fund subsidies, goods fall short of achieving or maintaining competitive advantage and are, therefore, purged from being traded in the local market, resulting in a decline in local production. This may be considered the most serious global economic paradox, which would have naturally led to a global economic crisis.

Secondly, financing the artificial competitiveness of goods produced by developing nations is realized at the expense of
poverty, famine, and other social issues. While there is evidence of a decline in social costs, there also is an increase in the amounts of subsidies. In member countries of the European Union, for example, the subsidy allotment for a single cow equals the average annual income of a farmer in rural Russia. This also is the reason why the 1996 Rome World Food Summit of heads of states and governments (of developed nations, in the first instance) resolved to reduce the number of undernourished people to half of the number then, by no later than 2015; but, this target is far from being accomplished. To the contrary, the number of impoverished people around the globe is increasing, rather than decreasing.

Thirdly, beginning in 1964, when the UN Conference on Trade and Development (UNCTAD) was established to provide a forum for developing nations, the principal item on the agenda was the formulation of a global economic structure. The same issue was addressed by the Premier of the United Kingdom, Gordon Brown, at the 2009 World Economic Forum Annual Meeting in Davos. However, to that end, no significant progress has been made to date. In effect, there is certain apathy with respect to the role of developing nations in the global economic development process – apathy that is steering those nations toward some sort of isolation. Further, there is a prevailing disposition that developing countries had better direct their financial resources toward social programs, rather than assist local manufacturers in honing and improving their products. Thus, in the absence of adequate means of production, developing countries are caught in a position of dependence upon the natural resources of developed nations. In turn, this situation aggravates existing economic disparities and leads to dire consequences in the economies of both developing, as well as developed nations.

On a regional level, the causes of the crisis have transpired largely from the absence or deficiency of economic integration. On all of the world continents, efforts for regional integration have culminated in the creation of free trade zones or, at the least, in the formation of customs unions. A typical example is the
North-American free trade zone, which has not even evolved to a customs union as yet. The same can be observed with respect to the economic integration among Southeast Asian countries, CIS, as well as Latin American states. The only exception to this trend in economic integration is the European Union, which has evolved toward closer economic convergence and is in the last phase of a multinational integration process. Nevertheless, from the standpoint of expanded world competition, a certain drift by the EU toward isolation from the rest of the world can be discerned – an exclusionary trade practice that is expressed in terms of a priority demand for goods and services among member states and an evident reservation with respect to trading comparable goods and services from non-member states. Naturally, such exclusionary trade practice would limit the opportunities of other countries to trade their products and services in the EU common market.

As a result, the possibilities of regional integration across the globe become exceedingly limited. A great many countries are continuously seeking to find trading partners across the globe and any single country could not claim to have attained total integration in the global economy if it has not been able to achieve a high level of integration in its own territory.

Concurrently, the processes of integration in several different regions, including those of CIS and BSEC (Black Sea Economic Cooperation) are highly politicized and depend upon the mutual advantages gained through bilateral arrangements among key actors. This too is regarded as an unhealthy situation that can potentially be detrimental to reaching tangible economic cooperation.

In the local market, the potential predicaments of failure were noticeable even before the economic crisis. Essentially, the formation of monopolies and the relative power they impose in the market are root causes of a non-competitive economy. One must also consider the level of the prevailing shadow economy that prevents accurate portrayal of the national economy, which could have elicited the enactment of strategic national policies based on reliable economic indicators. Among other coercions in the economy are corruption and the threats of further harm from
the lack of or deficiencies in financial security, banking security, investment security, production security, food security, social security and the security of other economic sectors. Overall, both controllable and uncontrollable factors are influencing the performance of the market, creating the necessary preconditions that lead to economic crisis. And finally, if one were to supplement these conditions with the significant increase in exports relative to imports and the unprecedented growth of negative trade receivables in the country’s balance-of-trade position, it becomes rather evident as to how and why the world financial crisis would weigh on the national economy.

**Stimulants**

It is possible to categorize the crisis stimulants, involving both structural and consequential factors, in the following classification:

- Systemic;
- Conceptual (theoretical);
- Responsibility;
- Trust.

The crisis has clearly demonstrated that the ailment is not only dominant in the financial sector; rather it is evident in the entire immune system that depends upon the financial sector. There exists an impression that during the past decades, it was not the financial sector that sustained the economy, instead the economy supported the growth of the financial and banking sectors. Moreover, the financial sector has acquired a sort of independence, formulating its own rules and regulations and progressively growing detached from the overall economy, thus conceiving a sort of “virtual economy.” Ultimately, being segregated from reality and having severed its ties with the overall economy, the financial sector self-induced the crisis and dealt a severe setback to the whole economy – including manufacturing, agriculture, construction, services, and other sectors. Thus, it is ample clear that the crisis is not simply an issue within the
financial sector, but it is a problem of the entire economy. It is a **systemic crisis**.

The crisis could be characterized as being conceptual from the standpoint that, at this exact stage, not only are the flaws of a free-market economy noticeably discernible, but also, that there is not a single country in the world that could claim as having a perfect free-market economy. Even before the global crisis, the industrialized nations of the West were continuously employing methods of management that are traditionally typical of command economies. This characterization pertains to central planning practices applied not only at the micro level of individual firms, but also at the mezzo and macro levels of the economy. Moreover, the governments of industrialized nations have sought to pursue coordination of their plans on an intergovernmental level. A striking example of that phenomenon is the European Union with its systematic and unified economic policy approach.

The next important contradiction with a free economic system lies in the growing number of state-owned public enterprises. Throughout the recent crisis, the governments of the USA, UK, France, and other countries were actively engaged in economic competition and market deals, allotting large sums of money to acquisitions of private banks and large manufacturing operations. As a result, the total of fixed assets on respective states’ balance sheets has expanded. And, as such, the principles of classical economics – which claim that prices are determined by market forces, supply and demand, and that government should not meddle in competition – have become extinct.

Incidentally, the financial-economic crisis differs from the conceptual setback in that, sooner or later, the economy will pull out of the crisis, whereas it might be rather difficult to find a way out of the **conceptual crisis** and hard to identify possible solutions for safeguarding the immune system of liberal economic theory and preserving absolute values.

It is equally implicit that once the global crisis is overcome there may be no country in the world capable of realizing
sustainable development employing the schemes of ‘wild’ capitalism, as exhibited in absolute freedom and deregulation.

The **responsibility crisis** is an undeniable dynamic in the performance of internal markets as well as in global economics. In these settings, countless financial-economic structures have functioned within the framework of their internal arrangements neglecting their broader group or team responsibilities. In other words, any country’s (except for the European Union member countries) Ministry of Finance, Central Bank, and other state agencies, as well as the International Monetary Fund, the World Bank, and others have expended considerable effort to fix ailing economies exercising their narrow expertise and professional acumen, but leaving the rest to the whims of consequences and trends.

Limiting one’s total responsibility or entrusting it onto others has culminated in no one claiming overall responsibility or assuming the full role of ‘chief physician.’ Indeed, that role is reserved solely for the state, within its oversight and regulatory activities; but ever since independence, the chief executive’s position has been essentially abolished in the conviction that the patient ought to cure himself – that the market is self-regulating – and, as a result, eliminating the sense of responsibility. Even in the case where, aside from domestic currency, global currency is in circulation – which is the principal carrier of the contagious disease – effectively, no one is held responsible for spreading the contagion. Whereas, any setback in the global economy could have negative implications on the US dollar and, in turn, any material change in the US economy and currency exchange system would affect those countries that are integrated into the global economy.

It would be naïve to think that any one nation would voluntarily repent and take responsibility for all this. In our opinion, the way out of the responsibility crisis necessitates the creation of an effective mechanism for implementing counterbalances and control within the global economy and for transitioning from a unipolar to a multi-polar world where regulatory and
supervisory activities are carried out by the principal players on a global level. And in such an arrangement, each player’s role would be delineated in terms of sensible interrelationships of rights and responsibilities. It is totally unacceptable that rights are given in unlimited magnitude, and responsibility simply takes on a formal stature. The reverse would not be appropriate either. Overwhelming a player with too many responsibilities could ultimately lead to undesirable tension. Irresponsible posture at the top of the organizational pyramid could cascade down throughout the structure and paralyze the effective performance of all subordinate entities. No organization is protected from such hazard – neither those in the private sector, nor those various state institutions in the public sector.

In the current stage of the financial crisis, some appear to be acting as observers. Even those that hold primary responsibility for the prevailing situation, including legislators and public executives for their share of the problem, as well as producers and consumers for theirs. Throughout the different phases of history, insufficient sense of responsibility and even, in some cases, the complete lack of responsibility have caused multiple retreats and failures requiring decades and even centuries to rectify its ramifications.

And finally, with the manifestation of crises caused by the preceding factors, the trust crisis could not have been salvaged. With the distraught brought upon the foundations of the entire economic system and the agony caused onto classical liberal ideology, together with the sense of responsibility deficit, it is implausible to uphold mutual trust on a sufficient level. Moreover, consumers are fatigued by the anxieties brought on by world disorder and are losing trust in government and private institutions – namely trust in governmental bodies, such as the Central Bank, as well as trust in private institutions, such as commercial banks, insurance companies, and others.

Further, rarely does one come across trust in relationships between international and local organizations or individuals.
Other than a few exceptions, it is hard to find trust in regional interactions, which further complicates political and trade associations with neighboring nations. Such interactions are usually mediated through connections with other countries or organizations, thus pushing the factor of trust out to an inferior level of significance. In the final analysis and within the prevailing economic epidemic, trust in the principal players restoring the economy save the economy is gradually fading away.

The imported and outdated medicine for curing the economy

Economic concilium & psychotherapy

The above mentioned factors are directly related to those types of fundamental issues, such as identifying the right remedy for curing an ailment. But, it is a well-known fact that, in the absence of trust, little would be accomplished even with the use of the most beneficial remedy.

In the medical practice, there is significant acceptance of how psychological factors influence the healing process and, in many cases, trust in the physician and the respective psychological influence may help the patient even more than the most contemporary medication. The same is true for the economy. We believe that it would not be possible to come out of the crisis in the absence optimism and faith, coupled with trust in one’s own government. Otherwise, the medication imported from elsewhere (in this case, the various models of economic development) could not produce the desired outcome. More importantly, given that some of that medication is simply outdated and some others cause serious side effects, i.e., while they may cure one ailment, they would also cause a few other disorders harmfully affecting different parts of the organism (in this case, various other sectors of the economy).
No doubt it would be ill-founded to compare different kinds of ailments, such as weighing the current crisis against the Great Depression of 1929-1933 that shook the whole world, or even attempt to articulate similarities and parallels among their different treatments given several dissimilarities among the drivers of these crises. First, whereas the current crisis emerged from the mortgage-backed securities and, generally speaking, the financial market, in contrast the drivers of Great Depression of 1929-1933 were basically economic (over-production in manufacturing, excess supply over demand, dissolution of farming, etc.).

Second, in the first half of the 20th century there weren’t and there couldn’t have been such interdependencies among the economies of different nations as is the case in the beginning of the 21st century; hence the reason why the economic crisis then couldn’t have swept the globe at such high speed and been as deep. One should acknowledge the fact that there were countries then that were not affected per se by the Great Depression, which is not the case with the current crisis.

Third, gold was the basic currency in the years of the Great Depression, along with the British pound to a smaller extent; today, the gold has been pushed out of international calculations and substituted for the US dollar and partly with the EU common currency.

Fourth, in the years of the Great Depression, there were fixed exchange rates in all countries, whereas today most countries have embraced floating exchange rates.

Fifth, during the crisis of 1929-1933 the world was politically bipolar with certain counterbalances, whereas today the crisis is expounding in a unipolar world and no real counterbalances have taken shape.

Sixth, in those days the development trend of leading nations was to transition from an agrarian society to industrial-agriculture and industrial; whereas today developed countries are portrayed as post-industrial and leaning toward a consumer-oriented
service sector. One could go on citing more differences to infer that if there are disparities among the symptoms of the ailment, then the cure should also be different. It is important to also state that expectations from the principal actors into the process of preserving national and global economies could not be the same, since the International Monetary Fund and the World Bank, which were created on John Maynard Keynes’ model of voluntary international financial forum, no longer fit the model on which they were created. Furthermore, aside from the fact that these organizations have primarily served the interests of developed countries during the past decades, it would be difficult to cite a post-Soviet country where the application of their models has made a positive impact on the national economy or on the above mentioned entities themselves.

In other words, these two financial-economic hospitals have essentially served elite patients, leaving out the poor whose persisting ailments have spread ubiquitously exerting added pressure on these international clinics to alter their existing treatment strategy. The mere fact that, during the past years, these two international organizations have appeared together in efforts to disengage from their own shortfalls and holding periodic joint discussions of common concerns, also speaks to that evidence. New regional and international organizations have now surfaced, with which these earlier organizations will have to deal.

**The immune system of the national economy**

It is imperative to also call attention to the possible influences of the crisis on the economy of Armenia, today and in the near future. Obviously, Armenia is not at the epicenter of the economic pandemic (crisis) for several reasons: First, in spite of the existence of necessary statutory and normative authorizations, there isn’t a functioning and shaped securities market in Armenia. The financial market is primarily represented in the form of banks and insurance companies. The other components are in
formation phase. For this reason, Armenia is unable to fully integrate in the global financial market and must withstand on its own the positive and negative consequences in the various phases of economic development.

Second, the economy of Armenia is currently in its recovery and structural configuration phases and, naturally, could not have the expected level of competitiveness for integration in the global market.

Third, the anticipated influences could be mediated in the form of fluctuations in the prices of imports, cutbacks in foreign investments into the mortgage market, effects on foreign shares in the regulatory capital of banks, and other derivatives of the aforementioned factors. Nevertheless, Armenia has been dealt adverse consequences from the decline in its mineral production in the wake of the drop in copper prices in the global market and the decrease in remittances from abroad.

**Lessons learned from the economic pandemic**

Notwithstanding the efforts of all nations, the illness may persist for long. It is customary to speak of lessons learned after a crisis is overcome; however, even today one can take note of regularities worth deliberating.

Following nearly a decade of economic upsurge, in the beginning of the Iraq war, 2003, there were initial signs of stagnation and debacle, conditioned by the sharp increase in military outlays, the decline in the growth rate of the real economy and surge in the negative trade balance. These trends continued in the years that followed; however, rather than the economy taking its natural course of stagnation, followed by crisis (as would have been expected), government intervention imposed through artificial incentives led to an “economic recovery” expressed in the “cheap dollar” – a policy aimed at energizing the economy by way of boosting the competitiveness of its products.
It is important to note that the hard race between the US dollar and the Euro – the new common currency of the European Union – was ongoing in this same period. Under such conditions, the artificial deflation of the US dollar against the Euro had a dual effect. To begin with, the prices of goods and services expressed in US dollars fell, leading to an increase in the demand for those goods and services and, as a result, boosting US exports, and measurably improving the US trade balance. On the flip side, Euro prices of goods and services produced by member countries of the European Union went up, which dealt a serious blow to the volume of their exports, lowering production and increasing the level of unemployment.

In parallel, the external economic inducements were manifest in swift growth slopes, which duly compounded the unavoidable downturn of the economy at an even faster pace. Under such circumstances, the role of the government is normally expressed through contractionary monetary policy designed to slow down economic growth by way of increasing interest rates on loans and lowering interest earnings on savings accounts and other financial assets, and also through other measures aimed at subsiding the post-growth economic lull and the speed and effects of the ensuing crisis to the extent possible. Contrary to the above cited line of reasoning, and in lieu of controlling inflation, the government largely increased the supply of the US dollar in circulation thereby contributing toward the devaluation of the US dollar to a level not justified by a commensurate economic demand for that currency.

Consequently, the banks approved large amounts of mortgages and other types of US dollar loans to those needing credit, without any restraining exigencies. As a result, today a significant number of US residents living in leased space subsist on credit, consequently driving a number of financial institutions to file bankruptcy.

As the due dates approached, it became clear that the most important criterion for financing loans – the borrower’s
repayment ability – had been violated, thus the economy felt the first serious blow at the stock exchange (lending bourse). The course of action is now beyond control and despite the republican government’s bailout of $700 billion in 2008, and the subsequent democrats’ bailout of $787 billion in 2009, these endeavors aimed at recovering the US economy are severely threatened. The possibility that these attempts might not culminate in any positive outcome is also predicated upon the fact that the US plans to emerge from the economic crisis, not by way of a natural process, but by exercising artificial influences and inducements.

The first lesson learned from the crisis is that the economy should be allowed to grow not through artificial inducements, but on its own, which denotes a natural development process within the economies that are at the heart of the GDP and not through mechanisms that are detached from the workings of the actual financial market.

Second, state regulatory and oversight activities could make positive impact in the short-run; however, government intervention over a longer term could have serious economic and financial ramifications.

Third, as was demonstrated by the Argentine financial crisis a decade ago, the upper echelon of the financial sector should strive to serve not as much the interests of the upper echelon of the public bureaucracy (the political leadership), but to focus on tangible developments in the real sector of the economy, especially by cooperating closely with leading manufacturers and paving the way for the growth of small enterprises.

Fourth, in an effort to circumvent the detrimental effects of the global crisis, Armenia should make every effort to wind down its dependency on one or two countries and attempt to augment its external relationships both in terms of commercial-economics as well as foreign direct investments.

Fifth, Armenia should endeavor to reduce its prevailing dependency on imports (currently, the volume of imports exceeds
the volume of imports by more than threefold). This would allow curtailing the consequences arising from tensions coerced by the global market.

Sixth, in the current phase of the global crisis it behooves Armenia to take advantage of those prices of goods and services that are most favorable to the national economy.

**Probable benefits**

From that perspective, it is important to move farther from the politics of confronting existing irregularities (i.e., reactive) to initiating more authoritative and innovative economic measures (i.e., proactive) that would allow, not just the adoption of defense mechanisms for counterbalancing damages, but also cashing-in benefits in support of potential development opportunities. In medicine, such an approach is called preventive or prophylactic measure. For that end, it is fitting to have a variety of different models, readily available in the state policy stockpile, for taking on the challenges of unexpected breakdowns in any single development scenario. One must take note of the fact that the economic crisis having distressed, in the first instance and more intensely, the global economy and its financial markets, is weakening the competitiveness of the economies of the most integrated nations, thus also diminishing their respective competitive advantages. Under such circumstances, the developing countries could procure from developed nations technologies and cutting-edge equipment at affordable prices, which would be difficult to acquire in times of intense economic activity and growth. This is also true because not always are the developed countries willing to sell such high-tech equipment to potential competitors. To take advantage of prevailing circumstances, it appears that it is not enough to procure modern equipment at affordable prices. The purchased equipment must also be cleared through customs in compliance with established regulations and agreements, also
attending to its transportation, which is a pretty expensive undertaking.

It is, therefore, necessary to review the customs regulations in this phase, and lower the duty set for equipment and cutting-edge technologies in order to support their entry and use in the Republic. In our opinion, it is important to clear such production equipment not based on market prices, but based on the bill of lading or invoice.

With reference to market prices: whereas the market prices of equipment and several other consumer goods have fallen sharply as a result of the financial crisis, their corresponding customs duties and import taxes continue to be high, precluding consumers to take advantage of the relatively lower prices under current conditions. It is, therefore, imperative to recalculate those customs duties.

In this opportune phase, the government could also procure large quantities of consumer goods, making them affordable to larger segments of the consumer population by maintaining strict control over prices in order to dodge the high prices set at the whim of monopolists. A lucrative situation has also been created for the government affording the means for complimenting and increasing the state grain and gas reserves, as well as those of the other most essential goods. In that regard, state purchases must be made directly from the producers, rather than through vendors and other market intermediaries.

**Economic recovery and healthy lifestyle**

*The design and engine of the new economic machine*

The crisis also presents the opportunity to reposition the economy and emerge with added competitive advantage. This assumes not only the realization of new ways and means, but the formulation of a new and improved economic policy. Thus, there
is a necessity to separate the activities leading to factual and presumed development. More specifically,

- An increase in the circulation volume of commodities not necessarily indicate a high level of competitiveness and increased export; that volume is susceptible to increase on account of increased imports, thus increasing the trade deficit;
- An import substitution policy does not suggest a policy of export patronage, which would augment the country’s export capacity through trade missions, business conferences, privileged lending, and favorable exchange policy;
- Support for economic competition could not be assumed to be the same as fighting against monopolistic behavior, which would have meant an end to clannish conduct leading to offensive agreements that perturbs both the honest businessmen, as well as the consumers, while also hurting overall economic competition;
- Creation of new jobs does not necessarily mean curtailment of the unemployment and development of the economy, since there may be staff cuts in other sectors of the economy;
- New investments could be attached to conditionalities with respect to politicized counter investments abroad, thus these don’t suggest growth in investments and increase in confidence.

Taking these differences into account, it is necessary to develop economic prescriptions that spring from the peculiarities of the national economy, thus increasing the economic system’s resistance.

1. To make sizable and targeted investments into human capital;
2. To create privileged conditions for the development and application of innovations and new technologies;
3. To stimulate small and medium enterprises throughout the republic;
4. To support residential and commercial construction with assistance from the government;
5. To assign privileged loans to priority projects that demonstrate creativity in production and such other entrepreneurial projects that are steered by competitive and aspiring individuals, capable to motivate and lead others in productive paths;
6. To promote state-initiated public works projects, especially those directed to infrastructure development;
7. To launch a mortgage lending program with affordable conditions, which would positively impact the recovery of the entire economy;
8. To transition from an uneven, bureaucratic taxation practice to a more amenable tax code, gradually moving toward district taxation across the Republic, thus improving business efficiency by way of tax differentials based on an agglomeration of taxes between Yerevan and the other districts;
9. To shape various free trade zones;
10. To realize a segregated customs code that aims at stimulating the importation of equipment and new technologies, thus augmenting the competitiveness of locally produced goods;
11. To transition to a low-interest credit policy that would increase entrepreneurial vigor;
12. To adopt “cheap” money policy that would positively impact the competitiveness of various sectors of the economy (especially information technology, tourism, and other sectors) and could lead to a reduction in the negative trade balance.

Through such action, it would be possible to avoid the obvious mistakes that were evident in the 1998 Asian financial crisis, and subsequently in the Russian crisis, and to take advantage of the current situation to the highest possible extent. Besides, it is also important to execute preventive measures, establishing a “healthy lifestyle” in the economic sense (a topic that deserves separate discussion). Nonetheless, it is possible to remedy the economic situation through preventive measures that would otherwise avert existence in a contaminated environment even with use of the best medication.
Prevention of disease and consideration of the social component

Managing the social market

Under current conditions, the most important issues are not only the elimination of the consequences of economic crisis, but equally the timely and effective resolution of social ills. Not only is the country challenged by job cutbacks, but also by exacerbated unemployment caused by the return of migrant workers pursuing local jobs. This situation is further intensified because of the devaluation of the Dram. That is directly associated with the population’s purchasing power; the 30% devaluation of the Dram on March 3, 2009 and the subsequent April 1 price increases of gas, electricity, and water also speak to the same problem. It is even more important to correctly assess and clearly envision the existing situation in order to compensate for the loss experienced by socially vulnerable groups. Naturally, one possible way to aid those socially vulnerable segments of the population is for the government to subsidize such individuals’ purchasing capacity. Also, one may consider increasing social benefits, pensions, as well as wages. However, the more significant alternative is to create an environment conducive to local as well as foreign investments, which would inevitably create new jobs. Armenians have always tended to their individual needs by working. The same is true today; which leads to the need for assisting the unemployed in finding jobs commensurate with their knowledge and expertise so they may be able to improve their families’ living standards. Thus, it is possible to alleviate the burden imposed by the global crisis through coordinated and systematic action.

Generally speaking, with the implementation of the above cited activities, including various derivatives of those activities, it is feasible to curb the risks of the crisis in the foreseeable future and establish sure undertakings leading to economic viability. Obviously, Armenia can and should strive to emerge from the
financial crisis faster and in a more advantageous position than countries that have larger and more comparative economies.

More than ever before, Armenia needs to formulate a social market economy to which, in our opinion, there is no alternative. An economy where individual rights and anxieties are at the center of advancements. Otherwise, all attempts to emerge from the financial crisis are doomed to fail. Particularly, absent targeted compensation to socially vulnerable segments of the population for the hardships caused by current increases in consumer prices resulting from the devaluation of the local currency, together with price increases of gas, electricity and water would create detrimental social tension that would further aggravate the existing situation.

Furthermore, in order to protect the purchasing capacity of the general population, it has become necessary to increase the expenditure side of the state budget – contrary to curtailing it as argued by others – particularly focusing on wage indexation and minimum wage increase from 32,500 AMD to 80,000 AMD. The same targeted expenditure increases are also true for the various state social benefits and welfare payments. And what concerns the resulting deficits in the state budget, it is feasible to cover those through internal sources / issuance of savings bonds / as well as on account of the existing loans from international financial institutions.

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Eichengreen, Barry, On the Links Between Monetary and Political Integration, Center for International and Development Economics Research, University of California, Berkeley, 1996.
Globalization is not a recent phenomenon. Although its meaning is often referred to describe the increase in global trade since the beginning of the 1970s, international trade was already an important part of the world economy centuries ago. Buyers and sellers transported products from western China to Europe via the Silk Road, while the Bretton Woods conference built the foundations of our modern day financial system.

While ‘modern’ globalization used to refer mostly to transatlantic trade, this picture has indeed changed since the beginning of the 1990s. The new states which arose from the collapsed Soviet Union have transformed their economies to a system where the market is the principal element. China embarked in 1978 on its four modernizations and opened its borders for international trade, willing to participate in the international economy by accommodating international trade, monetary, FDI and portfolio investment flows.

Firms in these emerging markets don’t only want to stick to their advantage of cheap labor costs. They also want to take advantage of the well-developed knowledge base available in developed economies and Western companies. Through mergers and acquisitions, they try to achieve their goals, according to the 2011 BCG Global Challengers list, which is dominated by Chinese, Indian, Brazilian, Russian and Mexican companies. According to Thomson Reuters data, mergers and acquisitions by emerging countries totaled 806 billion US dollars, or one third of the global merger and acquisition value in 2010 (Hirschler, 2011).
In what follows, an overview will be given of international trade theories. The second part will investigate more into detail trends of emerging market companies in the West, supported by numbers and statistics, before describing the reasons why companies from emerging markets are interested in investing in Western developed economies.

**Theories of International Trade**

Classical theories of international trade, whereas the theory of mercantilism, Adam Smith’s absolute advantage principle, David Ricardo’s comparative advantage principle and Eli Heckscher and Bertin Ohlin’s factor proportions theory focused merely on why and how countries engage in cross-border trade. However, in the 1960s scholars began to search for the managerial and organizational aspects of firm’s internationalization processes (Cavusgil, 2012).

Based on these contemporary theories of international trade there are many reasons for companies to broaden their scope and to invest in foreign markets. However, before discussing the incentives for emerging market’s transnational companies’ (TNCs) to invest abroad, we will discuss the theoretical models used to explain the internationalization process62.

**Monopolistic Advantage Theory**

A competitive advantage is a resource or capability a company possesses over its rivals and which leverages the firm to generate profits and other returns. Harvard’s strategic management professor Michael Porter used this concept to explain his diamond model in his book *The Competitive Advantage of Nations* (Porter, 1990). Porter stated that this competitive advantage at both the company as well as at the national level arises from the

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62 A simplified and classical model of firm internationalization relates the internationalization process to commitment of the firm’s management to expand abroad, as well as to the experience of the management team in doing business abroad.
presence of four major elements: demand conditions, factor conditions, related and supporting industries and the firm’s structure, rivalry and strategy\textsuperscript{63}.

Monopolistic advantage theory uses the concept of competitive advantage to suggest that companies which use foreign direct investments in its internationalization strategy ‘must own or control certain resources and capabilities not easily available to competitors, that give them a degree of monopoly power over local firms in foreign markets’ (Cavusgil, 2012). It is important to note that these resources are specific to the company itself, rather than to the location where the firm operates its business.

**Eclectic Paradigm Theory**

The eclectic paradigm theory draws on both classical and contemporary theories of international trade. Published in 1980, John Dunning proposed with this theory a framework to explain and determine the pattern of the value-chain operations that companies own abroad.

According to the theory, firms should meet three conditions in order to internationalize: ownership-specific advantages; location-specific advantages; and internalization advantages. Each of these conditions will be briefly explained below.

Ownership-specific advantages refer to the competitive advantages explained before (cfr. Supra). In order to internationalize, a firm should possess knowledge, skills, capabilities, key relationships and other assets that allow it to compete effectively in the foreign marketplace. Competing effectively also means that the benefits gained by possessing these assets should outweigh the costs the company has to make in order to acquire them. Since these competitive advantages are firm-specific, they shouldn’t be readily transferrable to the company’s competitors.

Location-specific advantages refer to the – natural – advantages the location where the firm is going to do business

\textsuperscript{63} More on this subject can be found in Porter, M. (1990), The Competitive Advantage of Nations, 855 pp.
offers. The French soil and climate are perfectly suited to grow wine grapes, which brings France to the top of wine producing countries. Other location-specific advantages include the availability of skilled-labor, low-cost labor and inexpensive capital.

Internalization refers to the process of performing key value-chain activities within the company, rather than outsourcing them. The main drivers to decide if these activities will be outsourced or not, comes from both the accounting as well as the economic cost. It may be cheaper to outsource one of the company’s key value-chain activities, but doing so incurs the risk that the outsourcing firm may lose its competitive advantage to the company which is going to perform the value-chain activity on the outsourcing firm’s behalf.

Since foreign direct investment is not the only form of market entry, we can summarize the need of the availability of the three different conditions as follows:

**Table 1  OLI Theorem**

<table>
<thead>
<tr>
<th>Form of Market Entry</th>
<th>Categories of Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ownership-Specific</td>
</tr>
<tr>
<td></td>
<td>Location-Specific</td>
</tr>
<tr>
<td></td>
<td>Internalization</td>
</tr>
<tr>
<td>Export</td>
<td>Yes</td>
</tr>
<tr>
<td>Licensing</td>
<td>Yes</td>
</tr>
<tr>
<td>FDI</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Dunning (1980)

According to the contemporary literature, two major explanations are given to explain how internationalizing firms can gain and sustain their competitive advantage: venture theory and network theory.

**Collaborative Ventures**

Collaborative ventures originate when two or more firms start to cooperate in order to create synergies. Collaboration is a critical activity in international business, since companies may
not always possess the assets needed to survive in the global environment. A venture can give the firm access to the foreign partners’ know-how, capital, distribution channels, marketing assets, or the ability to overcome government regulations. Moreover, a collaborative venture allows the cooperating firms to share the risks of their joint efforts, which limits the vulnerability for the partners.

**Networks**

Networks represent the beneficial long-term relationships companies build by doing business with each other, e.g. manufacturers, suppliers, banks, retailers, transportation companies and government agencies.

Cavusgil (2012) put it as follows:

‘In networks, buyers and sellers become bound to one another through ongoing exchanges and linkages of products, services, finance, technology, and know-how. Continued interaction among the partners results in stable relationships based on cooperation and creates value and competitive advantage even among competitors.’

Built upon trust and long-lasting cooperation, these relationships will reduce uncertainty and transaction costs for companies with mutual strategic interests. Moreover, since the high risks which come together with foreign direct investments, many companies have shifted away from this form of market entry and have chosen for more flexible collaborative ventures or other relationships with independent business partners abroad.

**Investment Trends**

In 2005, Chinese personal technology company Lenovo acquired the personal computers division of New York based IBM against a price of $1.25 billion. Two years later, in 2007, the Indian conglomerate Tata bought Corus Group for a price of
$13.5 billion, resulting in Tata Steel, the second-largest steel maker in Europe and a subsidiary of Tata Steel in India, one of the ten largest steel producers in the world.

The two former examples indicate how a new breed of firms from emerging market economies are becoming important players in the global industrial environment, and moreover, in the world foreign direct investment (FDI) market. An editorial from the Financial Times (2006) put it as follows:

‘The new trend for foreign purchases has only just begun: the Tata-Corus deal is a dramatic demonstration of the new, self-confident mood of Indian business. Over the next 30 years, China and India will grow to dominate the world economy. They will give birth to great industrial companies that own plants all around the world. National pride may suffer a little but economic nationalism and imperialism have had their day and that can only be a good thing.’

This is also illustrated in Table 1 below.

**Table 2 Selected M&A mega-deals 2007-2010**

<table>
<thead>
<tr>
<th>Acquiring Company</th>
<th>Target Company</th>
<th>Industry</th>
<th>Value ($ millions)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tata Steel (India)</td>
<td>Corus Group (UK)</td>
<td>Steel</td>
<td>11,791</td>
<td>2007</td>
</tr>
<tr>
<td>Hindalco Industries (India)</td>
<td>Novelis Inc. (US)</td>
<td>Aluminum</td>
<td>5,789</td>
<td>2007</td>
</tr>
<tr>
<td>Doosan (Republic of Korea)</td>
<td>Ingersoll-Rand Co. (US)</td>
<td>Construction equipment</td>
<td>3,675</td>
<td>2007</td>
</tr>
<tr>
<td>Flextronics (Singapore)</td>
<td>Solectron Corp. (US)</td>
<td>Electronics</td>
<td>3,675</td>
<td>2007</td>
</tr>
<tr>
<td>Tata Motors Ltd. (India)</td>
<td>Jaguar Cars Ltd. (UK)</td>
<td>Motor Vehicles</td>
<td>2,300</td>
<td>2008</td>
</tr>
<tr>
<td>Geely Holding Group (China)</td>
<td>Volvo (Sweden)</td>
<td>Motor vehicles</td>
<td>1,500</td>
<td>2010</td>
</tr>
</tbody>
</table>

Source: UNCTAD (2011)
Table 3  FDI in- and outflow for selected regions (2005-2010)

<table>
<thead>
<tr>
<th>Region/Economy</th>
<th>FDI inflows</th>
<th></th>
<th>FDI outflows</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>1,461,863</td>
<td>1,744,101</td>
<td>1,185,030</td>
<td>1,243,671</td>
</tr>
<tr>
<td>Developed</td>
<td>977,888</td>
<td>965,113</td>
<td>602,835</td>
<td>601,906</td>
</tr>
<tr>
<td>Developing</td>
<td>429,459</td>
<td>658,002</td>
<td>510,578</td>
<td>573,568</td>
</tr>
<tr>
<td>SE-Europe + CIS</td>
<td>54,516</td>
<td>120,986</td>
<td>71,618</td>
<td>68,197</td>
</tr>
</tbody>
</table>

Source: UNCTAD (2011)

While the developed economies were suffering from the global financial and economic crisis, which can be derived from the sharp decline in both FDI inflows and outflows, the developing economies and CIS countries did pretty well on the level of FDI outflows. These numbers show that developing economies and CIS countries outperform developed economies in relative numbers when it comes to investing in foreign assets.

Emerging economies are the new FDI powerhouses. That is how the UNCTAD 2011 World Investment Report describes the increasing importance of developing economies in 2010, both as recipients of FDI and as outward investors. Overall, FDI outflows from developing and transition economies increased by 21 per cent, which make them count for almost 29 per cent of global FDI outflows. In 2010, six developing and transition economies were among the top-20 investors (UNCTAD, 2011). Companies from these countries are more dynamic than their developed economies counterparts, especially those from Europe, which leads to this increase.

On the other hand, foreign direct investments in developed countries remain below pre-crisis levels. The restructuring of the banking industry, often directed by government regulatory authorities, has resulted in a series of significant divestments of foreign assets (World Investment Report, 2011). Developed economies however are still an interesting market for those new kids on the block. Their incentives and reasons will be analyzed in the next chapter.
**Incentives to Invest**

Even though emerging market companies often lack the scale, experience, intellectual property portfolio as well as the power to bring their products to developed markets, they can use international investments to expand their innovation and manufacturing bases. Moreover, international expansion will help them to build their global product and brand recognition.

Table 3 shows a selection of acquisitions by emerging markets’ transnational corporations, together with the acquiring company’s incentive to take over.

**Table 4**  *Selection of Major Acquisitions from Emerging Economies*

<table>
<thead>
<tr>
<th>Principle Company</th>
<th>Industry</th>
<th>Acquired Company</th>
<th>Acquired Business</th>
<th>Motive</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geely Automotive (China)</td>
<td>Automotive</td>
<td>Volvo (Sweden)</td>
<td>Construction Machinery</td>
<td>Efficiency Seeking</td>
<td>2010</td>
</tr>
<tr>
<td>Lukoil Overseas Holding Ltd. (Russia)</td>
<td>Oil &amp; Gas</td>
<td>Nelson Resources Ltd. (United Kingdom)</td>
<td>Oil &amp; Gas</td>
<td>Resource Seeking</td>
<td>2005</td>
</tr>
<tr>
<td>CEMEX (Mexico)</td>
<td>Cement</td>
<td>Rinker Group (Australia)</td>
<td>Cement Manufacturing</td>
<td>Market Seeking</td>
<td>2007</td>
</tr>
</tbody>
</table>

Source: Synovate (2011)

In general, as illustrated in Table 3, the incentive for emerging markets’ transnational corporations to acquire or to invest in developed (Western) corporations is threefold: (i) efficiency seeking; (ii) resource seeking; and (iii) market seeking.

**Figure 1**  *Reasons for International Expansion*
Figure 1 shows that it is important to note that these strategies are not mutually exclusive. This is also what the Boston Consulting Group found in its 2009 BCG Global Challengers List (Annex 1). Some of the challengers\textsuperscript{64} on this list effectively employ several of these strategies in their quest for global leadership.

\textit{Efficiency Seeking}

Entering a new market will increase inward competition for the investing firm, both from local as well as from global players already active in the market. This forces new entrants to organize their production processes more efficiently, and to increase their productivity by integrating these processes both horizontally and vertically.

Many emerging market’s transnational corporations are currently reassessing their internal operations and their roles in the global value chain (Synovate, 2011). By integrating their present operations and implementing international standards, they can achieve efficiencies due to their investments in developed economies.

\textbf{Box 1  \textit{Embraer}}

\begin{tabular}{|p{0.95\textwidth}|}
 \hline
\textbf{Embraer} \\
\textbf{Brazilian aircraft manufacturer Embraer acquired the Portuguese supplier of aircraft maintenance, repair and operations (MRO) OGMA. Before this acquisition, Embraer had very little presence in the European MRO market. OGMA was integrated in Embraer’s MRO operations, strengthening Embraer’s presence in this market.} \\
\hline
\end{tabular}

\textsuperscript{64} A challenger is defined as a company originating from a rapidly developing economy which (i) has a favorable starting position in its home country; (ii) is characterized by the vision and will of its ambitious owners and founders who have taken enormous risk in pursuit of global leadership; and (iii) has the ability to reach outside its home market, to learn fast, and to adapt its business models as needed (BCG, 2009).
Resource Seeking

Companies differ from each other, not only in the products they make or the services they provide, but also in how these products or services are made. Different levels of experience, know-how, capital requirements, etc. will result in different production processes, through which a company can build a competitive advantage over another company in its own or in a different industry.

The same is true for countries. Different countries can possess different natural resources. France has a high-quality soil and the perfect climate to grow wine grapes. This makes that France has a comparative advantage over the United Kingdom, where both the climate and the soil are much less fitted to grow grapes.

Since companies are currently looking for natural resources across the globe, they acquire strategic resources worldwide, in order to secure natural resources like oil, minerals and other raw materials.

Box 2 Lukoil

Russian energy giant Lukoil acquired UK based Nelson Resources Ltd. in order to expand its presence in the international oil and gas market, but more important, to expand its strategic reserves of oil and natural gas, which is Lukoil’s reason of existence.

In another example, Indian petrochemical giant Reliance Industries Ltd. acquired the shale gas assets of US-based Atlas Energy for almost $3.5 billion in early 2010. With this acquisition, Reliance now has the first mover advantage in exploring the novel technologies for shale gas, which is a new fossil fuel considered to be more economically viable when compared with the other available fuels (Synovate, 2011).
Market Seeking

Transnational companies investing abroad will not only assess the opportunities of the new market, but also its macro situation, e.g. trade barriers, investment climate, level of corporate tax, level of labor tax, etc. Also the business environment and the (industrial) policies of the country in which the company has its core activities will strongly influence the internationalization process of the company.

In order to expand their businesses, increase their customer base and improve their production and supply chain network, emerging markets’ transnational corporations are constantly exploring available opportunities in developed economies. International expansion will help the company overcome its overdependence on the domestic market, which is the result of lower margins caused by the increased competition thanks to trade liberalization. Only the most efficient companies will survive and be guided towards foreign markets because of the created overcapacity.

A lot of firms have acquired companies abroad with a well-established market position and a famous brand name, which enables them to increase their market presence and to benefit from economies of scale. This is what the Mexican cement manufacturer Cemex want to achieve by acquiring the Australian based Rinker Group.

Box 3 Cemex

Cemex

Mexican based Cemex bought a controlling stake in the Australian cement manufacturer Rinker Group in 2007. Through this acquisition Cemex expanded its geographic presence in Australia and in the Asia Pacific region. Because of the high economic growth numbers and corresponding building projects in this region, there is a heavy need for cement. Cemex realized that being present in this part of the market would boost its sales, and therefore also increase its market share in the cement manufacturing industry.
Conclusion

It became clear that global trade, and more specifically trade and investments between East and West is not a very recent phenomenon. It dates back centuries ago to the days when commodities, spices, etc. were transported from the far East to the current Eastern and Central Europe. However, the rise of transnational corporations (TNCs) brought a new dimension to the global economic system. The increasing amount of outgoing foreign direct investments from emerging market economies is a phenomenon that can be observed since the previous decade.

Moreover, we highlighted that entering a new market requires a thorough market assessment, in order to avoid the loss of financial and other assets in case the new foreign market entry would proof unsuccessful afterwards.

We concluded this article by investigating the main reasons for emerging market’s TNCs to invest in developed economies. Efficiency, new market opportunities and the advantage of creating a broader scale of resources within the company are among the top incentives for expansion in developed market economies.
## Annex 1  The 2009 BCG 100 New Global Challengers

### Argentina
- Tenaris

### Brazil
- Camargo Correa Group
- Coteminas
- Embraer
- Gerdau
- JBS-Friboi
- Marcopolo
- Natura
- Odebrecht Group
- Perdigao
- Petrobras
- Sadia
- Vale
- Votranit Group
- WEB

### Chile
- CSAV
- Falabella

### China
- Aluminum Corp. of China
- Baosteel Group
- BYD Group
- Chery Automobile
- China Communications Construction Company
- China Int. Marine Containers Group
- China Minmetals
- China Mobile
- China National Chemical Corp
- China National Offshore Oil Corp.
- China National Petroleum Corp.
- China Petroleum & Chemical Corp.
- China Shipbuilding Industry Corp
- China Shipping Group
- COFCO
- Cosco Group
- Dalian Machine Tool Group
- FAW Group

### China (ctd.)
- Galanz Group
- Gree Electric Appliances
- Haier
- Hisense Group
- Huawei Technologies
- Johnson Electric
- Lenovo Group
- Li & Fung Group
- Midea Group
- Shanghai Automotive Industry Corp
- Sinochem
- Sinomach
- Sinosteel
- Suntech Power
- Techtronic Industries
- VTech Holdings
- Wanxiang Group
- ZTE

### Indonesia
- Indofood Sukses Makmur
- Wilmar International

### Kuwait
- Agility

### Malaysia
- MISC Berhad
- Petronas

### Mexico
- America Movil
- Cemex
- Femsa
- Gruma
- Grupo Bimbo
- Mexicachem
- Nemak

### Russia
- Basic Element
- Evraz Group
- Gazprom
- Lukoil
- Severstal
- Sistema

### Thailand
- Charoen Pokphand Group
- Thai Union Frozen Products

### Turkey
- Koç Holding
- Sabanci Holding

### United Arab Emirates
- Dubai World
- Emaar Properties
- Emirates Airlines
- Etisalat
References


Chapter 9

The New EU-29 Internal Market for Visible Trade and IP/OP Logistics

Since the recent enlargement of the European Union to a EU-25 setting, the bureau of statistics Eurostat does not mention the ‘newcomers’ as external partners but as arrivals and expeditions within the internal market. The trade between these 25 members can be represented by a 25 x 25 matrix with:

- the rows, the departures from one member state to the others;
- the columns, the arrivals in one member state coming from the others;
- zero-elements on the diagonal since national traffic is not recorded.

This matrix can be extended into a prospective 29 x 29 format, by:

- extending the rows by the exports from EU members to the four pending and candidate countries, being Croatia, Bulgaria, Romania and Turkey;
- extending the columns by the EU imports coming from those countries;
- adding the trade between the four extra countries from local sources.

The 2003 trade value rises from a 1.5 trillion euro (1 503 billion) in the former EU-15 configuration to more than 1.8 trillion euro for the EU-29, say, four times the ‘old EEC’ 25 years ago. At the opposite, EU-external trade tends to drop because the EU expanded with the major neighbouring partners. Their trade became internal traffic, and was not cleared by additional external trade.
This contribution adds three exercises to this debate in the sense of an extended ground research on the related data-bases. First, there is the estimate of the new enlarged internal visible market which is about to pass a benchmarking threshold of two trillion euro. Second, there is a guestimate of the internal service market which exceeds 362 billion euro in the ‘old’ EU-15, i.e. 24.64 % of the visible trade or 19.77% of the EU-15 total of ‘trade and services’. This low proportion has fuelled suggestions towards further liberalization of the intra-EU service market as proposed by the famous ‘Bolkestein directive’ with the well-known reactions of both social and political pressure groups. Also the WTO addresses a growing discussion on the further liberalization of service trade within the GATS (general agreement on trade in services), which is provisionally oriented towards a measurement issue rather than a policy-oriented directive.

Third, the trade balances of goods and services are compared for both (intra) EU members and extra-EU partners, with a selective focus on the notion of embodied services. This exercise combines two aspects of trading logistics in a unique setting, i.e. services which are traded as such and services which are ‘embodied’ at the local, viz. national level, within the setting of inward (IP) as opposed to outward processing (OP). Especially the comparison of a few Atlantic partners adds clarifying evidence to this issue.

The EU market of visible trade

The EU internal market progressively gained momentum up to the point that it now almost doubles the EU external trade total. Table 1 highlights ten macro-regions, whereas the twin table 1bis (in annex) also provides exploded detail on the EU-25 individual member states and the four pending members. For the individual members, the diagonal is always zero since national traffic is not recorded. On the macro-regional level, the diagonal represents the intra-EU traffic between the members of this
This procedure warrants that the total of almost ‘two trillion euro’ is identical, whatever the regional aggregation procedure is. Our regional scheme accepts France and Germany without regional partner, not only because of their central position, but also because the cross distances between the major cities exceeds that between major ‘regions’. The Balkan covers the new candidates of Romania, Bulgaria and Turkey. The Baltic combines the Scandinavian EU members (Finland, Denmark and Sweden) with the new Baltic Europe (Estonia, Latvia and Lithuania). Further genuine items are Atlantic (the British and Irish Isles), Iberia (Spain and Portugal), Benelux (Belgium, the Netherlands and Luxemburg), Visegrad North (Poland, Slovakia and the Czech Republic), Club Med (Italy, Greece, Malta and Cyprus), and Danube-Adriatic (Slovenia, Hungary, Austria, with Croatia added as an external partner).

The diagonal of table 1 and 1bis indicates the weight of two twin partners:

- Iberia: 18.5 billion euro of which only one third from Portugal to Spain and two thirds from Spain to Portugal (see table 1bis);
- Atlantic with 31 billion euro between Ireland and the United Kingdom.

For regions of three or more partners, the exercise gains momentum such as the Visegrad North which symbolizes the ancient ‘Mitteleuropa’ between Danube, Elbe and the Baltic and already totals a decent 10 billion euro.
### Table 1  Trade in goods in the EU-29, the ten macro-regions, year 2003 (x 1 000 euro)

<table>
<thead>
<tr>
<th>From\to</th>
<th>France</th>
<th>Germany</th>
<th>Atlantic</th>
<th>Iberia</th>
<th>Benelux</th>
<th>Baltic</th>
<th>Visegrad</th>
<th>Club Med</th>
<th>Danube</th>
<th>Balkan</th>
<th>Departures</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>0</td>
<td>49 585 644</td>
<td>30 128 752</td>
<td>35 004 557</td>
<td>40 682 486</td>
<td>8 676 447</td>
<td>7 341 164</td>
<td>31 928 965</td>
<td>7 077 633</td>
<td>5 311 115</td>
<td>215 736 763</td>
</tr>
<tr>
<td>Germany</td>
<td>65 815 080</td>
<td>0</td>
<td>51 449 241</td>
<td>36 869 841</td>
<td>83 339 612</td>
<td>33 656 343</td>
<td>34 550 592</td>
<td>51 168 572</td>
<td>52 851 210</td>
<td>13 651 383</td>
<td>423 351 874</td>
</tr>
<tr>
<td>Atlantic</td>
<td>29 128 842</td>
<td>39 683 066</td>
<td>31 031 780</td>
<td>16 980 240</td>
<td>49 169 533</td>
<td>13 907 064</td>
<td>4 557 593</td>
<td>18 644 953</td>
<td>4 134 343</td>
<td>3 794 176</td>
<td>211 031 589</td>
</tr>
<tr>
<td>Iberia</td>
<td>30 732 030</td>
<td>20 960 956</td>
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<td><strong>52 996 666</strong></td>
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</table>
The Benelux (table 2) scores record high with an intra-regional traffic of 64 billion euro which is fuelled by a massive Dutch outbound surplus. For Belgium, the deficit amounts to a third of the bi-lateral trade and suggests that the logistical distribution traffic is primarily short haul and cross-border.

**Table 2  Intra-regional Benelux traffic**

<table>
<thead>
<tr>
<th>From \ to</th>
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<th>Luxemburg</th>
<th>Departures</th>
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<td><strong>64 266</strong></td>
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</table>

The Baltic (table 3) shows a neo-colonial flavour towards the ‘new Europe’, in spite of the fact that the regional Baltic staggers at half the intra-Benelux transit. Sweden, Denmark and Estonia reveal an export-dominance to Finland, which in its turn delivers primarily to Latvia and Lithuania. The crux regional trade flows still cross the well known Skagerak between Denmark and Sweden and more than three quarts of regional trade sails short-sea between the big three. The Baltic Sea still appears too wide to act as a link and rather separates. Coastwise sailing between neighbours tends to dominate cross-Baltic links.

**Table 3  Intra-regional Baltic traffic**

<table>
<thead>
<tr>
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<th>S</th>
<th>EST</th>
<th>LV</th>
<th>LT</th>
<th>Departures</th>
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<td>Sweden (S)</td>
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<td>641</td>
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<td><strong>1 535</strong></td>
<td><strong>998</strong></td>
<td><strong>32 911</strong></td>
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</table>
**Südbahn**

The region of the ancient Danube-monarchy underscores the potential weight of its partners. A few transit indications from table 4 are worth to address.

**Table 4  Intra-regional traffic in the Danube-Adriatic region**

<table>
<thead>
<tr>
<th>From \ to</th>
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<th>Hungary</th>
<th>Austria</th>
<th>Croatia</th>
<th>Departures</th>
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<tbody>
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<td><strong>6 611</strong></td>
<td><strong>2 438</strong></td>
<td><strong>13 869</strong></td>
</tr>
</tbody>
</table>

Austria shows the highest inter-regional arrivals but has lower total for departures to the region than Hungary. This contrasts with the higher Austrian exports to the EU as a whole, i.e. 56 billion euro compared to Hungary’s 31 billion euro. This can be explained by the better connections upstream the Danube basin and ten years of integration with the German lands. Slovenia and Hungary show dominant departures as in Croatia arrivals are higher. It is too early to advance some hypothesis on the transit flows along the Trans-European axis nr.8, but future evolution may be correlated to the accessibility towards the Istrian and North-Adriatic ports of Trieste (I), Koper (SLO) and Rijeka (HR).

Hungary clearly wins by a shortcut along the new to build Trans-European axis rather than the detour along the ancient ‘Südbahn’. The general trade balances may therefore change substantially in the near future.

**Tracking trade deflection & Gateways.**

From now on, this EU-29 matrix will only show a ‘genuine’ internal growth rather than one caused by the (growing) numbers...
of partners. The internal structure will thus invite to identify a number of integration patterns, such as:

- the acceleration of individual routes, in the aftermath of major infrastructure works (e.g. TEN’s and TINA) or investment policy (trade deflection);
- the macro-regional thesis, i.e. whether trade growth acts within the regional area (gravity effect) or rather focuses on longer distances (trade creation);
- the identification of future growth scenario-alternatives, including FDI, de-localisation and network chains.

**Transport and logistics**

It is now possible to repeat the exercise for the services. The nomenclature for trade in services provides some detail with a remarkable consensus between OECD and Eurostat. The many empty entries force the exercise to be confined to the ‘old’ EU-15. Nevertheless, the mere fact that the exercise is possible at all feeds constructive scientific possibilities of tracking the new GATS issues (*general agreement on trade in services*) within the WTO. Anyhow, the next exercise proves that the whole study is more than a filling-in procedure.

**Bolkestein directive**

Spring 2005 is known for the growing protest against the so-called Bolkestein directive to free the EU service market. Initiated by the massive French protest (cf. *Le Monde*, p. 1 and 6, and *the Herald Tribune*, p. 1 and 8, of February 3rd 2005), the wave conquered the European Parliament, Belgium and Portugal and culminated in a EU-top to restrict free service trade (cf. *Handelsblatt*, dd. 25-27.3.2005, “EU-Gipfel schränkt Freiheit für Dienstleistungen ein”, p. 2, 5 and 11). Simultaneously, within the vaguer worldwide GATTS, attempts are building up to solve the measurement issue, including the notion of ‘embodied services.
In short, there is a problem of putting together a comprehensive EU service map.

*Measures and registrations (see separate tables 5a/b, 6 and 7)*

The registration of related activities remains between an art and a science. On the one hand, the list shows surprising uniformity between Eurostat and OECD administrations to the point of questioning overlapping competences. On the other hand, substantial ‘empty holes’ remain, which fuel the need for proper registration. Key examples are the incomplete market for medical services and the proper accounting of consultancy fees and transfer-pricing activities across the logistical value chain.

The present exercise follows three stages. First, OECD-data (in USD) are used to provide a maximum detail of the internal matrix of services, in spite of some empty holes, because OECD still neglects the existence of the EU as a whole. For the visible trade since 1993, OECD-statistics build up unacceptable double counts in EU transit-traffic. For service trade, the country detail is an advantage since service trade cannot be double counted. The matrix has three situations:

- On trade relations with both inbound and outbound registrations, the latter are taken because in general financial statistics are more reliable at the outbound side, as opposed to trade which tends to be recorded at the entry.
- For relations with only one reporting source, this source is accepted. This can be inbound or outbound services, depending on the situation at stake.
- The relations without reporting evidence are filled in by ‘guestimates’ which are derived from the combination of the relevant departures and arrivals. The eventual numbers follow a bi-proportional adjustment.

These provisional estimates in USD are then ‘updated’ to the Eurostat totals of arrivals and destinations in euro. The procedure is known as the ‘rAs’ method. A first update adjusts the row
totals, but then the column totals do not fit the right totals. So, column totals are adjusted with the ratio between the estimates and the ‘right’ totals. Eventually, this repeating procedure converges to a ‘best estimate’ when errors are less than an acceptable minimum. The initial service matrix is given in table 5/a and the ‘best estimate’ of the EU-15 service matrix is presented in table 5/b.

Service intensity

Apart from the rough information, the service trade invites to be compared to the visible goods traffic. These percentages are given in table 6 with on the one hand the goods-percentages (red) and on the other hand the service-percentages (blue). The same numbers are reported in ratio terms in table 7, which is easier in quickly detecting the extremes. The ratio is almost 9 on the relation between Greece and Ireland, whereas the more solid neighbouring trade seems to be dominated by visible trade. In general, the bracket between extremes goes up to a factor of one hundred, which suggests that more factors are involved than just the service component.

For example the regional groups may add evidence. The UK seems to generate more genuine service trade in which the service itself acts cross-border. At the opposite, the Netherlands specialize in ‘embodied services’, i.e. services which are produced at the local level and added to the international cross-border value chain. Then, the visible trade is recorded internationally but the value-added service component remains local.
Table 5a  Trade in services in the EU-15, year 2000; the ‘unfinished’ basic OECD matrix in million USD

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Table 5b  *Trade in services in the EU-15, year 2000: the final 'updated' matrix in million euro*

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External service trade

The extra-EU external trade in services shows a small balance surplus of less than 2% between 298 billion euro net receipts and 293 billion euro expenses. More than half the total is produced by France, Germany and the UK (see table 8), with 55% of the service production and 51% of the expenditures. The detail differs by country. The British produce about one third surplus, which is in line with the value-added of the London City (estimated up to 7 billion British pounds) or the sales of logistics operators, which totals 20 billion British pounds.

Table 8  The top-3 in the extra-EU service market (mio euro and percentage of EU-15)

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<tr>
<th></th>
<th>Revenue</th>
<th>%</th>
<th>Costs</th>
<th>%</th>
<th>Balance (mio euro)</th>
<th>% of surplus</th>
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<td>76 864</td>
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<td>51 129</td>
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<td>33 of exports</td>
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<td>44 813</td>
<td>15.0</td>
<td>64 482</td>
<td>22.0</td>
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<td>30 of imports</td>
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<td>41 600</td>
<td>14.0</td>
<td>33 621</td>
<td>11.5</td>
<td>+7 979</td>
<td>19 of exports</td>
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Sectoral detail

Industry information is far from complete because some industries tend to act on the local level. For example, Medicare totals EU-wide about 500 billion euro against some 50 billion euro for the production of pharmaceuticals and only 15 billion for medical equipment, but almost no cross-border medical services are recorded. Thus, table 9 reveals typical cross-borders services, such as travel and transport. Nevertheless, also business services show that the often MNE-based activities witness a high degree of globalization. The remaining quart covers a variety of branches such as communication, government, financial, computer services and royalties.
Table 9  *The top-3 EU service groups*

<table>
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<th>Credit</th>
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<th>%</th>
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<td>194 931</td>
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<td>193 182</td>
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<td>Business services</td>
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All those items tend to globalize in a more or less scattered way. The USA only gets 20% with a dominance of business services. Canada scores high in insurance and Japan in information and computer services.

**Comparing the trade balances for goods and services.**

The difference between ‘trade in services’ and ‘embodied’ services requires a comprehensive approach within the current accounts. We confine our exercise to the 6 members of the initial EEC to which we add the UK in view of its special weight. Table 10 shows an informative variation.

Table 10  *Comprehensive balances, year 2000 (in mio euro)*

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<th>SERVICES</th>
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<tr>
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<td>- 61 630</td>
<td>+ 77 722</td>
<td>+ 1 360</td>
<td>- 480</td>
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<tr>
<td>France</td>
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<td>- 20 434</td>
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<td>Germany</td>
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<td>+ 42 042</td>
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<td>- 34 727</td>
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<td>- 2 160</td>
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<tr>
<td>UK</td>
<td>- 55 418</td>
<td>- 7 794</td>
<td>+ 25 735</td>
<td>- 1 680</td>
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</table>
The Netherlands produce almost no surplus on direct service trade but score record high on inward processing. These ‘embodied services’ are visualized by the negative external trade balance which is ‘transferred’ to an intra-EU surplus of 77 242 million euro (= + 77 722 - 480). The net surplus between inbound (extra EU) deficit and outbound gains (intra-EU) is almost as high in Belgium and Luxemburg (see table 11) but with less massive trade deflection through ports and airports. Germany and Italy show smaller balances, which may tend to support the thesis that bigger economies are less open “Eigenwirtschaft”. Remarkably is that France shows a net sourcing within the Union which fuels an extra-EU export drive. The UK does not compensate the visible deficit by a service surplus.

**Table 11  Synthesis, year 2000 (in mio euro)**

<table>
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<td>TOTAL 6</td>
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**Evaluation**

Of course, these numbers ought to be compared in the full detail of current and capital accounts which is beyond the scope of this contribution. Our attempt was to assess the EU service trade by combining the logistics notions of inward processing beyond the typical administrative notion of duty exempt IP. In a similar way, the restricted notion of EDC (European distribution centres) is widened into a simplified method which includes all trade deflection, also beyond the logistical EDC traffic. The used
methodology reveals structural differences between the major EU trading partners which come up for comparison over time and policy related evaluation.

Therefore the notion of ‘European Economic Integration’ cannot be limited to the statistics of visible trade but should include the typical logic of services. Also, the ‘outbound traders’ (e.g. France but also Greece) should be considered on an equal basis as the ‘inward traders’ (e.g. the Netherlands). It is not because an economy specializes in inbound trade deflection, that it ought to be labelled as more (European) integrated.

Finally, the used methodology of bi-proportional updating opens perspectives to apply this method, when some data are still incomplete but the bottom-line totals warrant a full coverage. Especially, the eastbound enlargement of the EU opens possibilities for tracking and tracing the new logistics of EU integration.

References


**Table 1bis**  
*Trade in goods in the EU-29, the 25 individual member states and four pending states, year 2003 (× 1,000 euro)*

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- Portugal: PT
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- Finland: FI
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Chapter 10
From AFTA Towards an ASEAN Economic Community … and Beyond

Introduction

This paper gives an overview of recent developments in the process of Asian economic integration. A large part will focus on the integration initiatives undertaken within the framework of the Association of Southeast Asian Nations (ASEAN). ASEAN was not only the first regional integration arrangement in Asia, it also remains the centre for current and future economic integration initiatives in the wider East Asian region. The progress that has been made by ASEAN’s member countries in establishing an ASEAN Free Trade Area (AFTA) will be analysed. Given the important and reasonably successful integration initiatives in other parts of the world, such as the EU and NAFTA, academics and politicians have devoted much attention to the possibilities of both deepening and widening economic collaboration in the (East) Asian region. Ten ASEAN countries already decided to establish an ASEAN Economic Community by the year 2020 and some other countries seem eager to join. We will have a closer look at the recent initiatives taken in this direction. We also devote attention to the role ASEAN plays in the regional monetary integration and cooperation schemes adopted in the region. Empirical tests, using the optimum currency area (OCA) theory, will be reviewed to determine whether a common currency would be beneficial for certain groups or sub-groups of Asian countries. The paper concludes with the authors’ thoughts on the viability of a wider East Asian Free Trade Area and East Asian monetary union in the long term and on the role ASEAN would have to play in its establishment.
From ASEAN towards AFTA

The Association of Southeast Asian Nations (ASEAN) was established on 8 August 1967, when the 5 original members – Indonesia, Malaysia, the Philippines, Singapore and Thailand – signed the Bangkok Declaration. The association now consists of 10 member states, as successively Brunei Darussalam (1984), Vietnam (1995), Laos (1997), Myanmar (1997) and Cambodia (1999) joined. It is interesting to point out that the ASEAN Secretariat was only established in 1976, right after the end of the Vietnam war and almost ten years after the establishment of ASEAN itself (Pasadilla, 2004:2). The ASEAN Secretariat is based in Jakarta, Indonesia.

In the beginning, ASEAN primarily pursued political goals, striving for peace and security in Southeast Asia. With hindsight, we can say that ASEAN has indeed largely contributed to the overall stability in Southeast Asia and to a general feeling of trust between the member states. From the late 1970s onwards, ASEAN countries also started to give thought to closer economic collaboration, but tangible achievements as to that remained limited for a long time. Although a Preferential Trading Agreement (PTA) was agreed upon in 1977, its impact was limited: the tariff concessions that ASEAN countries granted within this PTA framework were just too small, or related to products that represented only a marginal proportion of intra-ASEAN trade (Cuyvers & Pupphavesa, 1996:4). At that time, ASEAN countries were not ready to open up yet, mainly due to the development gap that existed between the member states and apparent by the fact that some members scrupulously stuck to import substitution strategies. Moreover, economic growth rates in the region were high anyway, so ASEAN members did not really feel the need to push ahead with trade liberalisation efforts. It was only in the second half of the 1980s that trade liberalisation seriously started to make way in
the ASEAN-6\textsuperscript{65}. By then, ASEAN countries had gained enough self-confidence and also felt the increasing external pressure from the IMF and the World Bank to speed up trade liberalisation efforts. Finally, ASEAN members also wanted to arm themselves against the newly developed trading blocs of NAFTA and the EU, as they were concerned about their exports to these huge markets. (Naya, 2004:3; Naya & Imada, 1992:56; Elliot & Ikemoto, 2004:4). In January 1992, ASEAN leaders decided to take their trade liberalisation efforts to a higher level, by establishing the ASEAN Free Trade Area (AFTA). In 1995 they also concluded the supplementary ASEAN Framework Agreement on Services (AFAS) and in 1998, ASEAN ministers established the ASEAN Investment Area (AIA). Hereafter, we will mainly focus on the AFTA agreement.

The AFTA Agreement went much further than the former PTA, concluded in 1977: the new agreement aimed at reducing tariffs on a large range of products, but also strived for the elimination of non-tariff barriers, quantitative restrictions and other cross-border measures (Pasadilla, 2004:4). By eliminating tariff barriers among ASEAN members, AFTA would turn the ASEAN economies into a single production base and would simultaneously create a regional market of 500 million consumers. The AFTA agreement envisioned a staged trade liberalisation, reducing tariff rates levied on intra-ASEAN imports to no more than five percent over a period of 15 years. Tariff reductions only apply to products that comply with the “ASEAN content requirement”. This means that at least 40\% of the value of a product must originate in ASEAN countries (ASEAN Secretariat, 1992: CEPT, art. 2.4). According to the original plan, AFTA would be fully established by 2008. However, already in 1994 ASEAN Economic Ministers decided to accelerate the process, advancing the completion date to 2003. In 1995, the target date was advanced

\textsuperscript{65}“ASEAN-6” is often used to designate the six long-standing members of ASEAN: Indonesia, Malaysia, Philippines, Singapore, Thailand and Brunei Darussalam. “ASEAN-CLMV” is used to designate the new (and up to now less developed) members Cambodia, Laos, Myanmar and Vietnam.
further to 2002. At the same time, it was decided that tariffs on intra-ASEAN imports should be completely eliminated by 2010 for ASEAN-6 and by 2015 for ASEAN-CLMV. (ASEAN Secretariat, 2002; Cuyvers & Pupphavesa, 1996:6-7; Pasadilla, 2004:3)

The Common Effective Preferential Tariff (CEPT) Scheme was introduced to implement the AFTA Agreement in practice. The CEPT Scheme encompassed manufactured and semi-manufactured products, including capital goods and processed agricultural products. The liberalisation process was carried out at different speeds according to the product group: distinction was made between a “fast track” scheme and a “normal track” scheme. Products in the Inclusion List (IL) had to be immediately liberalised through a reduction of the CEPT tariff rates to a maximum of 5% by 2002. The ASEAN-CLMV countries were allowed to apply less stringent deadlines: Vietnam has to meet this objective by 2006, Laos and Myanmar by 2008 and Cambodia by 2010. The AFTA Agreement also allowed for the exclusion of certain “sensitive” products from tariff reduction under the normal or fast track scheme. Therefore, Temporary Exclusion Lists (TEL), Sensitive Lists (SL) and General Exception Lists (GE) were drawn up by all ASEAN members. (ASEAN Secretariat, 1999)

Products in the Temporary Exclusion List (TEL) can be excluded from trade liberalisation for a limited period of time. In the end, all products in the TEL have to be transferred to the Inclusion List (IL) in order to bring tariffs down to a maximum of 5%. The Sensitive List (SL) primarily contains raw (unprocessed) agricultural products. Trade in these products has to be liberalised by 2010 for the ASEAN-6, while the new members get an even more extensive time frame. Products in the General Exceptions List (GE) are permanently excluded from trade liberalisation on grounds of protection of national security, public morals, public health, environmental protection and protection of articles of artistic, historic or archaeological value. (ASEAN Secretariat, 1999)

More than 99% of the products in the CEPT Inclusion List (IL) of ASEAN-6 now have tariffs of no more than 5% (Figure 1).
The small number of products that still have tariffs of above 5%, are mainly products that have been transferred from the Sensitive Lists (SL) and the General Exceptions Lists (GE) in 2003. Moreover, almost all products traded by ASEAN-6 in the region are part of the IL. For ASEAN-CLMV, tariffs on 66.57% of the products in the IL have been reduced to a maximum of 5%. It must be noted, however, that no more than 80% of the products traded by these countries in the region are part of the IL. This all means, that the IL of ASEAN-10 (total ASEAN) now contains about 90% of total tariff lines and that 90.17% of tariff lines in the IL have tariffs ranging from 0-5%. (ASEAN Secretariat, 2004h:16-17; AFTA Council, 2003)

**Figure 1** Percentage of Tariff Lines at 0-5 Percent in the Tentative 2004 CEPT Package

Note: “other” represents those tariff lines with specific duties based on data before application of ASEAN Harmonised Tariff Nomenclature (AHTN)

Source: ASEAN Secretariat (2004h:17)

Table 1 reproduces the scheme that was applied for the gradual reduction of the average CEPT tariff rates. The average tariff rate under the CEPT Scheme for ASEAN-10 was at 2.63% in 2003, and ranged from 0% in Singapore to 7.96% in Cambodia, ASEAN’s youngest member state. In 2004, the average tariff for
ASEAN-6 further decreased to 1.51%, compared to 12.76% in 1993 when AFTA started off. (ASEAN Secretariat, 2004h:17)

Table 1  *Average AFTA/CEPT Tariff Rates by Country (%)*

<table>
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<td>6.58</td>
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<tr>
<td>Myanmar</td>
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<td>Thailand</td>
<td>6.07</td>
<td>5.59</td>
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<tr>
<td>Vietnam</td>
<td>7.09</td>
<td>7.09</td>
<td>N/A</td>
<td>N/A</td>
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ASEAN 3.74 3.54 3.17 2.63

Note: the average CEPT tariff rates for ASEAN as a whole are weighted averages, with the number of tariff lines in the Inclusion List for 1999 used as the weights.

Source: ASEAN Secretariat

Although the ASEAN Secretariat claims that AFTA is now virtually established, this statement might somewhat disguise the truth. Rice, considered as a highly sensitive product for the region, is still excluded from the AFTA agreement. Moreover, several members are still very unresponsive when they have to lower tariffs on certain other critical product groups. Malaysia, for example, refused to comply with the AFTA deadlines and kept on levying tariffs on completely built up (CBUs) and completely knocked down (CKDs) automotive units. By doing so, Malaysia undoubtedly wanted to protect its state-controlled carmaker Proton. Only very recently, automotive CBUs and CKDs have finally been transferred to Malaysia’s Inclusion List. It goes without saying that Thailand, having a fast-growing automotive industry itself, was not really pleased with this significant delay in Malaysia’s liberalisation efforts. (Economist, 2004; AFTA Council, 2004)
The most pressing issue however, is the very limited use of the CEPT Scheme. Calculations show that only 5% of intra-ASEAN trade has been carried out using CEPT tariff rates (Reyes, 2004). Experts say that local enterprises do not bother to go through all the necessary formalities, or just do not know that their business transactions qualify for these preferential tariff rates. The authorities in countries still applying relatively high tariffs, do not bother to inform the local business sector about the CEPT, as they do not want to loose tariff revenues. In other countries, levying relatively low tariff rates, the difference between the CEPT and the ordinary rate is just too small to take the trouble anyway (Economist, 2004).

ASEAN Leaders are trying hard to spread the use of the CEPT Scheme among local business sectors. The CEPT Rules of Origin and its Operational Certification Procedures have been recently revised to better suit the demands of the business environment. The changes include the introduction of (ASEAN Secretariat, 2004a):

a) a standardised method of calculating local/ASEAN content
b) a set of principles for determining the cost for ASEAN origin and the guidelines for costing methodologies
c) a clear and specific treatment of locally-procured materials
d) an improved verification process, including on-site verification

Up to now, the “value added” method was used to determine origin for products falling under the CEPT Scheme. The value added rule stipulates that at least 40% of the value of a product must originate in ASEAN countries. The Task Force on the CEPT Rules of Origin is currently working on the practical implementation of an alternative criterion in determining origin. The so called “CTH (Change in Tariff Heading) rule” or “substantial transformation rule” will become applicable to products which cannot fulfil the 40% local/ASEAN content requirement (AFTA Council, 2003). The introduction of the alternative “substantial transformation rule” might render the CEPT rules of origin more flexible, especially for the poorer member states, where producers in certain sectors
have difficulties to comply with the 40% value added requirement (Brenton, 2003:16).

ASEAN leaders also realise that non-tariff barriers remain a major obstacle in the process of arriving at a free flow of goods within the region. Progress in the elimination of indefensible non-tariff measures (NTMs) remains utterly slow, in spite of the high priority that ASEAN Ministers assign to the matter. Recently, a database on ASEAN NTMs has been set up to get a better overview of the remaining barriers. ASEAN leaders also invited the private sector to notify all unknown or unlisted NTMs so that they can be eliminated subsequently. Another possible obstacle to the free movement of goods is the divergence of product standards and technical regulations. Therefore, the ASEAN Coordinating Committee on Standards and Quality (ACCSQ) has been made responsible for the implementation of the ASEAN Framework Agreement on Mutual Recognition Arrangements and for the harmonisation of technical regulations and product standards. Finally, all member states are urged to comply with the WTO Agreement on Import Licensing as soon as possible (AFTA Council, 2003 and 2004; ASEAN Secretariat, 2004c).

The ultimate target of any FTA is to arrive at zero tariff rates and to bring about an integrated market with free circulation of goods. The ASEAN-6 countries should accomplish this target by 2010 and the ASEAN-CLMV countries by 2015, according to the AFTA Council (ASEAN Secretariat, 2002). However, as of today, tariffs on no more than 64.12% of products in the Inclusion List of ASEAN-6 have been fully eliminated (ASEAN Secretariat, 2004h:17). It is clear that it will take more time and effort, before a free flow of goods in the ASEAN region is reached.

Apart from the issue whether liberalisation in the region is carried out quickly enough, questions can also be raised about AFTA’s contribution to general welfare. Although most authors agree on the positive impact ASEAN has had on the political stability and cohesion in the region, there is less consensus on the economic grounds for the establishment of a free trade agreement
in Southeast Asia. Krugman suggested that FTAs between “natural trading partners” are more likely to be welfare enhancing, than agreements between countries that lie scattered. If the regional bias of a particular trading arrangement is too large, trade diversion might, however, exceed trade creation, thus reducing welfare (Krugman, 1991:21-22). AFTA seems a good example of a “natural trading bloc”, but it should also be mentioned that ASEAN member countries traditionally have been outward-looking economies. Elliot and Ikemoto rightfully note that inter-regional trade – rather than intra-regional trade – has largely contributed to ASEAN’s economic growth during the last three decades or so. Theoretically, AFTA could therefore easily have trade diversion effects (Elliot & Ikemoto, 2004:2).

Some recent empirical studies have analysed AFTA’s impact on international trade. The results of these studies are mixed: studies by Elliot & Ikemoto (2004), Gosh & Yamarik (2002) and Cernat (2001) found that AFTA led to net trade creation, while Dee & Gali (2003) and Soloaga & Winters (2000) suggest that AFTA led to net trade diversion. The theoretical expectation that AFTA would have important trade diversion effects, is consequently not fully confirmed by these early studies. Elliot and Ikemoto suggest that the significant inter-regional proportion of total ASEAN trade has been maintained. Even the Asian financial crisis of 1997-1998 has not caused a major change towards inward oriented trading activity of the ASEAN member countries (Elliot & Ikemoto, 2004:16-17).

Intra-ASEAN exports as a percentage of total ASEAN exports increased from 18% in 1985 to 23.16% in 2003, while the share of intra-ASEAN imports in total ASEAN imports went up from 16% in 1985 to 20.73% in 2003. Intra-ASEAN trade seems to grow at a rate that is only slightly above the growth rate of ASEAN’s global trade. Moreover, intra-ASEAN trade has increased at a much slower pace than trade among East Asia’s developing countries in general. The strong GDP increase in these

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66 The results of these studies were gathered by Coulibaly (Coulibaly, 2004:2).
developing countries and the global move toward trade liberalisation, are the main explanatory factors for this trend. Consequently, ASEAN is not doing overwhelmingly well compared to the wider East Asian region. It is not really surprising then, that ASEAN has turned to its neighbours to revitalise its trading performance, as we will see later on. (AFTA Council, 2004; Naya, 2004:13-14)

It must be noted that the above mentioned studies only focus on the static effects of economic integration, i.e. trade creation and trade diversion. It is clear, however, that the possible dynamic effects of economic integration should not be neglected. Positive dynamic effects occur when barriers to trade are reduced, resulting in a substantial market size increase. Such dynamic effects are e.g., economies of scale, increased efficiency due to intensified competition and increased investments. These effects, in turn, could lead to technological progress, giving ASEAN countries a new competitive edge. As a matter of fact, when ASEAN leaders established AFTA in 1992, they hoped that the free trading arrangement would have a marked positive impact on ASEAN’s global competitiveness in the long run. Although these dynamic effects are promising in theory, they have been analysed empirically in only a limited number of studies up to now. As a result, it might be improper to condemn AFTA on its static effects only. (Elliot & Ikemoto, 2004: 17)

**From AFTA towards an ASEAN Economic Community**

Asia is not different from other regions in the world. The increase in regionalism in Asia should be viewed from the perspective of a widespread tendency towards regional collaboration initiatives on a world scale. The general deception with the slow pace of liberalisation within the WTO-framework and the idea that regional integration agreements are “building” rather than “stumbling blocks” to global free trade (Bhagwati, 1991:77), has led to a proliferation in the number of regional FTA agreements. Many regional FTAs go
even further than what is stipulated by the WTO and are therefore denoted as WTO-plus agreements (Sampson & Woolcock, 2002). It is noteworthy that this movement towards regionalism has already made way in Europe and America, but for Asia it started very recently. (Naya, 2004:4-5)

Even before AFTA was officially implemented in 2003, ASEAN members started talks about further economic integration initiatives. Today, one cannot possibly neglect the manifest regionalism in the East Asian region, as the number of bilateral and plurilateral trading arrangements is increasing month after month.

The 1997-1998 Asian financial crisis is often regarded as the direct cause for the rise in regionalism in Asia. The crisis painfully showed that the East Asian economies were closely related and that de-facto integration in the region had already started much earlier: since the second half of the 1980s, production networks had emerged in the East Asian region, with multinational enterprises splitting up production over the different countries in the region. Multinationals from Japan, and later on also from the Newly Industrialised Countries (NICs), moved some of their production activities to Southeast Asia to take advantage of the cheap labour supply. (Chia, 2004:2; Pasadilla, 2004:5)

Apart from the realisation that their economies were highly interdependent, East Asian leaders also got the feeling that international institutions (especially the IMF) and the main trading partners (the US in particular) fell short in support for the region during the 1997-1998 financial crisis. As a result, East Asian leaders evolved a strong need for formal cooperation agreements and deeper economic integration within the region around the turn of the century. (Naya, 2004:7; Soesastro, 2003:3)

Although the financial crisis might have been the direct cause, one must also look at the broader developments in order to understand the emerging regionalism in East Asia. The end of the Cold War was extremely important in the rapprochement process with former communist states in the region, which have now all become ASEAN members. It is
also clear that during recent years, China became much closer to ASEAN. Both China and ASEAN have good reasons for their growing partnership, as we will discuss later. All in all, by the end of the 1990s, the political playing field was sufficiently prepared for further economic integration initiatives in the East Asian region. (Chia, 2004:2-3)

All these forces together have brought about a momentum of both deepening and widening economic integration in East Asia. In December 1997, ASEAN leaders adopted the ASEAN Vision 2020, which can be regarded as a long-term road-map for ASEAN. The plan envisaged the establishment of an ASEAN Community by the year 2020, made up of three different pillars: an ASEAN Economic Community (AEC), an ASEAN Security Community (ASC) and an ASEAN Socio-cultural Community (ASCC). In the Bali Concord II, adopted on 7 October 2003 during the 9th ASEAN summit, ASEAN leaders formally expressed their intention to realise the ASEAN Economic Community (AEC). The AEC is meant to be a single market and production base, with free movement of goods, services, investment, skilled labour and a freer flow of capital. The AEC should also foster equitable economic development in the region and reduce poverty and socio-economic disparities by the year 2020. (ASEAN Secretariat, 1997; 2003a and 2004c)

By creating the AEC, ASEAN endeavours to respond to other regional trading blocs, such as the EU and NAFTA. The recent enlargement of the EU for example, created fears of FDI diversion, i.e. an increasing share of European foreign direct investment flowing into the new member states rather than into ASEAN. Even more challenging is the competition from other low cost producers in Asia, such as China and India. These new economic giants do not only dispose of an abundant supply of cheap labour, but also witness the emergence of an enormous domestic consumer market. By establishing an economic community, ASEAN leaders hope to integrate the national markets of the member states. This
integration process should fully take advantage of the diversities in the region to further specialise, to become more efficient and to realise the much needed economies of scale. It is hoped that every ASEAN member will then be able to fully exploit its comparative advantages, leading to a more competitive region as a whole. (Reyes, 2004; Hew, 2003)

The original Hanoi Plan of Action, drawn up in 1998 to serve as a guideline for arriving at the final goal of the AEC, has recently been succeeded by the Vientiane Plan of Action, another six-year plan which focuses on narrowing the development gap within ASEAN and on further deepening regional economic integration. One of the elements of the plan is the establishment of an ASEAN Development Fund, which should foster the development of ASEAN-CLMV countries (ASEAN Secretariat, 2004b). Deeper economic integration will be pursued by the accelerated integration of the following 11 priority sectors: (i) agro-based products, (ii) air travel, (iii) automotives, (iv) e-ASEAN, (v) electronics, (vi) fisheries, (vii) healthcare, (viii) rubber-based products, (ix) textiles and apparel, (x) tourism, and (xi) wood-based products (ASEAN Secretariat, 2004c).

For each of the 11 priority sectors, specific “roadmaps” (ASEAN Sectoral Integration Protocols) have been developed in conjunction with the private sector. These roadmaps indicate the pace of the liberalisation process and the specific timetables that have to be followed up to 2010, in order to facilitate the accelerated integration of these 11 sectors in ASEAN. Import tariffs on products under the priority sectors have to be completely eliminated by 2007 for ASEAN-6 and by 2012 for ASEAN-CLMV. It is noteworthy that these target dates are 3 years earlier than originally foreseen under the AFTA agreement. Similar to the trade liberalisation process under AFTA, a fast track scheme has been developed for accelerated integration towards the AEC, including about 40% of total tariff lines in ASEAN. The decision to accelerate economic integration in these
particular sectors is courageous, as the 11 priority sectors together accounted for more than 50% of intra-ASEAN trade in 2003 (ASEAN Secretariat, 2004d). It remains to be seen, however, if the optimistic time frames that were set, will be feasible in practice.

It should be clear by now that flexibility is a distinct property of ASEAN economic integration, with tariff reductions being pursued gradually and differently phased within ASEAN-6 and ASEAN-CLMV (the latter countries are always allowed to apply less stringent time schedules). This flexibility has recently been formalised in the “ASEAN minus X” approach, which means that all ASEAN members have to agree on a specific target to pursue, but individual members can decide to join later, or at the same moment but implementing at a more realistic pace. (Reyes, 2004; Hew, 2003)

ASEAN leaders argue that quick progress in the liberalisation of the 11 priority sectors can serve as an important example for the rest of the economy. However, some major disadvantages to this sectoral approach can be mentioned: when a particular sector is liberalised, thus turning the whole ASEAN region into a single market and production base for this sector, it is clear that tariffs on all intermediate goods used in the sector should also be eliminated. Yet it cannot be excluded that these intermediate goods are produced in other sectors of the economy which are not subject to accelerated liberalisation. Tariffs on vital intermediate goods will therefore remain an important obstacle in the evolution towards a single market and production base for the priority sectors. (Reyes, 2004)

As ASEAN wants to achieve the AEC, it is not sufficient to merely liberalise trade in goods and services. Huge challenges remain before ASEAN meets the other objectives of free movement of investment and skilled labour, and a freer flow of capital. Foreign investors who built up a successful business and consequently want to repatriate their profits, are still disadvantaged by national laws in ASEAN member states
that favour domestic investors. It should be clear that other countries like China, are eager to receive these foreign investors. Therefore a profound change in public mindset within the ASEAN region is urgently needed, as foreign investments will benefit ASEAN’s consumers in the long run. Some scholars consequently plead for national treatment of foreign investors, both from within and outside ASEAN. As the AEC also envisages free movement of skilled labour, ASEAN leaders will have to come up with clear-cut definitions of skilled labour for each of the 11 priority sectors. Only by using common criteria, national borders for skilled labour will disappear in ASEAN. (see e.g., Reyes, 2004)

In spite of the similar sounding, the structural differences between the proposed ASEAN Economic Community (AEC) and the European Economic Community, which evolved into the European Union (EU), should not be neglected. As the individual ASEAN countries are reluctant to give up national economic policies vis-a-vis non-members, the AEC set-up will not include a common external tariff. This should not be too surprising as one knows that there are huge discrepancies between the member states in average external tariff levels (Economist, 2004). Singapore for example, basically is a free port and does not levy import tariffs. To arrive at a common external tariff, Singapore would consequently have to start levying tariffs or the other nine ASEAN member countries would have to eliminate their tariffs (Reyes, 2004). Moreover, a forced convergence of external tariffs in the short run would not be wise as the development gap between ASEAN-6 and ASEAN-CLMV is still too large. In the long run convergence would seem desirable, but is seriously hampered by lacking supranational institutional and structural mechanisms (Cuyvers, 2002).

All this implies that ASEAN is not following the example of the EU and rather endeavours to establish a single market without having installed a customs union or having created some
supranational authority. This is not really surprising as ASEAN members have always been reluctant to delegate power to some supranational body. In this respect it is interesting to note that ASEAN was established by a declaration and not by a treaty, meaning that ASEAN completely lacks legal personality. The EU on the other hand, does have legal personality and disposes of a powerful Commission to implement and enforce decisions (Cuyvers, 2002; Reyes, 2004). The ASEAN Secretariat in turn, was only established ten years after ASEAN’s founding and has been under-powered ever since. Consequently, strong doubts remain whether the ASEAN Secretariat will be able to streamline the integration process towards the AEC (Economist, 2004; Naya, 2004:11-12). It remains to be seen whether the national authorities will enforce compliance with the adopted roadmaps for the 11 priority sectors in practice, given the limited authority of the ASEAN Secretariat (Reyes, 2004).

**Wider East Asian Economic Integration**

| ASEAN countries have traditionally been outward looking and they still are today, in spite of the establishment of AFTA. As a result, ASEAN and the ASEAN member states are readily taking part in the recent current of regionalism in the wider East Asian region. Thus ASEAN countries are not only involved in a deepening economic integration process, but also in a widening one. Table 2 gives an overview of the intra-regional and the inter-regional trading arrangements of East Asian countries. |
### Table 2 Economic Cooperation Agreements of ASEAN members*

<table>
<thead>
<tr>
<th>Intra Regional (East Asia)</th>
<th>Membership</th>
<th>Status (January 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN: AFTA, AFAS, AIA</td>
<td>ASEAN-10</td>
<td>Implemented</td>
</tr>
<tr>
<td>ASEAN-China Comprehensive Economic Cooperation (including FTA)</td>
<td>ASEAN-10, China</td>
<td>Framework Agreement signed in November 2002, Early Harvest Programme implemented</td>
</tr>
<tr>
<td>ASEAN-Japan Comprehensive Economic Partnership (including bilateral FTAs)</td>
<td>ASEAN-10, Japan</td>
<td>Framework Agreement signed in October 2003, negotiations on the CEP outline begin in April 2005, Japan-Singapore bilateral implemented, other bilaterals with Japan under discussion</td>
</tr>
<tr>
<td>ASEAN-South Korea Comprehensive Economic Partnership (including FTA)</td>
<td>ASEAN-10, South Korea</td>
<td>Negotiations ongoing, negotiations on the FTA outline begin early 2005</td>
</tr>
<tr>
<td>China-Japan-South Korea FTA</td>
<td>China, Japan, South Korea</td>
<td>Under consideration, also ongoing negotiations on Japan-Korea and China-Korea bilaterals</td>
</tr>
<tr>
<td>ASEAN+3</td>
<td>ASEAN-10, China, Japan, South Korea</td>
<td>Chiang Mai Initiative on monetary and financial cooperation implemented</td>
</tr>
<tr>
<td>East Asia FTA</td>
<td>ASEAN-10, China, Japan, South Korea</td>
<td>East Asia Study Group’s measures for the establishment of an East Asia FTA adopted, further negotiations ongoing</td>
</tr>
<tr>
<td>China bilaterals</td>
<td>with Hong Kong, South Korea, Thailand</td>
<td>China-Hong Kong bilateral implemented, other bilaterals under negotiation</td>
</tr>
<tr>
<td>Hong Kong bilaterals</td>
<td>with China</td>
<td>Implemented</td>
</tr>
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### Intra Regional (East Asia)

<table>
<thead>
<tr>
<th>Membership</th>
<th>Status (January 2005)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan bilaterals with Malaysia, Philippines, Singapore, South Korea, Thailand</td>
<td>Japan-Singapore bilateral implemented, other bilaterals under negotiation</td>
</tr>
<tr>
<td>Malaysia bilaterals with Japan</td>
<td>Ongoing negotiations</td>
</tr>
<tr>
<td>Philippines bilaterals with Japan</td>
<td>Ongoing negotiations</td>
</tr>
<tr>
<td>Singapore bilaterals with Japan, South Korea</td>
<td>Singapore-Japan bilateral implemented, ongoing negotiations with South Korea</td>
</tr>
<tr>
<td>South Korea bilaterals with China, Japan, Singapore, Thailand</td>
<td>Ongoing negotiations</td>
</tr>
<tr>
<td>Thailand bilaterals with China, Japan, South Korea</td>
<td>Ongoing negotiations</td>
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</tbody>
</table>

### Inter Regional

<table>
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<tbody>
<tr>
<td>ASEAN-US Enterprise for ASEAN Initiative (including bilateral FTAs)</td>
<td>EAI announced in October 2002, Singapore-US bilateral implemented, other bilaterals under negotiation</td>
</tr>
<tr>
<td>ASEAN-India Comprehensive Economic Cooperation (including FTA)</td>
<td>Framework Agreement signed in October 2003, negotiations ongoing, Early Harvest Programme will be implemented by April 2005</td>
</tr>
<tr>
<td>Intra Regional (East Asia)</td>
<td>Membership</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Asia Pacific Economic Cooperation (APEC)</td>
<td>ASEAN-6, Australia, Canada, Chile, China, Hong Kong, Japan, Korea, Mexico, New Zealand, Papua New Guinea, Peru, Russia, Taiwan, United States and Vietnam</td>
</tr>
<tr>
<td>China bilaterals</td>
<td>with Chile</td>
</tr>
<tr>
<td>Hong Kong bilaterals</td>
<td>with New Zealand</td>
</tr>
<tr>
<td>Japan bilaterals</td>
<td>with Canada, Chile, Mexico</td>
</tr>
<tr>
<td>Malaysia bilaterals</td>
<td>with US</td>
</tr>
<tr>
<td>Philippines bilaterals</td>
<td>with US</td>
</tr>
<tr>
<td>Singapore bilaterals</td>
<td>with Australia, Bahrain, Canada, Chile / New Zealand (&quot;Pacific Three&quot;), EFTA, Egypt, India, Jordan, Mexico, Panama, Peru, Sri Lanka, US</td>
</tr>
<tr>
<td>South Korea bilaterals</td>
<td>with Australia, Chile, Mexico, New Zealand, US</td>
</tr>
<tr>
<td>Thailand bilaterals</td>
<td>with Australia, Bahrain, India, New Zealand, Peru, US</td>
</tr>
</tbody>
</table>

*This table is an updated and slightly adapted version of the table that can be found in Chia (Chia, 2004:5).*
As a first initiative towards wider economic integration with important involvement of some East Asian countries, the Asia-Pacific Economic Cooperation forum (APEC) should be mentioned here. APEC grew out of an Australian proposal to enhance cooperation in the Asia-Pacific rim and was formally established in 1989. APEC consists of 21 member countries, spanning four continents and uniting more than one third of the world’s population\(^\text{67}\). The so called “Bogor goals” express APEC’s intentions to achieve free trade and investment in the Asia-Pacific rim by 2010 for industrialised countries and by 2020 for developing countries. APEC pursues trade liberalisation on a voluntary basis, making use of the “open regionalism” concept. This means that reductions of import tariffs are not restricted to APEC member countries, but are granted to all countries worldwide on a most favoured nation basis. (APEC, 2004) Although APEC received a lot of attention in the first half of the 1990s, the attention has faded away and has not revived up to now. The apparent stand-still is due to the large membership, which entails diverging opinions on the pace of trade liberalisation and on the means to get there (Naya, 2004:6).

A negative atmosphere built up around APEC in the aftermath of the Asian financial crisis, as the forum proved unable to manage the crisis and to mobilise decent support for the crisis-hit countries. East Asian countries were disappointed by APEC’s impotence and as a result they switched their attention back to the initiatives within the ASEAN and ASEAN+3 (ASEAN + China, Japan and South Korea) framework (Naya, 2004:7). In October 2002, the United States announced the “US Enterprise for ASEAN Initiative”, as a framework to negotiate bilateral and plurilateral trade agreements with ASEAN and ASEAN member states. This renewed interest of the United States for the Southeast Asian economies might well give a new boost to

\(^{67}\) These member countries are Australia, Brunei Darussalam, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Taiwan, Thailand, United States and Vietnam.
APEC’s role in managing the international economic relations in the Asia-Pacific rim (Naya, 2004:14).

The ASEAN+3 framework currently seems to be more promising for East Asia than APEC. ASEAN+3 is a more popular name to designate the East Asian Economic Caucus (EAEC), an initiative taken by Malaysia’s Prime Minister Mahathir in 1990 to bring together all ASEAN members on the one hand, and China, Japan and South Korea on the other hand.68 The ASEAN+3 concept gathered momentum when ASEAN countries wanted to intensify their economic cooperation with Europe in the middle of the 1990s. At that time, the EU proposed to include other East Asian countries in the negotiations, which evidently brought China, Japan and South Korea into the picture. In March 1996, the first Asia-Europe Meeting (ASEM) was held in Bangkok. One year later, the first informal summit of ASEAN+3 leaders was held in Kuala Lumpur, Malaysia (Naya, 2004:5-6). The ASEAN+3 framework booked significant results in the monetary field, when the ASEAN+3 Finance Ministers decided to extend the ASEAN Swap Agreement to China, Japan and South Korea69. This new agreement, concluded in May 2000 and better known as the “Chiang Mai Initiative”, of which more in the next section, was an important step towards more financial stability in the region. (Asami, 2001:1)

Despite the Chiang Mai Initiative as a collective ASEAN+3 initiative, it is noteworthy that current negotiations on potential free trade agreements are simultaneously conducted on a bilateral and a plurilateral basis by the countries involved. It was remarkable that China made the first proposal to establish a FTA with ASEAN in 2000. Two years later, in November 2002, the “Framework Agreement on ASEAN-China Comprehensive Economic Cooperation” was signed in Phnom Penh, Cambodia. This agreement envisions a FTA with free movement of goods,

68 The original name for the initiative was the East Asian Economic Grouping (EAEG), but was soon renamed into EAEC to get a softer tone.
69 The ASEAN Swap Agreement dates from 1977 and was established to support fellow ASEAN members in case of balance of payments problems. See further below.
services and investments. Tariff reductions on certain agricultural goods have already been started with the implementation of the “Early Harvest Programme”. Tariff reduction for products on the normal track will start in January 2005 and have to be completed by 2010 for ASEAN-6 and China, and by 2015 for ASEAN-CLMV. Tariff reduction for products on the sensitive list will be achieved by mutual agreement. (Chia, 2004:11; ASEAN Secretariat, 2004e)

Both ASEAN and China hope to take full advantage of the new FTA. ASEAN leaders believe that China can play a leading role in boosting economic growth for the East Asian region, which could revitalise the flying geese pattern of economic growth. However, China will remain a formidable competitor for the poorer ASEAN countries in the near future with its relatively abundant supply of cheap labour. It is unlikely that China will soon start making huge investments in Southeast Asia and will become a supplier of official development aid for the poorest countries in the region. Therefore, China is not ready yet to completely take over the role that Japan has played in the past. (Naya, 2004:8) By means of the ASEAN-China FTA, China hopes to ease ASEAN leaders’ concerns of China becoming the single dominating attraction pole of foreign direct investment in the region. Moreover, ASEAN is a promising market with more than half a billion consumers and holds various inputs for further processing in China. (Chia, 2004:11)

Japan quickly followed China’s example and proposed a collaboration agreement with ASEAN in 2002. The “Framework Agreement for Comprehensive Economic Partnership” between ASEAN and Japan was signed in October 2003 in Bali, Indonesia. It is important to note that before its 2002 proposal, Japan seemed more inclined to follow the route of bilateral agreements. A bilateral agreement with Singapore had already been signed in January 2002. (Naya, 2004:9) Bilateral agreements with other East-Asian countries such as Malaysia, the Philippines, South Korea and Thailand are still under negotiation. The fact that Japan suddenly also wanted to reach
a plurilateral trade agreement with ASEAN as a whole, can therefore reflect Japan’s intention to counterbalance China’s growing economic and political importance in the East Asian region. Japan now endeavours to integrate its bilateral agreements with the Framework Agreement for Comprehensive Economic Partnership (CEP). Negotiations about the specific articles in the CEP Agreement will start off in April 2005 and are planned to be concluded in two years. (Chia, 2004:12; ASEAN Secretariat, 2004f)

Some ASEAN members are frustrated with ASEAN’s slowness in signing deals with China, Japan and other main trading partners. Consequently, they have been pursuing bilateral trade agreements during the last couple of years (Chia, 2004:5; Naya, 2004:11). This evolution fits into the trend of emerging regionalism which can be observed in all parts of the world. Singapore, to only name the champion of bilateralism in the region, has signed bilateral trade agreements with Japan, Australia, New Zealand, EFTA and the US and is negotiating agreements with half a dozen other countries. The current situation seems to reflect the enormous gap that exists within ASEAN, between members wanting to negotiate collectively (using the ASEAN or the ASEAN+3 framework) and other members aiming at quicker progress and thus switching to bilateral trade agreements. The more developed members, such as e.g., Thailand and Singapore, already are relatively open economies and they actually hoped that ASEAN (AFTA) could enhance their global competitive position through further specialisation and increased FDI inflows. Other (less developed) members are quick to remind the more developed ones that ASEAN should primarily focus on enhancing intra-ASEAN trade and on closing the development gap within ASEAN. These less developed member countries still block the introduction of a “national treatment” rule for foreign investment. It is clear that the views of the more developed countries on the one hand and the poor member states on the other hand cannot be easily reconciled. It is unlikely that the differences of opinion will disappear with the introduction of the
ASEAN Economic Community. Thailand and Singapore have therefore turned to the more flexible bilateral agreements, as they can tailor these agreements to open up at the pace they prefer. If the apparent disparities within ASEAN deteriorate, the integration momentum might turn away from ASEAN … leaving the poorer member states disillusioned. (Economist, 2004)

The question is of course, whether all these bilateral initiatives by individual ASEAN members are undermining the relevance of ASEAN. Two main issues come up. Firstly, if individual ASEAN members all negotiate separate agreements with external partners, it should be clear that the negotiating power of the individual member will be limited. ASEAN as a whole risks to loose the so called “hub-advantages” and the individual countries will gradually become “spokes” (Chia, 2004:12). Secondly, the bilateral agreements could be an obstacle in the evolution towards a region-wide free trade agreement in East-Asia because of the so called “spaghetti bowl” effect (Bhagwati & Panagariya, 1996). This means that in the individual bilateral agreements with non-ASEAN members, diverging rules of origin, product standards and conformance requirements are likely to be applied, thus forming a highly complex structure. This “spaghetti bowl” also makes life more difficult for multinational enterprises, as they have to pay attention to the different regulations in every country. (Chia, 2004:7 and 12)

Up to now, the rules of origin employed within the AFTA framework have been quite liberal, compared with the rules used in agreements of the EU and NAFTA. The 40% ASEAN content requirement is the general principle applied to all products eligible for tariff reduction under the CEPT Scheme, meaning that there are no complex product by product rules of origin. The recent bilateral agreements concluded by individual ASEAN members with external trading partners (such as e.g. the Singapore-US FTA), tend to follow the administrative models of these external partners, thus leading to more restrictive rules of origin. This is exactly the evolution that already took place in the Southern African Development Community (SADC) (Garay & De
Lombaerde, 2004). As the rules of origin start to differ across products and member states, it becomes more complex and costly for companies to make use of the preferential trading arrangements. In that way, the rules of origin might become a hindrance to ASEAN’s trade facilitation efforts. (Brenton, 2003:15)

It seems essential to us that the bilateral integration initiatives of ASEAN member states with external partners should be designed to fit into a general ASEAN framework. Only if this condition is fulfilled, bilateral agreements can act as real building blocks for wider East Asian regional integration (Soesastro, 2003:8-9; Pasadilla, 2004:17). The actual idea for a region-wide free trade agreement in East-Asia was put forward by South-Korea during the second ASEAN+3 Summit, which took place in Hanoi, Vietnam in December 1998. The idea led to the formation of the East Asian Vision Group (EAVG), made up of distinguished intellectuals and experts from ASEAN countries, China, Japan and South Korea. The group was tasked to work out proposals on future cooperation in East Asia. In 2001, the EAVG submitted its recommendations in a substantial report, entitled “Towards an East Asian Community: Region of Peace, Prosperity and Progress”. The report argued that East Asian countries should strive to establish an East Asian Free Trade Agreement (EAFTA) in the long term. To arrive at this final goal, the ASEAN+3 summit would first have to be transformed into an East Asian Summit. In a next stage, some kind of a new regional institution should arise to guide the integration process towards EAFTA. (EAVG, 2001; Chia, 2004:14; Pasadilla, 2004:6)

In the meantime, the East Asian Study Group (EASG) was formed as a high-level officials committee to assess the EAVG report. The EASG adopted 26 concrete measures on the basis of the report in order to guide the broadening and deepening economic integration process. The short term measures mainly seek to prime general collaboration in East Asia: examples are the development of East Asian think tanks, the promotion of East Asian studies, the establishment of an East Asian Forum and Business Council etc. The long term measures mainly focus on
the evolution towards EAFTA. ASEAN leaders already agreed to hold the first East Asia Summit (EAS) in Malaysia in 2005 and also established an expert group to carry out a feasibility study on EAFTA. (ASEAN Secretariat, 2004b and 2004g; EASG, 2002)

**ASEAN as an engine of monetary integration and cooperation in Asia**

Monetary cooperation in Asia has been changing rapidly since the Asian crisis, which started in Thailand on July 2, in 1997, and which triggered severe economic turmoil throughout the region. At that time, the only available monetary cooperation scheme was the ASEAN Swap Agreement (ASA).

In 1977, the central banks and monetary authorities of the ASEAN countries at that time\(^70\) established the ASEAN Swap Agreement (ASA). The aim of the ASA was to provide the member countries with sufficient international liquidity in case of balance of payments problems. US dollars were sold against domestic currency of the requesting participant accompanied by a forward purchase of the same amount of domestic currency by that participant against US dollars. Each participating country agreed to contribute 20 million US dollars, thus providing together 100 million US dollars. The maximum outstanding amount of US dollars received by any participant was not allowed to exceed 40 million US dollars. The original ASA was for a one year period, but was extended in 1978, 1981, 1987 and 1992. In the 1992 ASA (Fifth Supplementary Agreement to the Memorandum of Understanding on the ASEAN Swap Arrangement), the maximum contribution of each participating country was brought to 40 million US dollars, and the maximum outstanding amount received by any participant to 80 million US dollars. In 1997, Laos

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\(^{70}\) In 1977 these were Thailand, Malaysia, Singapore, the Philippines and Indonesia.
and Myanmar acceded to the ASA. This was the monetary cooperation framework at the outbreak of the Asian crisis.

At the end of September 1997, and for most observers unexpectedly, Japan proposed the creation of an Asian Monetary Fund (AMF). The largest part of the national contributions to the AMF would come from Japan, but also Hong Kong, Taiwan and Singapore were prepared to contribute, and it was envisaged to reach a total of 100 billion US dollars. In spite of enthusiastic reactions from the Asian countries, the Japanese proposal was blocked by the adverse reactions from major Western countries and from the IMF (see e.g. Lipsy, 2003).

A compromise was sought in the so-called Manila Framework, with a financing agreement that would supplement the IMF financing, but without the institutional component of the AMF. This Framework was developed by the Manila Framework Group in November 1997, which consists of 14 Asia-Pacific nations.

On May 6, 2000, on the occasion of a meeting of the ASEAN+3 Finance Ministers, it was agreed to extend the ASEAN Swap Arrangement to all ASEAN member countries (ASEAN-10) and to China, Japan and South Korea. This agreement is popularly labelled the Chiang Mai Initiative (CMI). It consists of a network of bilateral swap agreements (BSA) between the 13 countries, with the same purpose as the ASA. It was agreed to increase the initial total amount of 200 million US dollars up to 1 billion US dollars. It should be noted however, that this amount is still insufficient to cope with a major financial crisis in the future. Moreover, the use of the currencies of the countries involved in bilateral trade is seriously hampered since the BSA is only adopted by four ASEAN countries, whereas international traders prefer to use the dollar (Tenorio, 2003). The CMI is also more complex than the ASA, due to the multitude of sometimes diverging provisions in the bilateral agreements (Asami, 2001).

In order not to get the same adverse reaction from the USA and the IMF, the BSA is complementary to the IMF, as it was agreed with IMF that at most 10 pct. of a bilateral swap could be
done without any link to the IMF, which evidently severely limits
the efficiency of the BSA both in terms of timing and conditions
attached to support. However, by doing so, the total amount
which can be made available for support within ASEAN+3 by the
BSA and the IMF is 10 billion US dollars.

In June 2003, the central banks of Australia, China, Hong
Kong, Indonesia, Japan, South Korea, Malaysia, New Zealand,
the Philippines, Singapore and Thailand (the eleven members of
the Executive’s Meeting of East Asia Pacific Central Banks)
announced the establishment of the Asian Bond Fund (ABF). It
aims at managing a fund of approximately 1 billion US dollars,
which will come from Asian and Pacific countries\(^{71}\), and invest this
fund in a basket of liquid dollar denominated Asian government
bonds (Yam, 2003). The Bank for International Settlements’
investment management unit, BIS Asset Management, will
manage the ABF with teams based in its Representative Office for
Asia and the Pacific and in the BIS head office. The ABF will
facilitate the re-investment of a small portion of Asia's
international reserves back into the region while at the same time
aiding the development of regional capital markets. It is clear that
the ABF is too small to prevent a new Asian financial crisis,
taking into account that the Asian market for dollar denominated
bonds is estimated at 200 billion US dollars (Bloomberg, 2003).

The issue whether groups and sub-groups of Asian countries
could establish a common currency, is much debated in the
academic literature, especially since the 1997 crisis, but in spite of
some initiatives within ASEAN, hardly of relevance in actual
regional politics.

The academic discussion is intimately related to the question
which, if any, countries in Asia can be considered as a group as an
optimal currency area (OCA). Optimum currency area (OCA)
theory is the mainstream theoretical framework for analysing the
structural economic factors that determine the net (positive or

\(^{71}\) It is noteworthy that India alone pledged to contribute 1 billion US dollars; see Yam, 2003.
negative) effect of forming a currency area among countries. Empirical tests based on OCA theory are therefore a good starting point for evaluating the objective economic conditions for monetary integration in (South)East Asia. Whereas in the short run, political considerations and events, alongside other economic circumstances, might well condition or even impose exchange rate choices, OCA theory is particularly relevant in the medium and long run. The predictive power of OCA theory has been empirically demonstrated by authors like Bayoumi and Eichengreen (1998) and Papaioannou (2003). However, Cohen (1998) and others emphasise that the presence of a regional hegemon committed to monetary integration and the presence of a network of linkages and commitments that make the cost of a dependent monetary policy acceptable to all members are also necessary conditions for successful monetary integration. He goes even further stating that the combination of these two conditions might even be a sufficient condition. According to the same author, historical analysis shows that economic linkages are insufficient to sustain the necessary commitment beyond the short run.

What do the empirical tests of the OCA conditions that are available for (South)East Asia tell us? An answer to this question should allow us to understand the economic fundamentals that will shape exchange rate policies and, possibly, the formation of currency unions in the region in the near or farther future, recognising that the institutional framing and, even more importantly, Chinese and Japanese attitudes and leadership will be equally important factors.

According to Bayoumi and Mauro (1999) and Ng (2002), indicators of the degree of shock symmetry show that ASEAN members are less suited than those of the EU, a few years before the Maastricht Treaty, for forming a currency union. Deeper economic integration and a firm political commitment in the region are necessary pre-conditions. According to Ng, shocks in

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72 For recent overviews of OCA theory, see e.g. Lafrance and St-Amant (1999), Mongelli (2002) or Horvath (2003).
Southeast Asia are more strongly correlated than in the EU and external shocks are more strongly correlated than in NAFTA. Indonesia, Singapore and Malaysia show a relatively high degree of correlation of shocks. According to Cohen (2003), the lack of political integration and solidarity, necessary to sustain the needed degree of commitment, is the main obstacle to monetary integration.

Sterner and Skoog (2003) analyse the degrees of openness, the degrees of product diversification, similarities of industrial structure, similarities of inflation rates, degrees of correlation of macro-economic variables for ASEAN-10. ASEAN does not appear to constitute an OCA; ASEAN-3 (Malaysia, Singapore, Thailand) or ASEAN-5 (+ Philippines and Indonesia) could form the core of a monetary union, gradually expanding according to pre-set entrance criteria.

Liang (1999) tested the long-run relationship between the real exchange rates of Hong Kong SAR and PR China. For this pair of countries, the real exchange rates do not share common trends and, therefore, this necessary condition for successful monetary integration is not met.

Cheung and Yuen (2004) found evidence on synchronous output movements in the long run and common business cycles in China, Japan and Korea. According to these authors, the formation of a currency union in Northeast Asia would have net positive effects for the participating countries. They point however to a number of complications related to the implementation of such a currency union, such as the role of a regional hegemon and the difference in development levels between its members, and the consequences for the macro-economic adjustment process.

More empirical studies take a wider set of countries, comprising both East Asian countries and ASEAN member countries, as a starting point. Eichengreen and Bayoumi (1996), for example, conclude that East Asia satisfies the standard OCA criteria as good as EU countries. As arguments against monetary integration, they see the lack of development of the domestic financial systems, and the lack of institutions and political will at
the regional level. Similar methodologies but different variables and data sets are used by Yuen (2000), Trivisvanet (2001), Zhang et al. (2002) and Saxena (2003). Starting from a set of countries including ASEAN-5, Japan, Korea, Taiwan, Hong Kong, China, Australia and New Zealand, Yuen (2000) proposes a multi-speed strategy towards monetary integration. Three sub-regional monetary unions could be formed in an initial phase: Japan/Korea, Taiwan/Hong Kong and Singapore/Malaysia. Other countries could then join one of these unions, which could finally be integrated in a wider East Asian monetary union. Trivisvavet (2001) considers a slightly reduced set with ASEAN-5, Japan, Korea and Hong Kong. It is found that the group has characteristics of an OCA. An optimal scenario with gradualism would imply that the Southeast Asian countries, with the exception of Indonesia but possibly including Korea, form a monetary union, after which the other countries could join later. Zhang et al. (2002) find that the structural shocks affecting ASEAN-5, US, Japan, Korea, Taiwan, Hong Kong and China are less symmetric and have a larger size on average, compared to the EU, although the adjustment speed is faster. No sufficient evidence is found that East Asia forms an OCA. It is not excluded however that smaller subsets of countries might engage in processes of monetary integration. Saxena (2003), finally, finds that most of the countries comprised by ASEAN, Japan, Korea, China and India show positive correlations for supply disturbances and high labour mobility. The countries concerned could form a currency union around the yen, on the condition that the Yen-Dollar exchange rate can be stabilised.

Goto (2003) uses principal component analysis of seven macro-economic variables for Indonesia, Korea, the Philippines, Singapore, Thailand and Japan. A relatively high degree of synchronisation with Japanese variables is observed, which has dramatically increased since the 1990s. Indonesia, Korea, the Philippines, Singapore and Thailand might consider to form a monetary union around Japan.
The policy debate on monetary integration in Asia, seems to be restricted to the ASEAN countries, however. Taking into account the dominant position of the Japanese economy and its currency in East and Southeast Asia, as well as that of China, this is hardly surprising. At the ASEAN Summit on 15-16 December 1998 in Hanoi, Vietnam, one of the proposals endorsed was to conduct a study into the feasibility of establishing an ASEAN common currency. In 2000 an ASEAN Central Bank Forum Task Force was established, which completed the study in September 2003 (Kuang and Singh, 2003). Due to various delays, we had to wait until August 2003 when at its Finance Ministers’ Meeting in Manila, the ASEAN countries adopted the Roadmap for Integration of ASEAN regarding capital market development, capital account liberalisation, financial services liberalisation and ASEAN currency cooperation, with a common currency being pursued as a long term objective (ASEAN Secretariat, 2003b). The roadmap for integration of the monetary sector is part of the measures taken to realise the ASEAN Economic Community (AEC) by 2020. Many observers and policy makers are, however, sceptical whether it will be possible to reach a common currency by then (see e.g. Tenorio, 2003).

**Conclusions**

ASEAN has made significant progress in liberalizing its trade since its inception in 1967. In spite of the great cultural, political, religious and other diversities within the region, AFTA has been virtually completed in 2003. However, it was pointed out in the previous pages that several sensitive products are still not included in the AFTA arrangement. Further liberalisation efforts are required for ASEAN-CLMV countries in particular, as a significant proportion of products they trade is still not part of the Inclusion Lists.

ASEAN countries have always been very sensitive for possible interventions in their internal affairs, but it seems essential that
the ASEAN Secretariat is finally strengthened, especially now the member states envision to establish the ASEAN Economic Community (AEC). It remains doubtful whether ASEAN members will push ahead with the necessary reforms to deepen regional economic integration within the AEC scope, if there is no central body in place which can enforce these reforms in some way. Nevertheless, ASEAN members plan to establish the AEC by 2020 as a single market and production base, with a free flow of goods, services, investment, skilled labour and a freer flow of capital.

The emerging Asian regionalism has led to a sharp increase in the number of bilateral and plurilateral trading arrangements during the last couple of years. It is important to remember that such agreements will always remain a “second best solution” to multilateralism in the evolution towards global free trade. In order to avoid that these regional trading arrangements become “stumbling blocks” (Bhagwati, 1991) in the process to wider free trade, it seems advisable to develop a common ASEAN framework for the bilateral trading arrangements pursued by individual ASEAN members. The multiple rules of origin of the different bilateral arrangements might otherwise easily end up as an unfathomable “spaghetti bowl” (Bhagwati & Panagariya, 1996). The abundance of bilateral trading arrangements might in that way hinder the conclusion of the East Asia Free Trade Agreement (EAFTA), including ASEAN, China, Japan and South Korea. The ongoing talks about EAFTA indicate that ASEAN is not only involved in a deepening economic integration process, but also in a broadening one. As the political will is certainly present in the region and as the first East Asia Summit is already scheduled to take place this year, EAFTA might indeed become reality in the longer term despite some possible set-backs on the way.

The ASEAN countries have also played a major role in several regional monetary integration initiatives, particularly since the 1997-1998 Asian crisis. The original ASEAN Swap Arrangement was deepened and widened towards the new ASEAN members, as well as to Japan, South Korea and China, to
become a complex network of bilateral swap agreements between 13 countries. Also the Asian Bond Fund, originally an initiative of Thailand, has further increased both scale and scope for monetary cooperation. However, at present, all talks about a common currency in the region should not be taken too seriously. The policy debate is still restricted to ASEAN, while the regional financial hegemons Japan and China, are not inclined to follow (or take the lead). Viewed from this perspective, as well as judged from the empirical research on optimal currency areas, it is highly doubtful whether ASEAN alone can reach by 2020 a level of monetary integration, comparable to that of the European Union today. Also in this field, the reluctance (if not the plain obstinacy) of the governments in the region to abandon some of their national sovereignty, is bound to remain one of the major stumbling blocks.

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Chapter 11
NAFTA: Balancing the Benefits and Challenges

The main purpose of this paper is to disclose the economic spirit of the initial step of economic integration – creation of free trade areas (FTA), concentrating on their major advantages and disadvantages, as well as revealing the possible impact of FTA on participating nations based on NAFTA’s experience.

We attempt to use principal approaches in economic theory to identify the opportunities given by free trade agreement to neighboring countries to develop further national comparative advantages. In turn, this allows better recognition of the advantages and challenges associated with the process of utilizing competitive advantages of nations to become attractive for trading partners. Particularly, the case of NAFTA is examined to comprehend the practical consequences of step-by-step economic integration. Finally, the impact of NAFTA on all three countries is analyzed to better understand the outcome anticipated from such cooperation.

Free trade area: theory and practice

In a new era of economic globalization, as any new product becomes widely accepted internationally the process of production may starts in other countries. Consequently, as the theory suggests, the product may eventually be exported back to the country of its original innovation.73 This part of our study has three major goals. The first is to review a number of theories that explain why it is beneficial for a country to engage in economic integration, particularly in a free trade area and in broader international trade. The next goal is to explain the pattern of economic integration that we examine in the regional and global

economies. And the third goal is to understand how the theory of national competitive advantages works in real life.

In his work related to the new trade theory, Michael Porter of Harvard Business School has developed a theory that attempts to explain why certain nations achieve international success in particular industries. As a number of new trade theorists, Porter points out the importance of country factors such as domestic demand and domestic competition in explaining a nation's dominance in the production and export of particular products (Porter. Competitive Advantage, p. 121).

Almost all contemporary trade theories contradict the principles of mercantilism, propagated in the 16th and 17th centuries. However, this largely discredited theory's resonances sometimes appear in modern political debate in many countries. Adam Smith's theory of absolute advantage (the main foundations of free trade areas), proposed in 1776, was the first to explain why unrestricted free trade is beneficial to the nations. Based on Smith's work there are two additional theories that are worth considering – one is the theory of comparative advantage, advanced by the 19th century English economist David Ricardo. Later, in the 20th century Ricardo's theory was further improved by two Swedish economists, Eli Heckscher and Bertil Ohlin, presuming that comparative advantage arises from differences in national factor endowments. Indeed, different nations have different factor endowments, and different factor endowments explain differences in factor costs. As a result, the more abundant a factor, the lower its cost. This theory suggests that countries will export those goods that make intensive use of those factors that are locally abundant, and import goods that make intensive use of factors that are locally scarce. However, there are cases in trade

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74 Mercantilism advocated that countries should simultaneously encourage exports and discourage imports.
75 Free trade occurs when a government does not attempt to influence through quotas or duties what its citizens can buy from another country, or what they can produce and sell to another country.
suggesting the opposite conclusion from this concept: the United States traditionally has been an exporter of agricultural goods, reflecting partially its unusual plenty of large tracts of arable land. In contrast, Mexico has excelled in the export of goods produced in labor-intensive manufacturing industries, such as textiles and footwear. This means Mexico holds a relative abundance of low-cost labor. The United States, lacking a sufficient amount of low-cost labor, has been a primary importer of these goods. In this case, it is relative, not absolute, endowments that are important since a nation may hold larger absolute amounts of land and labor than another nation, but be relatively abundant in one of them. In addition, Nobel Prize winner Wassily Leontief has argued that there are some contradictions in real life. Using the Heckscher-Ohlin theory, Leontief hypothesized that since the United States was relatively abundant in capital compared to other nations, the United States would be an exporter of capital-intensive goods and an importer of labor-intensive goods. He was surprised to find that the U.S. exports were less capital intensive than U.S. imports. Thus his conclusions became popularly known as the Leontief paradox.

Why do we observe the Leontief paradox? No one is quite sure. One possible explanation is that the United States has a special advantage in producing new products or goods made with innovative technologies. Such products may well be less capital intensive than products whose technologies have had time to mature and become suitable for mass production. Thus the United States may be exporting goods that heavily use skilled labor and innovative entrepreneurship, while importing heavy manufactures that use large amounts of capital. Some more recent empirical studies tend to confirm this. However, recent tests of the Heckscher-Ohlin theory using data for a large number

77 By factor endowments they meant the extent to which a country is endowed with such resources as land, labor, and capital. W. Leontief, "Domestic Production and Foreign Trade: The American Capital Position Re-Examined," Proceedings of the American Philosophical Society 97(1953), pp. 331-349.
of countries tend to confirm the existence of the Leontief paradox.\textsuperscript{79} This example clearly demonstrates the discrepancies one may find between the theory and real free trade cases.

Despite this mentioned contradiction, all free trade theories – old and new, show why it is beneficial for a country to engage in international trade even for products it is able to produce for itself. This is a difficult concept for people to grasp. For example, in case of NAFTA, many people in the United States believe that American consumers should buy products produced in the United States by American companies (“buy American” campaigns) whenever possible to help save American jobs from foreign companies. Almost the same approach can be found in Canada and Mexico. At the same time, the theories of Smith, Ricardo, and Heckscher-Ohlin explain clearly that a country's economy may gain if its citizens buy from other nations certain products that could be produced locally.

The benefits become obvious since free trade area allows a country to specialize in the production and export of goods and services that can be offered with best cost efficiency in that country, while importing products that can be produced more efficiently in others. Therefore, it is well justified that the United States specialize in the production and export of commercial jet aircraft, since the efficient production of commercial jet aircraft requires resources that are plentiful in the United States – a highly skilled labor force and the latest technological achievements. For the same reason, it is reasonable for the United States to import textiles from Mexico since the efficient production of textiles requires a relatively inexpensive labor force. This does not mean that that country's population is always ready to accept this mentioned concept. In many cases American textile companies and their employees have tried hard to influence and lobby the U.S. government to limit imports of textiles from Mexico and elsewhere, ignoring the fact that the economy as a whole may lose by such limitations to a free trade.

Among theoretical responses to the Heckscher-Ohlin model explaining the observed example of free trade was the product life-cycle theory developed by Raymond Vernon.\(^{80}\)

In the same way, Paul Krugman has developed his “new trade theory”, which attempts to prove that in some cases countries specialize in the production and export of particular products not because of underlying differences in factor endowments, but because in some industries the world market can support only a limited number of firms.\(^{81}\) Particularly, in such industries, firms that enter the market first build a competitive advantage that is difficult later to challenge by others. As a result, the observed model of free trade between nations may be also due to the advantage of firms within a given nation having been first-movers. In a real life, all mentioned theories fail to provide precise policy recommendations for nations and their governments, particularly considering the consequences of the latest global financial crisis. More frequently, some conclude that the ordinary means to increase our wealth and treasure is by foreign trade, wherein we must ever observe this rule: to sell more to strangers yearly than we consume of theirs in value.\(^{82}\) Some other approaches suggest that mercantilism is not yet dead.\(^{83}\) Particularly, Jarl Hagelstam, a former director of the Ministry of Finance in Finland has noted that in most trade negotiations the approach of individual negotiating countries, both industrialized and developing, has been to press for trade liberalization in areas where their own comparative or competitive advantages are the strongest, and to resist liberalization in areas where they are less competitive and fear that imports would replace domestic production.\(^{84}\) Hagelstam explains this strategy by negotiating countries to a neo-mercantilist belief held by the politicians of many countries. Some economists have shown that the basic result derived from the model of free

\(^{80}\) This theory suggests that early in their life cycle, most new products are produced in and exported from the country in which they were developed.

\(^{81}\) This is argued to be the case for the commercial aircraft industry.


trade can be generalized to a world composed of many countries producing many different goods, in which case the above assumptions no longer hold. Moreover, despite all its shortcomings, research suggests the basic idea of the competitive advantage theory – that countries will export the goods they are most efficient at producing – is somehow outdated. We may assume, however, that the case for unrestricted free trade has been argued by some economists associated with the "new trade theory" to lose some of its theoretical power.

Coming to real free trade examples, we examined NAFTA as an attempt to utilize national competitive advantages. In more than two decades of existence it has demonstrated both the strengths and weaknesses of establishing a free trade area.

**North American Free Trade Agreement (NAFTA): foundations**

While the term “globalization” is being used among the major trends in the 21st century, particular contemplation needs to be paid to another tendency called “regionalization”, which leads to series of regional economic blocks. The regional economic block is not a completely new phenomenon throughout history. Byzantium, Rome, and other empires were renowned with their trading satellites and major privileges given to allies and trading partners.

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87 See P. R. Krugman, "Is Free Trade Passe?" *Journal of Economic Perspectives* 1 (Fall 1987), pp. 131-144.
Today the North American Free Trade Agreement is considered to be one of the success stories of regional integration in the world economy. Initially it was designed to make the North American market more efficient and thereby enhance the economic wellbeing of the United States, Canada and Mexico.

As it is mentioned in the main document called the Agreement, the overall objectives of the cooperation was formulated as follows:

*The Government of Canada, the Government of the United Mexican States and the Government of the United States of America, resolved to:*

- **STRENGTHEN** the special bonds of friendship and cooperation among their nations;
- **CONTRIBUTE** to the harmonious development and expansion of world trade and provide a catalyst to broader international cooperation;
- **CREATE** an expanded and secure market for the goods and services produced in their territories;
- **REDUCE** distortions to trade;
- **ESTABLISH** clear and mutually advantageous rules governing their trade;
- **ENSURE** a predictable commercial framework for business planning and investment;
- **BUILD** on their respective rights and obligations under the General Agreement on Tariffs and Trade and other multilateral and bilateral instruments of cooperation;
- **ENHANCE** the competitiveness of their firms in global markets;
- **FOSTER** creativity and innovation, and promote trade in goods and services that are the subject of intellectual property rights;
- **CREATE** new employment opportunities and improve working conditions and living standards in their respective territories;
- **UNDERTAKE** each of the preceding in a manner consistent with environmental protection and conservation;
- **PRESERVE** their flexibility to safeguard the public welfare;
PROMOTE sustainable development;
STRENGTHEN the development and enforcement of environmental laws and regulations; and
PROTECT, enhance and enforce basic workers' rights;
HAVE AGREED as follows:

Article 101: Establishment of the Free Trade Area

The Parties to this Agreement, consistent with Article XXIV of the General Agreement on Tariffs and Trade, hereby establish a free trade area.

Article 102: Objectives

1. The objectives of this Agreement, as elaborated more specifically through its principles and rules, including national treatment, most-favored-nation treatment and transparency, are to:

   a) eliminate barriers to trade in, and facilitate the cross-border movement of, goods and services between the territories of the Parties;
   b) promote conditions of fair competition in the free trade area;
   c) increase substantially investment opportunities in the territories of the Parties;
   d) provide adequate and effective protection and enforcement of intellectual property rights in each Party's territory;
   e) create effective procedures for the implementation and application of this Agreement, for its joint administration and for the resolution of disputes; and
   f) establish a framework for further trilateral, regional and multilateral cooperation to expand and enhance the benefits of this Agreement.

2. The Parties shall interpret and apply the provisions of this Agreement in the light of its objectives set out in paragraph 1 and in accordance with applicable rules of international law.88

Enthrallingly, the original foundations of NAFTA are considered the agricultural provisions of the U.S.-Canada Free Trade Agreement, in effect since 1989 (later incorporated into NAFTA). Under these provisions, all tariffs affecting agricultural trade between the United States and Canada, with a few exceptions for items covered by tariff-rate quotas, were removed by January 1, 1998. NAFTA was signed on December 17, 1992. The U.S. signed the environmental and labor side agreements on September 14, 1993. The U.S. and Canada implemented NAFTA through domestic legislation.\textsuperscript{89} It became law in Mexico as an international treaty.\textsuperscript{90} Implementation of the North American Free Trade Agreement (NAFTA) began on Jan. 1, 1994 and completed in 2008. This agreement removes most barriers to trade and investment among the United States, Canada, and Mexico.

Under NAFTA, all non-tariff barriers to agricultural trade between the United States and Mexico were eliminated. Many tariffs were eliminated immediately while others were scheduled for phase out over periods of 5 to 15 years. Virtually all agricultural tariffs and tariff rate quotas were phased out by the year 2008. Currently, all Canadian and U.S. agricultural import tariffs are at zero except for Canadian poultry and U.S. sugar. As of January 1, 2005, virtually all of Mexican goods import tariffs are at zero except for corn, dry beans, non-fat dried milk, orange juice and sugar, all of which are subject to tariff-rate quotas. It unites three nations with a combined population of 426 million, total output of more than $13 trillion and regional trade of $700 billion in goods and services.

Thus, NAFTA is an example of preferential trade agreement and assumes gradual elimination of trade barriers among neighboring countries in the region. Of the most commonly used types of preferential agreements free trade area is being formed with fewer obligations to member states in terms of implementing

\textsuperscript{89} http://www.law.nyu.edu/library/print-naftaguide.html
B1 HF1746 .C33 2000
common trade policies with nonmember countries. It requires less sovereignty in foreign trade, and therefore is less feasible as a next step of economic integration for NAFTA, whereas the European Union passed relatively faster from FTA to the Customs Union due to commonalities in interests and goals. This in turn makes the trade and results in trade creation expressed in new imports and exports and trade diversion beneficial meaning a mere shifting of sources from country to country. What makes NAFTA more attractive?

**Advantages**

First, from the viewpoint of supporters, NAFTA consists of substantial achievements and benefits. NAFTA provisions include market access through tariff-rate quotas (TRQs), elimination of non-tariff barriers through conversion to TRQs, grade and quality standards procedures, sanitary and phytosanitary regulations and rules of origin. A primary objective of NAFTA has been the complete elimination of barriers to trade among the three signatories. Many tariffs were dropped immediately; others have been or are being phased out. All agricultural provisions were implemented by 2008.

In addition, the agreement established procedures for handling disputes and a nondiscrimination rule granting the trade partners the same treatment provided to nationals. To improve investment flows, each member must accord investors and investments from the other two countries the same treatment provided to its own citizens in all aspects of the investment process, from acquisition to management to disposition of investments. While implementation has not always proceeded smoothly, and disputes continue to affect trade in some commodities, there is no doubt that NAFTA has had a significant impact on agricultural trade among the NAFTA partners. It has facilitated greater exports by increasing access to U.S., Mexican and Canadian markets and by ensuring a climate of greater openness, stability and certainty for producers,
importers, exporters and investors throughout the region. The two-way agricultural trade between the United States and Mexico alone increased by more than 70% between calendar 1994 and 2002, when it reached $12.7 billion. Two-way agricultural trade between the United States and Canada grew more than 75% over the same period, reaching more than $19 billion in 2002.

Among other benefits of NAFTA it is also essential to mention that together, Canada and Mexico purchased $18.2 million worth of agricultural products or 29.6 percent of total U.S. agricultural exports in 2004, up from 28.9 percent in 2003 and 20.8 percent in 1993.

**Figure 1** *Export trends between the United States, Canada and Mexico*\(^\text{92}\)

Many benefits were also achieved in bilateral relations. Foreign direct investment from the U.S. to Mexico increased by 216% between 1994 and 2011 as a result of NAFTA.\(^\text{93}\) Most of the farmers in the United States, Canada, and Mexico benefit from NAFTA: two-way agricultural trade between the United States

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\(^{92}\) www.bts.gov

and Mexico increased 149% since 1993, reaching $15.8 billion in 2004. Two-way trade increased 10.9% from 2003 to 2004. Two-way agricultural trade between the United States and Canada increased 112% since 1993 and 8% in 2003 reaching $21.1 billion in 2004. Although U.S. imports have grown under NAFTA, so have U.S. exports. Without NAFTA, the United States would have lost these expanded export opportunities. Since implementation of the U.S.-Canada Free Trade Agreement, U.S. agricultural exports to Canada have nearly doubled. Canada is now the No. 1 market for U.S. agricultural exports, which climbed from $5.3 billion in 1993 to $9.3 billion in 2003 and on to $9.7 billion in 2004. Since NAFTA’s approval in 1993, U.S. agricultural exports to Mexico have more than doubled. Mexico is now the U.S.'s second largest market, taking over that rank from Japan in 2004. In 1993, Mexico took $3.6 billion worth of U.S. agricultural products compared to $7.9 billion in 2003 and $8.5 billion in 2004. In 2004, exports of numerous key U.S. commodities set records for both countries: Canada: fresh vegetables, fresh fruits, snack foods, poultry meat, pet foods, vegetable oils, planting seeds, breakfast cereals, tree nuts, nursery products, rice, soybean meal, processed fruits and vegetables, juices and eggs. Mexico: red meats, processed fruits and vegetables, poultry meat, fresh vegetables, tree nuts, wheat, soybean meal, animal fats, dairy products and rice. This broad cross section of commodities suggests the benefits of NAFTA are widely distributed across U.S. agriculture.

Import competition has increased under NAFTA for some commodities, a not unexpected development, as trade barriers begin to come down and trade is subject to open marketing conditions. As the largest of the NAFTA countries and with a booming economy, it is not surprising that U.S. imports from Canada have grown strongly, providing American consumers with a broader array of competitively priced, high-quality products. In 1993, U.S. goods faced an average tariff barrier at the Mexican border of about 10 percent, five times the 2.07 percent rate that the United States imposed on Mexican goods. With NAFTA, Mexico’s average tariff has fallen to about 2 percent.
Import licensing and other non-tariff barriers have been eliminated and more than two-thirds of U.S. exports now enter duty-free.94

NAFTA benefits may be counted in different ways,95 although the expectations from the free trade area were even more exaggerated while signing the historical agreement.96 From 1993 to 2005 alone, trade among the NAFTA nations climbed 173%, from $297 billion to $810 billion. Each day the NAFTA countries conduct nearly $2.2 billion in trilateral trade.97 U.S. merchandise exports to NAFTA partners grew at 133% – more than U.S. exports to the rest of the world, at 77%. Canada and Mexico are U.S.’s first and second largest markets, last year accounting for 36% of U.S. export growth to the world. In agriculture, Canada and Mexico alone account for 55% of the increase in U.S. agricultural exports to the world since 1993.

• NAFTA has been good for Mexican agriculture. Trade growth has been remarkably balanced with U.S. agricultural exports to Mexico increasing $5.7 billion and U.S. agricultural imports from Mexico increasing $5.6 billion during the last eighteen years. In addition, productive investment, central to rising living standards, has increased. Even excluding housing, U.S. non-residential fixed, or business, investment has risen by 104% since 1993, compared to a 37% rise between 1981 and 1993.98

In the meantime, NAFTA has also provided various intangible benefits. It has encouraged commitment to reforms and led to major advances in government procurement and intellectual property rights. NAFTA also includes environmental provisions,

95 For more details please see: www.ehow.com; www.americasouthandnorth.wordpress.com; www.krugman.blogs.nytimes.com and others.
96 www.ustr.gov
98 ibid
and a side agreement – the North American Agreement on Environmental Cooperation – was developed to further address those concerns.99

Thus, NAFTA benefits and advantages might be summarized as the following:

- Allows each country to specialize and become more efficient;
- Alternative to GATT, Leverage to U.S.;
- Spurts growth, generates jobs, and protects the environment
- Provides a competitive edge: modern technology and cheap labor;
- Facilitates Mexico’s modernization, which will require equipment from U.S.;
- Opens up the Mexican market: zero tariffs in both directions by 2009;
- Plants in Mexico more likely to buy components from the U.S.; this will foster economic integration;
- Jobs in the U.S.: for every $1bln in exports, 40,000 jobs created; between 1987-92 more than 520,000 jobs created in the U.S.;
- Strengthening of Mexico’s intellectual property laws;
- Access to a pool of relatively cheap labor;
- More prosperous and stable neighbors; would consolidate Salinas’ reforms: any federal law conflicting with NAFTA overridden.

**Disadvantages**

However, as in any other regional block, NAFTA is not insured from many disadvantages. One of the most predominant complaints is that NAFTA made it possible for many U.S. manufacturers to move jobs to lower-cost Mexico. Those

99 The Premise and the Promise: NAFTA and Economic Policy in Mexico in the 1990s.
manufacturers that remained lowered wages to compete in those industries.

The Economic Policy Institute has estimated that between 1994 and 2010, the U.S. trade deficit with Mexico totaled $97.2 billion, displacing 682,900 U.S. jobs. (However, 116,400 occurred after 2007 and could have been a result of the financial crisis.) Nearly 80% of the losses were in manufacturing. California, New York, Michigan and Texas were hit the hardest because they had high concentrations of the industries that moved plants to Mexico. These industries included motor vehicles, textiles, computers, and electrical appliances.100

Another disadvantage was that many of Mexico’s farmers were put out of business by U.S.-subsidized farm products. NAFTA provisions for Mexican labor and environmental protection were not strong enough to prevent those workers from being exploited. Due to NAFTA, Mexico lost almost 1.5 million agricultural jobs. Adopted in 2002 the U.S. Farm Bill allowed subsidization of American agribusiness up to 40% of net farm income. Later, when the tariffs were lifted according to the NAFTA agreement, corn and other grains were exported to Mexico even below their cost. Consequently, rural Mexican farmers were not able to utilize their competitive advantages. All these trends had coincided with a tough period for Mexico when the government reduced its subsidies to farmers from 33.2% of total farm income in 1990 to 13.2% in 2001. More specifically, the majority of subsidies went to Mexico's large farms.

In addition, NAFTA also expanded the so called “maquiladora program”: American companies employed Mexican workers close to the border to cheaply manufacture goods and send them back to the U.S. It has been estimated that the total number of “maquiladora jobs” increased Mexico's labor force up to 30%. However, according to Continental Social Alliance, these mentioned

workers have "no labor rights or health protections, workdays stretch out 12 hours or more, and if you are a woman, you could be forced to take a pregnancy test when applying for a job".\textsuperscript{101}

One of the most negative impacts of NAFTA on Mexico is the country’s deteriorated environment. It is due to NAFTA open border trade requirements that Mexico agribusiness used more GMO seeds, fertilizers and other chemicals, costing $36 billion per year in pollution. Deforestation counting 630,000 hectares per year is another consequence of NAFTA, particularly for farmers in rural villages, who've expanded into more marginal land.\textsuperscript{102}

Mexico gets less benefit from NAFTA than promised. Initially NAFTA called for free access for Mexican trucks; however, this provision has not been implemented yet. NAFTA would have allowed trucks from Mexico to travel within the United States beyond the current 20-mile commercial zone limit. A few years after signing the NAFTA agreement a special demonstration project by the U.S. Department of Transportation (DoT) was set up to discuss the possible outcome of this commitment. Finally, in 2008, the House of Representatives ceased this mentioned project, and prohibited the DoT from allowing this provision of NAFTA to ever be implemented without Congressional approval. Among the major concerns the U.S. Congress was worried that Mexican trucks would have presented a road hazard, since they are not subject to the same U.S. safety standards. Moreover, this part of NAFTA was opposed by major U.S. truck companies who were scared to lose their jobs. As a result of these developments a new regulation is in force: Mexican trucks must stop at the 20-mile limit and need to transfer their goods to U.S. trucks. One could expect similar restrictions from Mexican side. Despite initial agreements, NAFTA would also have allowed unlimited access for U.S. trucks throughout Mexico as a similar agreement is being practiced between Canada

\textsuperscript{101} Worldpress.org, Lessons of NAFTA, April 20, 2001.
and the U.S. However, based on the fact that U.S. trucks are larger and carry heavier loads, adequate measures were taken by Mexico, taking into consideration that this violates size and weight restrictions imposed by the Mexican government.¹⁰³

Thus we may presume that there are certain challenges to further progress. Appreciating all tangible achievements¹⁰⁴, more could be done to deepen market integration within North America, as the regional market remains more segmented than the individual national economies of the United States, Canada and Mexico. It is noteworthy that before the implementation of U.S.-Canada Free Trade Agreement (CFTA) and NAFTA, local trade with a country was about twenty times larger than regional trade in North America, after controlling for the influence of distance and market size. By 2000-2001, local trade within the country was about 12 times greater than the regional one.

The inconsistency still remaining between internal and cross-border trade suggests that the North American market would become more efficient and better integrated if all non-tariff and non-economic barriers inhibiting cross-border trade and investment were removed. Interestingly, while product and input markets have become more integrated across borders, the institutions to support this integration are mainly national. Harmonized product, health, safety and environmental standards have yet to be widely established, and contentious issues remain in such areas as dairy, beef, sugar, wheat, rice, corn, livestock, lumber, transportation and labor migration. Most agricultural disputes among the NAFTA countries stem from differences in national laws and regulations, divergent domestic farm programs and incompatible macroeconomic policies.

¹⁰³ Article updated February 2, 2012.
¹⁰⁴ International Forum on Globalization, Exposing the Myth of Free Trade, February 25, 2003; The Economist, Tariffs and Tortillas, January 24, 2008; see also: www.cas.suffolk.edu/royo/mexico/index.htm
Today all three NAFTA countries divide authority constitutionally between national and regional governments. The federal structure of member country governments creates challenges in forging a unity of purpose and devising policies that effectively and fairly address issues at the root of divisions.

Further enhancing the influence of existing institutions is among promising solutions to advance North American market integration: the NAFTA dispute resolution process, the various NAFTA committees (such as the Committee on Sanitary and Phytosanitary Measures) and informal working groups (such as those focused on migration, animal health and rules of origin). Another avenue is to create cross-border federal task forces charged with reaching agreement about how to resolve contentious problems in ways that incorporate common interests.

For the years to come we may expect to witness the establishment of new supranational institutions, whose members would represent the interests of the North American community and who would be endowed with the authority to negotiate policy with nationally chosen governmental officials.105

It is widely discussed today that neither NAFTA, nor any other free trade agreement can be completely positive for participating states.106 Aside from challenges, there are still many complaints about the so-called economic side effects of this treaty. Many independent experts believe that the figures and stories on the positive impact of the agreement on parties are exaggerated.

Almost two decades of implementing NAFTA demonstrated how some gains for a country may turn into losses for another; industries with statistically significant gains in exports to Mexico as a result of NAFTA were rubber and miscellaneous plastic

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106 http://www.fas.usda.gov
products (79 percent), printing and publishing (78 percent), textile mill products (75 percent), petroleum and coal products (69 percent), leather and leather products (71 percent) and electronic equipment (49 percent). Essential declines were found in lumber and wood products (89 percent) and furniture and fixtures (75 percent). In addition, the statistically significant NAFTA winners in terms of exports to Canada were oil and gas exploration equipment (286 percent), furniture and fixtures (75 percent), industrial machinery including computers (70 percent), apparel (66 percent), instruments and related products (58 percent) and rubber and miscellaneous plastic products (54 percent). The only significant decline was in metal mining (88 percent). Even though the trade between three nations includes increasing volume and variety of goods and services, agriculture remains one of the key areas of trade and multilateral cooperation.

One could expect the U.S. to benefit most from NAFTA. However, it has just led to a big increase in U.S. agricultural imports. Also, NAFTA’s export benefits have been tremendously positive for U.S. producers and the growth in imports are simply exaggerated. In order to understand to what extent NAFTA has benefited U.S. exporters, one should compare U.S. export performance to Canada and Mexico since 1994 with U.S. performance to the growth of the world economy. Statistic data provides essential difference in absolute and comparative figures. From one hand, a wide variety of U.S. agricultural products have benefited from the agreement, from the other hand – a number stand out as U.S. best performers. For Canada, these include processed grains, grocery products, corn, essential oils, poultry meat, soybeans, and feed ingredients to name but a few. For Mexico, these include corn, soybeans, cotton, beef, dried/dehydrated vegetables, feed ingredients, wheat, sorghum, grocery products, pork, and deciduous fruits. What makes U.S. export performance

to Canada and Mexico so exceptional is that it largely occurred during a period when the value of the U.S. dollar was particularly strong against the currencies of the world’s major agricultural markets (mid-1995 through mid-2002 and starting again with the appreciation of dollar in 2012108). As a rule, this may decrease U.S. exports to most of these markets where some improvements in market access for U.S. exporters were not sufficient to overcome U.S. loss of competitiveness due to a strong currency. In Canada and Mexico, the trade losses associated with a strong dollar were compensated by the trade gains due to significant improvements in market access. Any increase in the value of the dollar in the years to come may worsen U.S. export performance to Canada and Mexico.

Table 1 Value of U.S. Exports to and Imports from Canada and Mexico by Land Transportation Mode: 1999-2009

(Millions of current U.S. dollars)109

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2004</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exports to Canada, total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Truck</td>
<td>146,374</td>
<td>171,878</td>
<td>235,681</td>
<td>184,653</td>
</tr>
<tr>
<td>Rail</td>
<td>11,755</td>
<td>16,597</td>
<td>29,438</td>
<td>19,973</td>
</tr>
<tr>
<td>Pipeline</td>
<td>114</td>
<td>1,584</td>
<td>4,313</td>
<td>2,632</td>
</tr>
<tr>
<td>Other1</td>
<td>11,360</td>
<td>17,777</td>
<td>23,294</td>
<td>19,456</td>
</tr>
<tr>
<td>Mail</td>
<td>6</td>
<td>23</td>
<td>43</td>
<td>48</td>
</tr>
<tr>
<td><strong>Exports to Mexico, total</strong></td>
<td>76,129</td>
<td>97,304</td>
<td>129,587</td>
<td>110,378</td>
</tr>
<tr>
<td>Truck</td>
<td>66,924</td>
<td>79,349</td>
<td>100,264</td>
<td>89,417</td>
</tr>
<tr>
<td>Rail</td>
<td>5,711</td>
<td>13,633</td>
<td>21,965</td>
<td>15,291</td>
</tr>
<tr>
<td>Pipeline</td>
<td>144</td>
<td>87</td>
<td>1,250</td>
<td>788</td>
</tr>
<tr>
<td>Other1</td>
<td>3,350</td>
<td>4,216</td>
<td>6,107</td>
<td>4,882</td>
</tr>
<tr>
<td>Mail</td>
<td>&lt;1</td>
<td>2</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

108 www.indexmundi.com/xrates/table.aspx
<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2004</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports from Canada, total</td>
<td>183,724</td>
<td>236,735</td>
<td>301,128</td>
<td>201,089</td>
</tr>
<tr>
<td>Truck</td>
<td>118,901</td>
<td>132,762</td>
<td>141,353</td>
<td>105,079</td>
</tr>
<tr>
<td>Rail</td>
<td>46,255</td>
<td>57,947</td>
<td>63,757</td>
<td>41,058</td>
</tr>
<tr>
<td>Pipeline</td>
<td>12,056</td>
<td>36,828</td>
<td>82,018</td>
<td>45,630</td>
</tr>
<tr>
<td>Other¹</td>
<td>6,387</td>
<td>8,994</td>
<td>13,555</td>
<td>9,098</td>
</tr>
<tr>
<td>Mail</td>
<td>13</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>FTZ²</td>
<td>111</td>
<td>203</td>
<td>445</td>
<td>223</td>
</tr>
<tr>
<td>Imports from Mexico, total</td>
<td>95,023</td>
<td>127,646</td>
<td>163,478</td>
<td>140,576</td>
</tr>
<tr>
<td>Truck</td>
<td>76,448</td>
<td>104,944</td>
<td>134,224</td>
<td>117,787</td>
</tr>
<tr>
<td>Rail</td>
<td>14,693</td>
<td>20,183</td>
<td>25,265</td>
<td>19,303</td>
</tr>
<tr>
<td>Pipeline</td>
<td>2</td>
<td>&lt;1</td>
<td>193</td>
<td>155</td>
</tr>
<tr>
<td>Other¹</td>
<td>1,256</td>
<td>1,839</td>
<td>2,717</td>
<td>2,175</td>
</tr>
<tr>
<td>Mail</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>FTZ²</td>
<td>2,624</td>
<td>680</td>
<td>1,079</td>
<td>1,156</td>
</tr>
</tbody>
</table>

¹ "Other" includes "flyaway aircraft" or aircraft moving under their own power (i.e., aircraft moving from the manufacturer to a customer and not carrying any freight), powerhouse (electricity), vessels moving under their own power, pedestrians carrying freight, and unknown and miscellaneous.

² Foreign Trade Zones (FTZs) were added as a mode of transport for land import shipments beginning in April 1995. Although FTZs are treated as a mode of transportation in the North American Transborder Freight Data, the actual mode for a specific shipment into or out of an FTZ is unknown because U.S. Customs does not collect this information.

U.S. agricultural imports have also increased from Canada and Mexico¹¹⁰, growing from a combined $8.1 billion in 1994 to a projected $19.6 billion in 2005, and almost doubled by 2011. Among the gains by U.S. NAFTA partners, some were related to the improvements in market access that the trade agreement offered them. On the other hand, since U.S. barriers were already

¹¹⁰ U.S. agricultural imports from Canada and Mexico are composed of 80% consumer-oriented products. Vegetables, fruits, beef, pork, snack foods, and beverages account for the majority of this trade. Seventeen percent of U.S. agricultural imports from NAFTA are intermediate products, with a third to a half of these being live cattle and hogs. Less than 10% are bulk commodities.
low prior to 1994, most of the gains were related to the strong U.S. economy, which increased overall import demand and, until 2012, the strong dollar, which increased their competitiveness in the U.S. market. This means imports from Canada and Mexico would have grown sharply even if there had been no NAFTA agreement while U.S. exports to those countries grew largely due to NAFTA.

It is important to note that out of the $11.5 billion increase in total U.S. agricultural imports from NAFTA countries, only half were in products that are competitive or partially competitive with U.S. farm production. During the same period the agricultural imports from Canada grew $6.5 billion, and less than 1/3 of this increase was in farm products that are competitive or partially competitive with U.S. farm production. Red meats (beef and pork) and fresh vegetables showed the most significant gains, with imports increasing by roughly $2 billion over levels a decade earlier and the remaining two-thirds of the increase was in processed foods and beverages – with snack foods and grocery products contributing the most. In the meanwhile, agricultural imports from Mexico have increased by $5 billion since 1994. Agricultural goods that are only partially competitive with U.S. production account for the majority of the growth. These imports have increased due to growing U.S. consumer demand for year around supplies of fresh horticultural products when domestic supplies tighten. Imports of processed food and beverages accounted for a sizeable share of overall growth, led by higher wine and beer shipments and, to a lesser degree, snack foods and grocery products.
According to government sources, the rapid and significant growth in agricultural trade is one of the major contributing factors to the higher degree of market integration within North

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111 Foreign Agricultural Service and United States Census Bureau.
112 Foreign Agricultural Service and United States Census Bureau.
NAFTA also represents a diverse market for goods as well as high-value products. Almost two thirds of all U.S. agricultural exports to Mexico are either consumer-ready products or intermediate goods that require some processing before use. Boxed beef, broilers, pork, and other processed foods are among major consumer goods. So called transitional or intermediate goods include powdered milk and vegetable oils, and the rest are bulk commodities: corn, rice, grain sorghum, soybeans, cotton and others. Three fourths of U.S. agricultural products to Canada are consumer-oriented products and nearly one fifth part of goods is intermediate.

Although partners are given broad opportunities to utilize their absolute and comparative advantages, however, anticipated results are not always equally acceptable by all parties. One of the major side effects of NAFTA for the two relatively more developed nations – the United States and Canada – is the loss of jobs. Companies prefer to use a lower cost of labor and production to maximize the profits. Manufacturing plants like maquiladoras\textsuperscript{114} taking advantage of less expensive components of production because of custom fee and tax exemptions on the border of Mexico were well known even before NAFTA implementation (since 1960). We may also suggest that NAFTA is more beneficial for the consumer than the manufacturer: many workers, engineers and related staff have to sacrifice high paying jobs. Besides such negative trends as huge outflows of funds and technology outside the country, the loss of jobs and other environment security becomes less feasible since the low cost production area becomes more vulnerable because of more smooth obligations to the manufacturer against the terms of requirements.


\textsuperscript{114} Maquiladora plants specialize in clothing, furniture, appliances, and electronic equipment production. Some statistical data: only 10% of goods remain in Mexico, the rest goes to the United States. Around one million people work in more than 3,000 plants. Obviously the quality of life in northern cities of Mexico such as Tijuana, Ciudad Juarez, and Matamoros is lower than in the United States but is almost 30% higher than in southern regions of the country.
set in more industrialized nations. It is well known that industrial pollution is mostly associated with lower safety standards concerning environmental and health protection. Profit incentives often take over social and environmental concerns.

Based on our observations, NAFTA disadvantages might be classified as:

- Risk of losing jobs;
- Environmental insecurity;
- Low standards for health and safety;
- Unequal effects of NAFTA on different states;
- Cost efficiency related problems;
- Limitations for developing local and independent economic policies;
- Economic and financial crisis spreads in all countries with no barriers;
- Free trade is not always fair trade for all due to subsidies and other non-tariff barriers.

We may conclude that potential world production is greater with unrestricted free trade than it is with restricted trade. In addition, free trade theories suggest that consumers worldwide can consume more if there are no restrictions on trade. This is true even in the case of countries that lack an absolute advantage in the production of any good. Finally, free and fair trade is a positive-sum game in which all gain.

Thus, it becomes obvious that regional economic blocs are associated both with obvious benefits and certain disadvantages. Considering the evolution from the invention of a simple form of free trade area to the formation of a customs union and further development to a common market, apparently the peak of economic cooperation – economic and political union obliges sacrificing a great deal of economic and political independence. This may also be called a price for close cooperation. Each of three parties – United States, Canada, and Mexico, hold active relations with the rest of the world despite political considerations. While
the United States imposed sanctions on trade with Cuba, Canada still holds ever-growing trade volumes with this country. Given these facts, one may realize why the free trade area created by North American Free Trade Agreement did not turn into the next step and form of economic integration – customs union – not to mention the common market and the economic and political union.

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Chapter 12
Impact of WTO Entry on Foreign Direct Investment in China: Implications for Chinese Policy Makers

Introduction

We review the changing patterns of inward FDI in China and then analyse how WTO membership will impact inward FDI in different sectors in China. Further we make recommendations on how to formulate FDI policy to ensure continuing inflow of foreign capital into areas and regions which need such capital injection for further economic development. China’s inward FDI will no doubt expand to a great extent after China’s entry into WTO, which will provide both overseas investors and China’s domestic enterprises with more opportunities than challenges.

China has been the biggest recipient of FDI among the developing countries and the second largest recipient only next to the US in the world for the last years since 1993. China’s entry into WTO will make China’s door more open and bring more business opportunities to overseas investors to the country. China’s membership to WTO has both good and bad effects on China’s inward FDI. We review the changing patterns of inward FDI in China, then explore how WTO membership affects inward FDI in different sectors in China, and finally offers recommendations on how to formulate FDI policy to ensure continuing inflow of foreign capital into areas and regions which need such capital injection for further economic development.

The Changing Patterns of Inward FDI in China

Since 1979 when inward foreign direct investment (FDI) was legally permitted, China had approved 344,280 projects, the cumulative contracted investment had amounted to US$620.317 billion according to the sources from the Ministry of Economy
and Trade of China. The following offers statistical analysis of FDI in China in only two decades after legalizing FDI.

**Changes in FDI Patterns in Four Periods** China’s FDI can be divided into four periods. They are the experimental period from 1979 to 1986, the growth period from 1987 to 1991, the boom period from 1992 to 1996 and the adjustment period from 1997 to the present. During the experimental period, China actually utilised US$8.304 billion, annual average at US$1.038. The period was characterised by high investment costs, restrictive price control, poor infrastructure and lack of legal framework. The growth period is marked by the improved legal environment and increased volume of FDI. During the boom period, the volume of FDI accelerated, averaging US$30.307 billion a year, as compared to US$1.037 billion during 1979 and 1986 and US$6.8 billion during 1987 and 1991. China became the largest recipient of FDI among all developing countries. The adjustment period is characterised by the transition into market economy and integration into world economy. Further improved infrastructure and investment environment allowed China to ride out the Asian financial crisis smoothly and FDI continued to increase after some slowdown during the Asian crisis.

**Table 1**  *China’s FDI by four periods (in $US billion)*

<table>
<thead>
<tr>
<th>Period</th>
<th>Project Numbers</th>
<th>Contracted Investment</th>
<th>Utilized Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979-1986</td>
<td>8,295</td>
<td>19.413</td>
<td>8.304</td>
</tr>
<tr>
<td>Annual average</td>
<td>1,037</td>
<td>2.427</td>
<td>1.038</td>
</tr>
<tr>
<td>1987-1991</td>
<td>34,208</td>
<td>33.179</td>
<td>16.754</td>
</tr>
<tr>
<td>Annual average</td>
<td>6,842</td>
<td>6.636</td>
<td>3.351</td>
</tr>
<tr>
<td>Annual average</td>
<td>48,263</td>
<td>83.36</td>
<td>30.307</td>
</tr>
<tr>
<td>1997-1999</td>
<td>57,718</td>
<td>144.328</td>
<td>131.118</td>
</tr>
<tr>
<td>Annual average</td>
<td>19,239</td>
<td>48.109</td>
<td>43.706</td>
</tr>
</tbody>
</table>

Source: *Almanac of China’s Foreign Economy and Trade*, various years; *China Foreign Investment*, September, 1999, Issue 82; and *China Statistical Yearbook.*
**Sources of FDI** Though FDI in China comes from about over 130 countries and regions all over the world, four countries/regions account for 85% of the total FDI in China. Ethnic Chinese investors from Hong Kong, Macao, and Taiwan accounted for about 67% of the actual utilized FDI in 1992 to 1996. The other major sources of China’s FDI are the USA, Japan, Asia and Europe. UK, France and Germany are major European investors. Singapore, Malaysia, Thailand, South Korea and the Philippines are major Asian investors. (Source: *Almanac of China’s Foreign Economy and Trade*, and *China Statistical Yearbook*, various years.)

**Table 2  Local distribution of inward FDI in China**  
(actual utilized amount, $US million)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South &amp; Southeast coast</td>
<td>1,768.34</td>
<td>8,861.56</td>
<td>65,893.50</td>
</tr>
<tr>
<td>Annual average</td>
<td>221</td>
<td>1,772.30</td>
<td>13,178.70</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>59.1</td>
<td>54.37</td>
<td>43.77</td>
</tr>
<tr>
<td>East coast</td>
<td>374.09</td>
<td>2,156.40</td>
<td>36,617.18</td>
</tr>
<tr>
<td>Annual average</td>
<td>46.76</td>
<td>431.28</td>
<td>7,323.40</td>
</tr>
<tr>
<td>Share</td>
<td>12.5</td>
<td>13.2</td>
<td>24.3</td>
</tr>
<tr>
<td>Northeast coast</td>
<td>479.92</td>
<td>3,769.18</td>
<td>29,788.36</td>
</tr>
<tr>
<td>Annual average</td>
<td>60</td>
<td>753.8</td>
<td>5,957.67</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>16</td>
<td>23</td>
<td>19.78</td>
</tr>
<tr>
<td>Inland regions</td>
<td>370</td>
<td>1,511</td>
<td>18,239.87</td>
</tr>
<tr>
<td>Annual average</td>
<td>46.2</td>
<td>302.2</td>
<td>3,647.97</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>12.4</td>
<td>9.43</td>
<td>12.15</td>
</tr>
</tbody>
</table>

Source: *Almanac of China’s Foreign Economy & Trade*, and *China Statistical Yearbook*, various years.

As Table 2 shows, the local distribution of inward FDI in China reflects China’s open door policy which was initially applied to Special Economic Zones (SEZ) and then to open coastal cities and other coastal areas, finally to inland regions. According to *Consumer China* (1998), rates of investment in the interior are growing at over 27 percent annually, while in coast areas, it is rising by only 11 percent annually. However, poor infrastructure constitutes a considerable additional barrier to
investment in the country’s hinterland, leading many foreign firms to become disillusioned with the market as a while.

**Forms of FDI** China’s FDI has flown into China not only as an invaluable source of capital, but with advanced science, technology and managerial skills in the following five modes: (1) equity joint ventures (EJV), (2) cooperative joint ventures (CJV), (3) wholly foreign-owned enterprises (WFOE), (4) joint development ventures and (5) other foreign investment, such as Build-Operate–Transfer (BOT).

**Figure 1  Changing Face of FDI in China**

The number of wholly-owned enterprises (WOS) has been small compared to the number of joint ventures. According to the Foreign Investment Enterprise Law, WOEs are only allowed in the following five categories: public utilities, communication and transportation, real estate, leasing company and investment company (CCPIT, 2000). Projects in these areas are designated as being restricted foreign investment projects, and they have to be approved by China’s Ministry of Foreign Trade and Economic Corporation. In some areas, joint ventures are required and Chinese partners are mandated to have at least 50 percent share in the partnership. While WTO does not yet have a comprehensive set of rules on foreign investment, such restrictions will have to be phased out to keep China in line with the international trend
of replacing heavy ex ante foreign investment screening with lighter ex post policies like anti trust laws (Houben, 1999).

**Sectoral Distribution** During the early stage the service sector accounted for the majority (62%) of FDI, with 29% going to real estates and 33% going to public and other services. During later periods, however, FDI in the manufacturing sector increased from about 58% to 77% when Chinese government extended the incentives to a wide range of business activities. In 1995 the Chinese government issued “Guiding Catalogue of Industries for Foreign Investment” and “Interim Provisions on Guidance for Foreign Investment”. As a result, FDI has been directed to the capital-intensive and technologically advanced projects from the USA, Japan and Europe. This “pick-and-choose” policy significantly affected sectoral distribution of FDI.

**Table 3** Distribution among sectors of China’s inward FDI (contracted amount, $US million)

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<thead>
<tr>
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<tbody>
<tr>
<td>Agriculture</td>
<td>375</td>
<td>797</td>
<td>5,716</td>
</tr>
<tr>
<td>Annual average</td>
<td>47</td>
<td>159</td>
<td>1,143</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>1.9</td>
<td>2.4</td>
<td>1.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>5,425</td>
<td>25,650</td>
<td>239,872</td>
</tr>
<tr>
<td>Annual average</td>
<td>678</td>
<td>5,130</td>
<td>47,974</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>27.8</td>
<td>77.3</td>
<td>57.8</td>
</tr>
<tr>
<td>Services</td>
<td>12,244</td>
<td>6,047</td>
<td>155,095</td>
</tr>
<tr>
<td>Annual average</td>
<td>1,530</td>
<td>1,209</td>
<td>31,019</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>62.7</td>
<td>18.2</td>
<td>37.3</td>
</tr>
<tr>
<td>Real estate &amp; public services</td>
<td>5,735</td>
<td>4,481</td>
<td>116,397</td>
</tr>
<tr>
<td>Annual average</td>
<td>716</td>
<td>896</td>
<td>23,279</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>29.38</td>
<td>13.5</td>
<td>28</td>
</tr>
<tr>
<td>Other services</td>
<td>6,509</td>
<td>1,566</td>
<td>38,698</td>
</tr>
<tr>
<td>Annual average</td>
<td>813</td>
<td>313</td>
<td>7,739</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>33.3</td>
<td>4.72</td>
<td>9.3</td>
</tr>
<tr>
<td>Others</td>
<td>1475</td>
<td>677</td>
<td>14,354</td>
</tr>
<tr>
<td>Annual average</td>
<td>184</td>
<td>135</td>
<td>2,870</td>
</tr>
<tr>
<td>Share (percent)</td>
<td>7.6</td>
<td>2.1</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Source: Almanac of China’s Foreign Economy & Trade, and China Statistical Yearbook, various years.
In summary, in the last two decades China’s inward FDI has been characterised by its large magnitude, involvement in wide range of industries, and rapid growth. It has contributed to the China’s economic development and has helped to speed up China’s economic integration into the global economy.

**Potential Effects of WTO Entry on Inward FDI in different Industry Sectors**

After China has become a member in WTO, China must abide by all the agreements and therefore China has to adjust its domestic policies and revise the relative laws. Many sectors will no doubt be affected, which include the telecommunications, insurance, banking, securities, audio visual, and professional service sectors, to name a few, will all have expanded market access to China. Internet services will be liberalized at the same rate as other key telecommunications services. While WTO membership will affect competitiveness of domestic industries, it will also affect patterns of FDI inflows. Such impact may vary depending on the industry sectors.

**Banking.** Currently foreign banks are not permitted to do business in local currency with Chinese clients (a few can engage in local currency business with their foreign clients). They are not allowed to taking deposit from, or giving loans, to Chinese nationals and companies. They are basically limited to servicing foreign invested companies in foreign currencies. While pilot projects allow some 30 foreign banks to engage in RMB denominated business in the Pudong area of Shanghai and in Shenzhen, restrictions imposed on their operations are such that the volume of transactions is too small to generate liquidity and profits.

WTO membership will bring the following changes:

1. China has committed to full market access in five years;
2. Foreign banks will be able to conduct local currency business with Chinese enterprises starting, 2 years after accession.
3. Foreign banks will be able to conduct local currency business with Chinese individuals from 5 years after accession;
4. Foreign banks will have the same rights (national treatment) as Chinese banks within designated geographic areas;
5. Both geographic and customer restrictions will be removed in five years; and
6. Non-bank financial companies can offer auto financing upon accession.

Allowing foreign banks to perform all operations linked to international trade transactions, including in local currency would give a further boost to China’s trading base. Opening of the banking sector will not only allow foreign banks to participate in the allocation of resources in the economy, but also facilitate operating conditions for foreign investors (Houben, 1999).

**Securities.** China will permit minority foreign owned joint ventures to engage in fund management on the same terms as Chinese firms. As the scope of business expands for Chinese firms, foreign joint venture securities companies will enjoy the same expansion in scope of business. Minority joint ventures will be allowed to underwrite domestic securities issues and underwrite and trade in foreign currency denominated securities (debt and equity). Permitting foreign investors to participate in securities market will help broaden China’s capital markets, in the most rapid way and thus, bring expertise, training, technology, as well as competition and benchmarking to the industry, and will result in the most efficient channeling of household savings into investment.

**Telecommunications.** Currently, China severely restricts sales of telecommunications services and bars foreign investment. China's commitments mark its first agreement to open its telecommunications sector, both to the scope of services and to direct investment in telecommunications businesses. Through these commitments, China will become a member of the Basic Telecommunications Agreement. Concerning the scope of services China will phase out all geographic restrictions for paging and
value-added services in 2 years, mobile/cellular in 5 years and domestic wireline services in 6 years. China's key telecommunications services corridor in Beijing, Shanghai, and Guangzhou, which represents approximately 75% of all domestic traffic, will open immediately on accession in all telecommunications services. China will allow 49% foreign investment in all services, and will allow 50% foreign ownership for value-added paging services in two years, for mobile services, 49 percent in 5 years; and for international and domestic services, 49% in 6 years. Such commitments will accelerate FDI in this sector as already seen in Motorola’s recent investment in China, which more than tripled in a year’s time.

Auto Sector. China will cut tariffs from the current 100% or 80% level to 25% by 2006, with the largest cuts in the first years after accession. Auto parts tariffs will be cut to an average of 10% by 2006. Auto quotas will be phased out by 2005, and this will grow by 15% annually until elimination. China will gradually open up auto parts and services sector to foreign investors. As this sector is almost no-existent now, it will become even more attractive to a large number of foreign companies given that the automobile manufacturing sector is becoming increasingly saturated and competitive.

Insurance. While the United States agreed to China's request to limit foreign equity participation in life insurance to 50%, China agreed to significantly accelerate the elimination of geographic restrictions in the first few years. According to the present Chinese law, China now restricts foreign companies to operating in Shanghai and Guangzhou. But under the agreement:

Geographic Limitations: China will permit foreign property and casualty firms to insure large-scale risks nationwide immediately upon accession, and will eliminate all geographic limitations in three years.

Scope: China will expand the scope of activities for foreign insurers to include group, health and pension lines of insurance, which represent about 85% of total premiums.
Prudential Criteria: China agrees to award licenses solely on the basis of prudential criteria, with no economic needs test or quantitative limits on the number of licenses issued.

Investment: China agreed to allow 50 percent ownership for life insurance. Life insurers may now choose their own joint venture partners. For non-life, China will allow branching or 51% ownership on accession and form wholly owned subsidiaries in 2 years. Reinsurance is completely open upon accession (100 percent, no restrictions). Foreign investment in insurance sector can bring industry expertise, training and benchmarking to the industry and thus result in bringing the sector to international standards.

Distribution. In China today, foreign firms have no right to distribute products other than those they make in China, or to own or manage distribution networks, wholesaling outlets or warehouses. China also now frequently issues businesses licenses which limit the ability of American firms to conduct marketing, after-sales service, maintenance and repair and customer support. China's commitments address all these issues. They reflect a comprehensive commitment on distribution – including wholesaling, sales away from a fixed location, retailing, maintenance and repair, and transportation. Thus, Americans will be able to distribute imported products as well as those made in China, offering significant opportunity to expand U.S. exports of goods. As noted above, China will phase out all restrictions on distribution services for most products within three years.

Implications for FDI Policy Formulation

WTO membership not only brings China into the last major international organization from which it is still absent, it will also acknowledge the country's emergence as a trading power and its readiness to assume responsibility as equal partner in a trading system that depends on the open markets of its important members to thrive. China's WTO membership has direct impact on investor confidence, economic activity and growth. By setting
out liberalizing investment measures to be implemented in steps over the next few years, it would reduce the erratic nature of many regulatory changes and bring a steady and predictable rhythm of economic reforms on which foreign investors can base their business strategies and expansion plans. It would also instill enormous outside confidence in the government’s ability to steer the reforms process to a final conclusion and establish a full market economy (Houben, 1999).

Membership of WTO will lead timely opening of previously unreachable sectors to foreign investors to attract much needed capital and boost employment at a time when state-enterprises are shedding millions of employees, especially, opening the services sector and foreign investment regime, including phasing out archaic mandatory joint venture requirements would create a renewed interest in foreign investors and thus create enormous number of jobs, mostly at the upper end of the wage scale, as well as attracting know-how, technology and state-of-art management techniques.

After China’s WTO entry, the Chinese economy will be much more open than ever before so that overseas investors may enjoy easy access to those sectors previously prohibited or restricted by the Chinese laws. By fulfilling the commitments in the WTO agreements China has reached with WTO members, China will offer foreign investors additional benefits. Specifically, foreign investors will be treated as equals to domestic investors and therefore strengthen FDI’ reliability; the dramatic reduction of import tariffs will allow foreign commodities to enjoy easier access to the Chinese markets. This in turn will dramatically reduce cost of production; Chinese state-owned enterprises will be confronted with cut-throat competition from foreign businesses after they have lost their protection from the government. Their lack of funds, poor management, red tape, overstaff and low efficiency will put them in a very disadvantageous position in competition from foreign investors of the same sectors. They will either “swim” or to be “drowned”. Thus, these companies can be good candidates for mergers and acquisitions. Direct investment
through mergers and acquisitions will allow foreign companies to zero in the market even if they have never set their foot on the market before.

China has achieved remarkable success in attracting FDI in the last two decades. WTO membership should make China be more attractive to foreign investors and thus, the amount of inward FDI should increase dramatically. More inward FDI will speed up China economic development in the central and southwestern parts of China. FDI from the West which comes with international business practices, will facilitate the perfection of China’s socialist market economy and the Chinese economy’s integration with the world economy, thus, allowing multinationals to integrate their operations in China in their world networks.

In the past, China has mainly used fiscal instrument to attract FDI into targeted industries and geographical areas. Multi-year tax breaks and tariff exemption on imports of capital goods and inputs have wooed multinationals to bring over US$348 billion of FDI to China between 1979 and present (China Daily, 6 April, 2001). While the incentive programs have been the hallmark of China’s DFI policy, the pick-and-choose approach began to undermine the attractiveness of China as investment destination as seen in the waning interest among foreign companies. Because of the dramatic reduction of import tariffs allowing foreign commodities easier access to the Chinese markets, some foreign investors will not have to invest in China and they may simply produce the products at home and export them to China. This is especially true for hi-tech products which cost very low freight. Therefore inward FDI in hi-tech sectors may decrease. Since foreign investors in the free trade zones, special economic zones and economic and technological development zones can not enjoy the preferential treatment as they used to, their enthusiasm in investment and reinvestment in China may be dampened.

The government should formulate conducive incentive programs for foreign investors interested in investing in western and central regions and in hi-tech sectors. Streamlining approval
process will be of special incentives to high-tech investors who have to face real-time competition and instant obsolescence of technology. Success of attracting FDI can be ensured if a clear framework providing legal security and effective property rights is backed up by strong regulatory bodies. Equally important is further strengthening the rule of law and regulatory structures, including transparency and prudential supervision. Chinese Foreign Investment Law should be adjusted to be consistent with WTO agreement on Trade-Related Investment Measures. Those provisions prohibiting and restricting foreign investors to establish areas including the press, publication, broadcasting, television and movies; domestic commerce, foreign trade and insurance; post and telecommunication; public utilities; communications and transportation; real estate; trust investment; and leasing should be revised to reflect the commitments that China has made to join WTO.

Specifically, in order to encourage inflow of FDI, the policy makers should consider the following issues:

1. The current Chinese laws and regulations concerning inward FDI have to be amended and revised as soon as possible so that they are in strict conformity with the commitments China has made in the WTO agreements with all the other WTO members.
2. The red tape in approving FDI projects has to be done away with by further simplifying application procedures. Corruption among FDI officials has to be eliminated in order to increase foreign investors’ confidence in China. Services should be easily and conveniently available to FDI businessmen.
3. The Laws must be strictly enforced and the rule by law rather than by man be soon realized.
4. FDI in export-oriented sectors, hi-tech sectors, environmental protection, infrastructure and agriculture; and FDI in the central and northwestern parts of China have to be encouraged. Preferential policies can be offered to FDI in the above-mentioned sectors and to FDI in the central and northwestern parts of China, as long as they are consistent
with the WTO agreements China has reached with WTO members.
5. The Chinese government must exercise effective management and supervision over the banking sector so that financial risks and crises can be averted.

Conclusion

As WTO entry helps create a better investment environment in China by bringing Chinese rules up to global standards, raising transparency and helping eliminate corruption and bringing Chinese into the new century, China’s inward FDI will no doubt expand to a great extent after China’s entry into WTO, which will provide both overseas investors and China’s domestic enterprises with more opportunities. If China takes advantage of the opportunities and meet the challenges with confidence and caution, China will surely speed up its economic integration with the world economy and the perfection of the system of its socialist market economy. As a result China will benefit greatly from its WTO entry and turn itself into an economic giant in the near future.

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Chapter 13
Convergence and Emerging Market Economies

Convergence has been observed in a variety of markets around the world. This paper aims to examine the basis of convergence and explore how this phenomenon can be taken advantage of through the use of free economic zones, particularly in the context of Armenia.

Convergence in theory. Convergence can be described as a rapid growth of emerging markets which in turn benefits both developed countries and emerging market economies. It gives access to new and bigger markets for goods and services, as well as diversity in terms of consumer choice. But growth in emerging markets also translates into higher consumer prices, more problems with environmental protection, and growing competition for skilled labor and «brain drain». Such processes, however, allow for invention and utilization of innovations that are less costly than in developed nations, assuming joint research and development and transfer of technologies from one country to another that results in technological convergence.

A mixture of trends after the World War II in the world economy impacted almost all countries notwithstanding the levels of economic and political development. Some economists called the overall tendency modernization (Armer, Schnaiberg, Inkeles, Smith, Rostow), others – globalization (Meyer, Ritzer, Robertson, Sklair, McLuhan, Giddens, Wresch), and yet another group of authors characterized the developments as a process of convergence (Galbraith, Goldthorpe, Sorokin, others). Later, after the collapse of Soviet Union another term called “transition” became more popular among economists. Almost all modern theories considered mentioned trend; moreover, the former classification of countries into developed nations and less developed
nations or industrialized and agrarian and the most frequently used terms of capitalist and socialist countries were changed to developed, developing and countries in transition. The paradox is in the absence of a commonly accepted definition of the term transition. While politicians understand a passage to capitalism with prevailing elements of democracy and the rule of law, economists have different elucidations: from a centrally planned economy to the free market, creating local and regional models of a competitive, open economy serving social welfare and others. In addition, the world economy also has an example of mixed economy in China called one country – two systems.

All theoretical conclusions deserve scrupulous consideration; however, some terms and definitions require particular attention. The idea of convergence is both powerful and intuitively attractive to sociologists across a diverse range of backgrounds and interests (Form, 1979). It is difficult to conceive of an acceptable macro-theory of social change that does not refer to the idea of convergence in one way or another. Despite the controversy over and subsequent disillusionment with early versions of convergence theory in the study of modernization, and the often mixed results of empirical studies discussed, it is clear that the concept of societal convergence (and convergence theories that allow for the possibility of divergence and invariance) provides a useful and potentially powerful analytical framework within which to conduct cross-national studies across a broad range of social phenomena. Even where the convergence hypothesis ultimately ends up being rejected, the perspective offered by convergence theories can provide a useful point of departure for research. Appropriately reformulated, focused on elements of a social system amenable to empirical study, and stripped of the ideological baggage associated with its earlier versions, convergence theories hold promise for advancing the understanding of the fundamental processes and regularities of social change (Coughlin, 2001).

It is worth recalling the years of global confrontation between East and West, particularly the long period of the Cold
War between socialist and capitalist blocks of nations, to better understand the theories that were composed to defend and advocate the irreversibility of either process: building communism or strengthening the capitalist society. The efforts of both politicians and economists were acknowledged by awards and prizes and were circulated in impressive volumes of publications. The “Cold War” battle was in all areas except direct military combat. There were only two exceptions: one in politics and another – in economic theory. A model of social market economy, incorporating a mixture of key elements from free market and socialist ideology was developed in Germany under Ludwig Erhard in 1950-60s and brought about the so called German economic miracle.

Economic growth of Germany during the first decades after the war at times overshadowed its marked success in joining the international community. In 1945 the country's economy was shattered. A good part of what survived was later dismantled and carried off by the victorious Allies.

Within Germany there was much argument about how to rebuild the economy and what its nature should be. Socialist politicians argued for a central distribution system, extensive state controls, and the nationalization of banks and industry. Their main opponent was Ludwig Erhard, a liberal economist appointed to head the office of economic affairs in the Bizone, who later became minister for economics and ultimately FRG chancellor (1963-66), succeeding Adenauer. Erhard's concept of a socially responsive market economy based on free trade and private enterprise, aided by the infusion of capital through the Marshall Plan, proved to be the ideal basis for the strong recovery of the West German economy, culminating in the economic miracle of the 1950s. In some areas, such as housing and agriculture, prevailing circumstances required the introduction of price controls and subsidies. Controls to prevent the formation of cartels and to foster monetary stability also remained the state's responsibility. The state likewise furthered the accumulation of private capital and protected ordinary citizens by establishing a
generous system of social services that included statutory health, unemployment, and pension insurance programs. West Germany's economy functioned very well for several decades, and the country became one of the world's wealthiest. Thanks to the strong social welfare component and the system of codetermination, which gave workers in factories some say about their management, West German industry enjoyed a long period of labor peace. The export-oriented economy received another boost with the creation of the European Economic Community by the Treaty of Rome in March 1957. West Germany was one of the EEC's founding members and after the fall of the Berlin Wall and unification with East Germany in 1989 utilized the nation’s competitive advantages to gain economic benefits not only from strong national currency – the mark, but also political dividends after replacing it with a single European currency – the euro.

Coming to economic theory, one can imagine the condemnation and hostility toward an author who would attempt to compose a concept contradicting the exceptionality and uniqueness of either communism or capitalism. Nevertheless, such an attempt was made by Prof. John Galbraith to forecast the future of the world economy. His theory was based on the assumption that neither capitalist nor communist countries would succeed in spreading their political foundations to the rest of the world. Galbraith suggested a completely new scenario for the years to come: the mixture of the best and most vital elements of free market economies such as free trade and fair competition from one side and the most typical components of the opposing system of planning, social security and others from the other side would compose a variety of models which might be used by countries based on local and regional geopolitical conditions. Even though politicians equally criticized the theory of convergence in both political systems, today’s reality has proven the truth of this concept.

**Forms of convergence.** Although the various theories on economic growth, globalization, transition and convergence have
distinctive concept justification, they all are interconnected and related to each other since:

- economic globalization assumes openness and interaction of elements of different political and economic systems which is characterized as
- convergence, including not only political, economic, but also cultural, legal, social and other ingredients, bringing together and mixing up entire philosophies and approaches of progress, which, in turn results in
- an overall trend of concurrent transition from one system to another, creating models of competitive economies with rapid rates of recovery and
- economic growth resulting from real transformations and implementation of reforms toward formation of grounds for an open market and civic society.

This chain might be continued and described in more details; however, there is an essential difference one needs to consider while examining the process of transformation and growth. Many countries in transition frequently report rates of economic growth twice or thrice exceeding those of industrialized nations. With such impressive growth rates it should be expected that many countries in transition could have reached better states of economic welfare and security than their competitors in North America or in the European Union. Why then do they still apply for international assistance in the forms of loans, grants, humanitarian aid and other projects of joint and close cooperation with Western nations and international organizations? Or shall we disregard the rates of economic growth while constructing our assessment and study on the levels of economic development? This inconsistency will vanish once we identify the difference between the rates of economic growth and rates of economic recovery. While the term «rate of growth» is typical for industrialized nations with sustainable development, the term «rate of recovery» is more applicable to economies in transition, or in transformation. The latter is a painful process including not
only a shift of paradigm from one political system to another and an underlying concept of economic development, but also essential demographic, social and other related changes, as well as significant conversion of mentality and basic approaches. Based on the careful consideration of technological factors, Gerschenkron's «advantage of backwardness» approach helps to explain why, within the OECD area, non-US countries grew considerably faster than the US during 1950s and 1960 but then slowed down. It also helps to understand the process of recovery in Europe after the World War II, which was mostly due to the implementation of Marshall Plan when the annual rates of recovery in many countries exceeded 30%.

Depending on given circumstances and geopolitical conditions, two major forms of transition had proven their joie de vivre in many countries:

- «shock therapy»
- «gradualism».

«Shock therapy» was introduced in Russia and other former Soviet states after their departure from the so called «center» as a result of the collapse of the empire in 1992. People in those countries will long remember the joke resulting from the sad reality: «people definitely experienced the shock, but never – the therapy». Neither regular citizens nor economists can make judgements about the efficiency of «shock therapy»; however, the methods of implementing major economic and political reforms created common problems in almost all Commonwealth of Independent States (CIS) nations. Lifting state controlled and regulated prices on all goods and services, eliminating the money supply in rubles and creating enormous deficits of state budgets unable to cover social expenditures, increasing unemployment, energy shortages and other economic troubles demonstrated at least one truth: countries and their governments were not prepared for such unexpected changes whatsoever.
Subsequently they applied for membership in key international organizations anticipating professional and material assistance.

Later they introduced national currencies along with monetary and fiscal policies.

And finally, they discovered that there is no remedy equally appropriate for all economies and that each transition economy needed to work out its' own model of economic development based on given competitive advantages and their utilization.

Presumably the only country that launched and benefited from using «gradualism» for economic and political transformation is China. And despite the tangible achievements in economic development and substantial progress in manufacturing and services and other related areas, it is too early to talk about the comparative efficacy of «gradualism» since the size of the local market, relatively low-cost labor, ethnic and cultural features and other factors having positive impact on the overall process of reforms also need to be taken into careful consideration.

There are other models of growth, transition and convergence in the world economy as well. They are based on such factors as human capital, financial capital, savings, innovations, productivity, competition and others. The Uzawa-Lucas model emphasizes physical and human capital that enables real technological progress. This model suggests that there are no diminishing returns to capital or labor and that the growth rate might be determined by the growth rate of capital established by the share of savings from the overall income. According to this model, a higher savings rate or an investment subsidy financed through lump-sum taxes will lead to permanently higher growth. Another effect of this model is that the distance of the country from the technological frontier is somehow extraneous: there is no leading edge. This suggests that if one country is to match another country's savings ratio, its economy can grow faster than one with rapid augmentation. As in the case of technological progress approach, Romer's famous model suggests the relevance of innovation to economic growth. However, it concentrates on the
invention of new brands and kinds of goods and services. Product variety allows the capital stock to be spread over an increasingly large number of production processes, each of which is subject to diminishing returns. Average productivity is thus a function of the number of product varieties. Invention is costly, so in equilibrium, the marginal benefit from investing in research and development is just equal to its marginal cost. Finally, Aghion and Howitt used the «creative-destruction» approach developed by Shumpeter to elucidate the role of innovation as a motor of growth, distinguishing between costly but «true» innovation and less costly imitation as implementation of a superior technology developed elsewhere. In fact, successful innovations are superior to previous products or processes, and displace them, and their producers enjoy monopoly profits until their innovations are displaced in their turn.

Coming to financial factors of convergence the following trend is observed worldwide: the reduction of barriers to international financial streams allowed available funds resulting mainly from savings to flow from capital – wealthy countries to capital – scarce countries. This usually leads to a redistribution of capital globally since the major incentive for investments is the higher rate of return in emerging markets economies vs the expected profits in developed countries. Ironically in some of the fast growing economies of Asia and the CIS domestic savings rates are higher than those of industrialized nations. Nevertheless, there is less use of domestic savings; hence countries in transition can hardly survive without external financial injections. Furthermore, many countries with current-account deficits exceeding five percent of their GDP are separated somehow from the financial markets and have limited financial sources to invest in key projects. Even the limited sources frequently are not being used efficiently, or in other words: they rarely partake in economic growth of the nation. Both transfers from abroad and local funds are usually wasted for consumption. Consumption-oriented societies spend available funds to import goods and services and as a consequence – increase unemployment locally and finance
jobs in trading partner countries. This problem turned out to be a common concern for many countries, therefore, a search for common solutions is the way to overcome this obstacle.

**Practical implications of convergence in emerging market economies.** The underlying concept for making the efforts more efficient is to form an attractive environment for investments and economic growth. Among a variety of means to reach these goals is the free economic zone assuming tax advantages and elimination of many business related barriers for local and foreign investors. A free economic zone (FEZ) is a territory designated for the purpose of economic, commercial and financial activities within which economic entities are provided with special economic and legal conditions of operation. FEZs are one of the inseparable components of emerging market economies: it is a tool to search for a “compromise” or “reconciliation” between the old and new economic systems. FEZs allow integration into the world economy, they create favorable fiscal and monetary regimes with straightforward legal environments, and, if effectively in place, are attractive “territories” for foreign and domestic investors. The benefits of FEZs are later extended to other parts of the country, and in many cases to the region.

As a form of economic governance, however, the success of a FEZ is not guaranteed: it requires an elaborated and complex set of actions, a matrix, which incorporates a wealth of external and internal, or exogenous and endogenous factors, a full range of which by itself is very hard to predict. From this perspective, FEZs have never been an obvious solution for all the problems for either market, or the transition economies. Tax free, customs and export processing territories worked out very well for China and Korea, for instance, while Lithuania's industrial parks are believed not to have met expectations. Belarus founded six (FEZs), located in each of the country’s administrative divisions, to attract foreign investment, promote high-tech manufacturing and increase economic diversification. The Brest zone alone drew in excess of $120 million in investments and has created 5000 new jobs. On the other hand, the 11 FEZs created in Ukraine failed to
attract foreign direct investment, or foster economic growth. It is essential to identify a range of fundamentals, both on micro- and macro- levels, that countries need to have in place; in particular, the specific sectors the FEZs could be created around, and the resources, financial, human, and political, that the country will require committing. Also, conceptual problems need to be identified, and recommendations around those stipulated.

For emerging market economies, FEZs could become an important catalyst for growth. Their functioning is an indicator of trade liberalization, and evidence of favorable tax and investment regimes. As any new enterprise, the establishment of FEZs is an expensive venture, which requires public investments in the first place. These are investments in the geographic area itself, its industrial infrastructure (including buildings and utilities), and investments in servicing and promoting the FEZ. The volume of investments varies from country to country and from region to region. According to our research, the public investments in FEZs on the post-soviet territories have averaged USD $3,000-$5,000 per newly created job. About half of this amount is applied towards creating the industrial infrastructure and the rest for promoting and servicing. The evidence shows that the usual practice for FEZs is to start as “special areas”, in the simplest forms, which require small public investments and which leverage on the existing infrastructures. Naturally, small-scale zones should be created first, in areas where developed infrastructures are in place, with the best strategic location, and where resources, human, financial and natural, could fuel extensive economic development. The thorough research on South Caucasus, for example, allowed identification of the following three types of FEZs that could be viable given the criteria above:

- Tourism;
- Trade and Export processing (FTZ – for bordering regions);
- Science based (techno/industrial parks, R&D, etc.).
From the scientific point of view, it is important to name the types of zones and to defend their reasonableness. Hence, tourism FEZs proved to be successful in a variety of countries, both in the CIS and Eastern Europe. In Armenia, for example, this is especially attractive due to the fact that a number of regions have a unique combination of excellent climate and historic monuments on one hand, and spas and mineral resources on the other. Famous resorts of Dilijan, Tsakhkadzor, Jermuk and Ijevan are popular among the population residing in the territories of the former Soviet Union therefore they do not require many resources to promote this product in the CIS. Trade zones usually provide venues for cargo transportation, storage and processing, as well as consignment storage facilities, etc. Zones like this create the capacity for further expansion and diversification of the domestic economy.

Many of the cities in emerging market economies inherited disproportionately large industrial capacities in machinery, metallurgy, chemical production, textile, etc., that have been mostly dysfunctional since the collapse of the planned economies. Such cities could become perfect export processing zones (EPZ). Research suggests that EPZs are most effective when they form part of an integrated economic strategy that includes fiscal incentives, investments in infrastructure, technology and human capital, and the creation of linkages into the local economy. It is important for EPZs to upgrade their activities to higher value-added products and services (requiring a more skilled workforce) and find their niche in the international production network. EPZ strategies must, therefore, be continually adapted. Science based zones like techno/industrial parks, are preferable due to the fact that those tap on the human capital in the country. This could serve as a foundation for commercialization of science, the best example of which could come from Russia’s experience in this area.

For successful operationalization, the FEZs will require certain preconditions on two levels:
a) Micro-level: a thorough development strategy for each of the FEZs, and a thorough choice of geographic area with necessary infrastructural investments in place. Most importantly, there should be a clearly defined goal for each of the FEZs in the country, i.e. creation of new jobs, industrial and commercial revitalization, increase in population’s revenue, etc.

b) Macro-level: political stability, predictable economic reforms, a well-thought legal environment, absolute and irrevocable support by the state, and a stage-by-stage approach.

In our view, the following are among the most critical preconditions to be considered while creating grounds for the FEZs:

- the choice of an organizational and legal framework;
- the choice of an incentive mechanism;
- the choice of a rational administration system;
- the choice of a region, and
- the choice of the form of FEZs.

The organizational and legal framework determines the steps of FEZs’ creation, their operations and administration. It is governed by a special legislation that covers the following directions:

- entrepreneurial liberalization;
- foreign investments and trade promotion;
- customs;
- the system of taxation (including tax incentives);
- licensing;
- administration of FEZs.

More specific issues in FEZs are reflected in the laws on ownership, land, banking sector and finance, corporations, joint ventures, etc. The incentive mechanism is a set of preferential treatments in the form of tax breaks on commercial crediting, investments, as well as customs duty breaks on imported equipment and technology, etc. The system of preferential treatment should
be objective driven, targeting the very purpose of the FEZ. The choice of FEZ administration system is a factor of the size and the type of the zone being created. Among other things, national peculiarities and the degree of private sector development could affect the administrative structure of FEZs. In principle, however, the administration of FEZs should not be a part of jurisdiction of line ministries and/or central government: it should be entitled to a relatively independent system of governance. From this angle, for the effective functioning of the FEZs, it is vital to have the following:

- establishment of functional management structure headed by administration, which is entitled to substantial authorities;
- existence of government body that would coordinate and control the development of FEZ and would possess enough authority to act in FEZs’ interest;
- FEZ administration directly reporting to an authorized government body.

The experience in emerging market economies evidences, that there always exists a risk, that FEZs attract shady "industrialists" and "financiers" who set up fronts for illicit activities, such as smuggling, unauthorized assembly of consumer goods, or intellectual piracy. These extraterritorial hubs may become centers of money laundering, parallel imports of counterfeit goods and forbidden re-importation of merchandise originally sold to poor countries at substantial discounts, or provided as international aid. The role of the state is to empower the FEZ administration to be able to fight with the side effects of free zones. The internal structure of FEZs’ administration is formed according to its functions and acts in accordance with the country’s constitution, legislation and other special regulations.

Finally, the choice of region should depend on the combination of two factors: concentration of skilled workforce
and proximity to strategic transportation infrastructure. In our view, at the beginning stage it would be reasonable to create FEZs in border areas. In Armenia’s case, ironically enough, these are also the regions where the standard of living and income is disproportionately low. In 2005, these three regions together generated less than 10 percent of the GDP, while the capital, Yerevan, generated 52 percent (note: in 1988 these regions generated about 30 percent of gross national income). The unemployment rate remains high there (about 30 percent), and GDP per capita numbers are about 2 times less than the average for the country. So the problem of development of these regions is also a problem of national security for the country. As mentioned above, in the beginning the form of the FEZs, i.e. tourism, trade and export processing, and techno/industrial parks, will mostly depend on availability of resources, and a thorough feasibility study for each of the options.

The state could go further, and pursue opportunities of creation of Unified FEZs (UFEZ), which would combine territories of several countries, e.g. Georgia and Russia. This would boost regional trade and economic integration between these countries. With Russia, a UFEZ in one of the following regions is, in our view, more preferable: Port-Temryuk-Kavkaz, Novorossiysk, Pyatigorsk, and Rostov-on-Don. Due to the structure of trade between Armenia and these southern Russian cities, we believe that a UFEZ should be in the form of trade zones and free customs zones. Our assessment of the trade potential between these regions shows that for the coming 4-6 years, trade with Russia could be increased at an annual rate of 30 percent. One should not also forget the existence of the Armenian Diaspora all over the world, especially Russia, USA, EU and Middle East that are the traditional suppliers of tourists and investors to Armenia. A more predictable economic and legislative environment, preferential business environment, and better public administration in FEZs will create economic
opportunities for Diaspora investments, which are more than just emotionally-based.

No matter what form of FEZs will be created in the country, world experience shows that their creation requires utmost and continuous attention from the host government. There have been enough attempts, both successful and not, from which many lessons can be learnt. A lesson learnt from Russia’s experience, for example, is that the laws and regulation in this area should not change frequently and should remain predictable. The experience from Belarus, Korea, and China suggests that government should provide all possible support, both financial and strategic, since the success of a venture largely depends on how well designed the objectives of FEZs and their foundations are. If well implemented, FEZs hold promise to bring to Armenia and its surrounding regions the rapid growth and prosperity observed in other developing economies.

References:


Chapter 14

The IMF and the New World Economic Order

It is a great pleasure to be here today, and would like to thank the organizers of the conference for inviting me. I always enjoy coming to Tsaghkadzor, and especially today, as the venue of the conference is fitting in order for us to elevate ourselves from local political events and be able to achieve a better vision on some critical issues the world is facing.

The global crisis that started in 2008 has shaken economies, industries and households across the world, but it has also shaken the intellectual foundations of the prevailing world order and national policy frameworks. A new, more solid, sounder intellectual basis is taking shape, with initiative such as Kazakhstan’s of creating an open forum for global cooperation being welcome and important to contribute to its construction.

Closer integration and interconnectedness in the world economy has had tremendous benefits. It created unprecedented prosperity for countries of different sizes and different regions, lifting millions out of poverty. It helped citizens enjoying access to a wider variety of goods and services, lower prices, more and better-paying jobs.

However, it has come with important downsides, including higher instability. To draw a useful parallelism, let’s remember what happened when people originally migrated from the countryside to live in cities. This process enabled brand new job opportunities and more access to goods and services. But at the same time it also allowed diseases to be spread much more quickly than in the past. The current crisis was a disease that originated in the households’ balance sheets of some countries including the US, was quickly transmitted into global banks’ balance sheets, and then transmitted again to some vulnerable
sovereign balance sheets, especially in Europe. These sick sovereign balance sheets have now affected some other global banks again, creating new negative vicious cycles which can bring new unexpected victims.

But the solution to a series of health epidemics that occurred when we started to live in cities was not to send everyone back to the primitive modes of living in the countryside. The solution was to improve preventive health, improve health care, and other measures. There is no way back to the global village, but we need to do better to address the downsides.

Given the problems we face are global in nature, the response to these problems has to be global. A defining feature of the new economic order ought to be more and better cooperation. The period immediately after the crisis showed there is room for hope. The G-20 emerged as a key forum for the world’s major economies to discuss policy priorities, a marked improvement with respect to the past in which emerging markets did not participate in important decisions concerning the global economy. G-20 priorities were taken to the IMF, where they have become global in nature. April 2009 was the climax of commonality of focus and purpose, with an unprecedented multilateral effort taking place. Were it not for the bold action of G20 after the crisis, we would have probably seen a second great depression.

Unfortunately after the worst moments of the crisis the effort quickly lost momentum, and maybe not coincidentally the economic recovery has entered a dangerous phase, with financial sectors struggling and sovereigns besieged. The lack of progress could derive into the process being set into reverse motion, with a fast proliferation of ill-conceived policies with a narrow geographical and temporal focus. We are already witnessing more bilateral payment agreements, and currency tensions are evident. Regionalism is already in some cases going from a means (a stepping stone to multilateralism) to an end in itself (a replacement).
We now need to rebuild momentum of the effectiveness of cooperation, and not just to handle a possible new crisis, but also to fix the infrastructure. Global platforms should be informing and influencing the design and implementation of the globally consistent and reinforcing national policies. The issues are too important to passively wait for the G-20 to come up with solutions. We all need to do more to address the multidimensional failures that lay behind the crisis. Global conferences of academics are taking place, and other global forums like G-Global can also be very important to develop new ideas, and to have a multiplicity of voices heard.

At the IMF we have also been working in this direction. Let me highlight some of it in three key areas:

- The crisis showed that financial systems need to reform. First, they need to be made safer. In this context, we have proposed to:
  - Broaden the perimeter of regulation to encompass institutions and markets that were outside the scope of regulation.
  - Better regulate banks’ capital, provide incentives to encourage firms to accumulate additional capital buffers during upturns and let them run down during downturns.
  - Improve data disclosures for supervisors and investors to better understand where risk is located.
  - Address inconsistencies of legal frameworks to ensure a smoother international banks’ resolution.
  - Improve liquidity provision frameworks.

Second, the functioning of financial systems has to be made fairer: we need to move away from a system that privatizes the gains and socializes the losses. In this context, we have proposed a new tax on financial activity that would go a long way for the financial sector financing the costs of expensive government bailouts.
• Also, the crisis has shown with renewed vigor that the international monetary system is too unstable. Work has progressed on the following issues:
  o Better monitoring and handling of volatile capital flows could help contain risks. Work has been done to formulate a framework to help countries cope better with those flows.
  o A stronger global financial safety net will limit contagion. IMF has augmented its resources and is seeking further augmentation. The lending toolkit was revamped and further work is under way on developing mechanisms for meeting short-term liquidity needs during systemic crises, ensuring the Fund's resources remain adequate and moral hazard is limited.
  o Over time, there may also be a role for the SDR to contribute to a more stable international monetary system. But the global reserve asset system is likely to evolve only gradually, along with changes in the global economy. There is general support for expanding the SDR basket and, in that context; Fund staff are currently working toward clarifying the circumstances under which a currency could enter the SDR basket.

• The crisis led to very high levels of unemployment, especially among those most vulnerable, and inequality had been growing even in the pre-crisis era. High inequality has strained social cohesion and created unrest. These developments have brought into clear focus the fact that globalization needs a more human face. The benefits of growth must be broadly shared, not just captured by few. We have undertaken research that shines a clear light on the inadequacy of notions that growth can come at the expense of inequality.

The new world order also needed a better IMF, as an institution uniquely placed thanks to its nearly universal membership and a clearly defined set of objectives and institutional arrangements.
And the IMF has been changing. As expressed, we have reformed our lending instruments to better tailor them to our members’ needs. We have also streamlined conditionality, and are working with a renewed sense of partnership and flexibility. We have improved governance, with two reforms in 2008 and 2010 that will involve a quite considerable increase of around 9 percent in voting shares towards developing countries, with all BRICS now among our top ten shareholders. Our lending programs have put a clear emphasis on the protection of social spending.

We live in an age of uncertainty, in which the world economy faces daunting challenges and serious risks. Responding to those is a tall order, but it is the responsibility of people in various circles, here today and across the world, to support policy makers raise up to those challenges.

Crises bring opportunities to change, and there is now a general recognition of the need for action. As soon as a favorable economic cycle gathers steam, complacency can set in, laying the seeds for another crisis down the road. There is now a window of opportunity, and we should not let the opportunity go by to secure a more prosperous, stronger and safer world economy for the next generations.
Chapter 15
Conclusion and Scenarios for Future

The overall conclusion is that global economic prospects are looking better and optimistic in case of establishing a new economic order. At the meantime there are still some uncertainties ahead of us.

We may conclude that current trends will impact on growth to ratchet higher still towards five percent in coming decade as, on the external front, improvements in trade; greater access to international financial markets should be supportive. And on the domestic front, improving fiscal positions, moderating inflation, very large increases in international reserves should allow policy stimulus to support domestic demand if required. Looking at the economic performance by region the projections show that all regions are expected to enjoy a boost in growth over the short-term forecast.

Emerging global trends need careful consideration. The following major global economic trends are significant to all economies and should not be overlooked:

With few exceptions, North America's, Japan’s and West European economies might not experience the pace of growth experienced before global financial crisis and the post-war period;

China will form a new center of economic power in conjunction with neighboring emerging economies and will further strengthen its’ global positions. China’s economic performance was even better compared to many developed nations, particularly, during the global financial crisis;

The role of the government will be changed into a backer of sustainable local and regional security and be mostly appreciated at the international level, leaving less space for domestic economic intervention. Moreover, government interference will be more
frequent since none of the states will use the neoliberal models of pure market competition with an “invisible hand”; 

On the regional level, governments will recognize the need to resolve pressing regional problems and shift responsibilities from global to regional institutions; 

The economic restructuring process will continue toward the establishment of new economic order as the economy is impacted by geopolitical instability, slowdowns in the technology sector, and plant closures/mergers/facility relocations; 

The economy will continue its transition from a goods-producing to a service-based economy as information-based companies dominate traditional resource-based or manufacturing sectors. The new service-based economy will be divided into a high skill, knowledge-based economy, knowledge based government, and a low-skilled services economy; 

The global economy will be subject to new periodic financial crises even after overcoming the first and second “waves”, but its capacity to correct itself may not be underestimated. The rapid rebound from the global financial crisis of 1997-1998, and the one in 2008-2010, the limited impact of the recent tripling of oil prices on global economic growth are the most recent manifestations of resilience. Nonetheless, economic liberalization and globalization entail risks and inevitably will create bumps in the road, some of them potentially highly disruptive; 

Economic crises may recur. The trends toward free markets and deregulation will allow financial markets to overshoot, increase the possibility for sudden reversal in sentiment, and expose individual countries to broad swings in the global market. In addition, unfair conditions of banking seigniorage in many countries create bottlenecks for sustainable development. Any of these could trigger a financial crisis; 

Turbulences and shocks in one economy will affect others. Increased trade links and the integration of global financial markets will quickly transmit turmoil in one economy regionally and
internationally, as Russia's financial turmoil in 1998 affected Brazil and Argentina, as US mortgage market failures turned into a financial epidemic in the rest of the world;

Disputes over international economic rules became more frequent not only on developing countries, but also in forums like Davos, Wilton Park and others. The latest financial crisis revealed differences among countries regarding global financial architecture. As emerging market countries continue to grow, they will seek a stronger voice in setting the terms of international economic governance. A lack of consensus could at times make financial markets skittish and undermine growth.

As the economies worldwide become more interdependent, elimination of artificial barriers for fair trade and implementation of joint projects will allow countries to be on win – win situation by proficient use of their cooperative advantages.

Today the global economy is well-positioned to achieve a sustained period of dynamism through the whole century in case new rules in global economy will be set. In turn, global economic growth may return to the high levels reached in mid 1960s and early 1970s, the final years of the post-World War II economic miracles and long term boom. Particular dynamism may be strongest among emerging markets - especially in BRICS nations - but also be broadly based worldwide, including in both industrialized and many developing countries. In the years to come the rising wave of the global economy will create many economic winners, but it will not eliminate all shortcomings and issues of mutual concern. Poverty was not reduced even for 1% after the Global Summit in Rome in 1996 where the heads of the states were committed to reduce it by half by the year 2015. It is growing and in some countries poverty is considered to be an uncontrollable force. While the previous century’s downturns are often associated with the destruction caused by unalleviated armed conflict, the 21st century will be characterized by the innovative annihilation of economic growth.
Given the major trends in today’s world economy, particularly after global financial crisis, forecasts on further developments are feasible. However, all projections may prone to failure in selecting one mega projection based on either optimistic or pessimistic grounds. There is an obvious need to see alternative ways of development and feasible scenarios with the assumption of global changes in each of them. Therefore, based on the variety of viewpoints from key international structures and experts, the following scenarios are subject for consideration while making attempts to look into future of the world economy. Each scenario was intended to construct a plausible, policy-relevant story of how this future might evolve: highlighting key uncertainties, discontinuities, and unlikely events and identifying important policy and intelligence challenges.  

First scenario may be defined as an inclusive globalization. A virtuous circle develops among technology, economic growth, demographic factors, and effective governance, which enables a majority of the world’s people to benefit from globalization. Technological development and diffusion – in some cases triggered by severe environmental or health crises – are utilized to grapple effectively with some problems of the developing world. Robust global economic growth – spurred by a strong policy consensus on economic liberalization – diffuses wealth widely and mitigates many demographic and resource problems. Governance is effective at both the national and international levels. In many countries, the state’s role shrinks, as its functions are privatized or performed by public-private partnerships, while global cooperation intensifies on many issues through a variety of international arrangements. Conflict is minimal within and among states benefiting from globalization. A minority of the world’s people – in Sub-Saharan Africa, the Middle East, Central and South Asia, and

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the Andean region – do not benefit from these positive changes, and internal conflicts persist in and around those countries left behind.

Destructive globalization may be the next scenario. Global elites thrive, but the majority of the world's population fails to benefit from globalization. Population growth and resource scarcities place heavy burdens on many developing countries, and migration becomes a major source of interstate tension. Technologies not only fail to address the problems of developing countries but also are exploited by negative and illicit networks and incorporated into destabilizing weapons. The global economy splits into three: growth continues in developed countries; many developing countries experience low or negative per capita growth, resulting in a growing gap with the developed world; and the illicit economy grows dramatically. Governance and political leadership are weak at both the national and international levels. Internal conflicts increase, fueled by frustrated expectations, inequities, and heightened communal tensions. WMD are being reproduced and are used in at least one internal conflict.

Among other scenarios one shall not exclude regional competition. Regional identities sharpen in Europe, Asia, and the Americas, driven by growing political resistance in Europe and East Asia to US global preponderance and US-driven globalization and each region's increasing preoccupation with its own economic and political priorities. There is an uneven diffusion of technologies, reflecting differing regional concepts of intellectual property and attitudes towards biotechnology. Regional economic integration in trade and finance increases, resulting in both fairly high levels of economic growth and rising regional competition. Both the state and institutions of regional governance thrive in major developed and emerging market countries, as governments recognize the need to resolve pressing regional problems and shift responsibilities from global to regional institutions. Given the preoccupation of the three major regions with their own concerns, countries outside these regions in Sub-Saharan Africa, the Middle East, and Central and South Asia have few places to turn for resources or political support.
Military conflict among and within the three major regions does not materialize, but internal conflicts increase in and around other countries left behind.

After breaking up the bipolar world in early 1990s, uncertainties remain for another scenario that might be defined as Post-polar world. US domestic preoccupation increases as the US economy slows, then stagnates. Economic and political tensions with Europe grow, the US-European alliance deteriorates as the United States withdraws its troops, and Europe turns inward, relying on its own regional institutions. At the same time, national governance crises create instability in Latin America, particularly in Colombia, Cuba, Mexico, and Panama, forcing the United States to concentrate on the region. Indonesia also faces internal crisis and risks disintegration, prompting China to provide the bulk of an ad hoc peacekeeping force. Otherwise, Asia is generally prosperous and stable, permitting the United States to focus elsewhere. Korea's normalization and de facto unification proceed, China and Japan provide the bulk of external financial support for Korean unification, and the United States begins withdrawing its troops from Korea and Japan. Over time, these geo-strategic shifts ignite longstanding national rivalries among the Asian powers, triggering increased military preparations and hitherto dormant or covert WMD programs. Regional and global institutions prove irrelevant to the evolving conflict situation in Asia, as China issues an ultimatum to Japan to dismantle its nuclear program and Japan – invoking its bilateral treaty with the US – calls for US reengagement in Asia under adverse circumstances at the brink of a major war. Given the priorities of Asia, the Americas, and Europe, countries outside these regions are marginalized, with virtually no sources of political or financial support.

Aside from each presumption, generalizations may also be needed across mentioned and other related scenarios. Mentioned scenarios can be grouped in two pairs: the first pair contrasting the "positive" and "negative" effects of globalization; the second pair contrasting intensely competitive but not conflicting regionalism and the descent into regional military conflict.
In all but the first scenario, globalization does not create widespread global cooperation. Rather, in the second scenario, globalization's negative effects promote extensive dislocation and conflict, while in the third and fourth, they spur regionalism.

In all mentioned scenarios, countries negatively affected by population growth, resource scarcities and bad governance, fail to benefit from globalization, are prone to internal conflicts, and risk state failure.

In all four scenarios, the effectiveness of national, regional, and international governance and at least moderate but steady economic growth are crucial. In all scenarios, US global influence wanes.

**Figure 1  World Trade as a Percentage of World GDP: 1990-2015**

Note: The constant dollar curve departs from the nominal curve largely because of the fall in price of IT-related traded goods in the 1990s and their expected price decline in the future\(^\text{116}\).

In a real world, these are not obviously the only assumptions we shall be prepared for. Other alternative scenarios may also

\(^{116}\) Source: Central Intelligence Agency’s Long-Term Growth Model.
evolve. Although the outlook for the global economy appears quite strong, achieving sustained high levels of global growth will be contingent on avoiding several potential brakes to growth. Five are described below.

The US economy suffers a sustained downturn. Given the large trade deficit and low domestic savings, the US economy – the most important driver of recent global growth – is vulnerable to loss of international confidence in its growth prospects that could lead to a sharp downturn, which, if long-lasting, would have deleterious economic and policy consequences for the rest of the world. Key trading partners would suffer as the world's largest market contracted, and international financial markets might face profound instability.

Europe and Japan fail to manage their demographic challenges. European and Japanese populations are aging rapidly, requiring more than 110 million new workers by 2015 to maintain current dependency ratios between the working population and retirees. For these countries, immigration is a controversial means of meeting these labor force requirements. Conflicts over the social contract or immigration policies in major European states could dampen economic growth. Japan faces an even more serious labor force shortage and its strategies for responding – enticing overseas Japanese to return, broadening the opportunities for women, and increasing investments elsewhere in Asia – may prove inadequate. If growth in Europe and Japan falters, the economic burden on the US economy would increase, weakening the overall global outlook.

China and India fail to sustain high growth. China's ambitious goals for reforming its economy will be difficult to realize: restructuring state-owned enterprises, cleaning up and transforming the banking system, cutting the government's employment rolls in half, and opening up the economy to greater foreign competition. Growth would slow if these reforms go awry, which, in turn, would exacerbate bureaucratic wrangling and increase opposition to the reform agenda. India's reform
drive – essential to sustained economic growth – could be sidetracked by social divisions and by the bureaucratic culture of the public service.

Emerging market countries fail to reform their financial institutions. Although most emerging market countries bounced back from the 1997-98 financial crisis more quickly than expected, many have not yet undertaken the financial reforms needed to help them survive the next economic crisis. Absent such reform, a series of future economic crises in emerging market countries could dry up the capital flows crucial for high rates of economic growth.

Global energy supplies are disrupted in a major way. Although the world economy is less vulnerable to energy price swings than in the 1970s, a major disruption in global energy supplies still would have a devastating effect. Conflict among key energy-producing states, sustained internal instability in two or more major energy-producing states, or major terrorist actions could lead to such a disruption.

**Figure 2 GDP by Major Countries and the EU: 2000 and 2015**

![GDP by Major Countries and the EU: 2000 and 2015](image)

*Billions of 1998 US$ (purchasing parity data)*

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117 Source: Central Intelligence Agency’s Long Term Growth Model.