

Annual report of the **ome*** 2007

Mapping new markets and opportunities

Taking part in global
business networks

[ABRIDGED VERSION]

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Published by:

COPCA (The Catalan Business Promotion Agency)

Departament of Innovation, Universities and Enterprise of the Catalan Government,
Generalitat de Catalunya



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Departament d'Innovació, Universitats i Empresa
Consorci de Promoció Comercial de Catalunya (COPCA)

First Edition: Barcelona, June 2007

Printing: 500 copies

Graphic Design: Toni Zamora

Typesetting and printing: Addenda

D.L.: B-48.841-2007

Footnote:

COPCA does not necessarily share the opinions expressed herein.

Foreword

The aim of the Observatory of International Markets is to provide knowledge on the future of international markets and new developments concerning internationalisation of enterprise, in order to collaborate in the planning of business activities and the shaping of proactive policies, whilst wishing to gain an anticipative edge and thereby rise to the challenges both Catalonia and its enterprise face today in their drive for internationalisation.

The presentation of this second Annual Report along with the prospective work included herein, form a statement of our firm commitment to improve the ability to look into future scenarios in a structured consistent, plausible and useful fashion.

The Observatory of International Markets, created with a mandate to serve the productive fabric, and most notably its SMEs, has started to build the framework of a collaborative project fortunate enough to count upon a wide range of experts, analysts, think tanks and institutions with a specific core task: analysis of the future.

The Observatory of International Markets concentrates its efforts on three spheres of analysis; future cross-sectoral global trends, future trends in markets and sectors with a major potential for business for Catalan enterprise, and trends applied to competitiveness, foreign trade, business models and management. Further detail on work underway in these areas is given below.

Global trends

The aim of this area of research is to provide prospective knowledge on cross-sectoral global trends that assist in the strategic planning of enterprise. This work is produced by the team of the Observatory specialised in systematic analysis of new trends, transferring relevant information from the major international research centres.

A major element of this work is the **Annual Report of the Observatory**, which analyses the most relevant factors that go to make up the probable evolution of international markets, their effect on world trade and upon our own economic and business environment. *Mapping new markets and opportunities: taking part in global business networks* is the second Annual Report of the Observatory.

Worth mentioning here too is the groundwork done on underlying consumer trends, ICTs, logistics, and outsourcing, all part of the research papers published by the OIM, whilst not forgetting the creation of the Barometer of International Relations focusing on the future of the regulatory framework of international trade to be undertaken in the framework of the Agreement with the Chair on the WTO-Regional Integration of the University of Barcelona. It is designed to act as an indicator to show the level of attraction of international markets, an annual study on the variables that go to make up potential for business, such as; macroeconomic environment, costs and prices, productivity of labour and human capital, technological capacity, suitability of a climate for doing business and working conditions.

Market and sector trends

The aim of this area of research is to provide strategic knowledge on future sector trends in a variety of countries and international regions with a view to drawing greater attention and debate on the challenges the Catalan economy faces in its drive to internationalise, given changes in the competitive dynamic of sectors and markets.

Along these lines, mention should also be given to the creation of an ongoing map of markets for Catalan SMEs and sector analysis highlighting the most outstanding business opportunities in the mid term in the countries under study.

This area of work pays special attention to the most dynamic markets/countries, where the greatest mid and long-term changes are taking place, and where research work is oriented towards the analysis of foreseeable evolution of respective sectors, (with a time horizon set at between 5 - 10 years). It also aims to identify possible changes in their structure and competitive dynamic, identifying trends and opportunities in the countries and international regions being followed.

Work has now been completed on global scenarios in the evolution of emerging markets, mid and long term opportunities for Catalan SMEs in the South Mediterranean in different sectors, as well as the analysis of opportunities stemming from the recent expansion of the EU. This year, work will also be carried out on the future of various strategic sectors in the fastest growing Asian economies, as well as those of Central and Eastern Europe and Latin America. This work will go to make up part of the OIM study collection.

Applied trends

For this section, the aim is, firstly to provide knowledge related to new approaches to competition and international trade, new strategies, new management and international models and how they can be applied to our own context. The works of this collection are decided upon within the Forum of Knowledge Centres, made up of the major universities and businesses schools of Catalonia, whose goal is to channel the transfer of this learning to the business community.

Within this area, five works have been completed, namely; A comparative analysis of Catalan exports; a study of export and competitiveness by enterprise and sector; an international comparison on strategies, forms of organisation and key factors for success; Analysis of new ways towards internationalisation: born global companies; and the management of innovation in internationalisation processes. Those areas started on this year include work on: Internationalisation and management roles: the management profile of Catalan enterprise as a determining factor in international business, Analysis of the evolution of the comparative quality of Catalan exports, A study on enterprise networks as a key factor in competitiveness and Analysis of the evolution the quinary sector in Catalonia. All the above will go to make up the collection of OIM Notebooks.

Secondly, a further aim of the work undertaken by the Observatory is the ongoing monitoring of the evolution of trade and investment of Catalonia in international markets. For this purpose, a number of reports have been produced providing detailed periodical data broken down into product types, countries and geographical regions, or analysis of the temporary evolution of the market share of Catalan exports, as well as the report on the export climate of Catalonia in collaboration with the statistical organisation IDESCAT, based on a survey of 600 exporting firms in order to determine the current and future situations of some of the variables which influence Catalonia's foreign trading practices.

Lastly, it should be added that one of the fundamental directives of the Observatory of International markets is that of crystallising relevant knowledge in order to improve the decision making capacity of enterprise, leading to development of new business models, new internationalisation strategies and new, products, in tune with the latest directions taken by international markets. Another aim is that of efficiently communicating the knowledge generated by Catalan enterprise, ideally through the *international Anella*, as well as the different communities of practice they are part of, in order to provide them with greater impetus.

The *international Anella* is a gateway to bolstering internationalisation of enterprise, associations, agencies and institutions in Catalonia. It has a variety of materials available ranging from the reports of the

Observatory of International Markets to current news updates, an agenda of activities to be undertaken, aid procedures etc. It is organised by communities of interest of a sector and geographical division with the goal of exchanging experience and knowledge on specific areas as well as focusing on the most important dimension of its work: collaboration among enterprises. Indeed, this organisation is also called to act as a catalysing element in the formation of local networks open to insertion and participation in international networks too.

The combination of both elements; prospective knowledge and links to networks based on professional and global relationships, open to the outside, can pave the way for increasing early detection of new opportunities, make a contribution to gaining anticipative capacity and at the same time give a major impetus to achieving greater dynamism within enterprise.

Maite Ardèvol

Director of the Observatory for International Markets

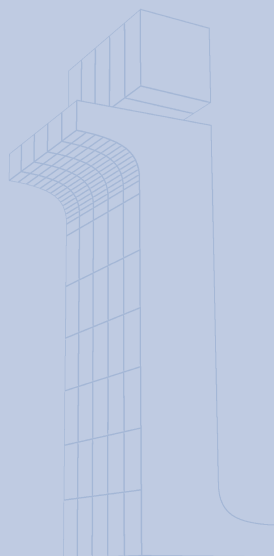
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10 underlying trends: from the globalisation of knowledge to the immaterialisation of the business model



10 underlying trends: from the globalisation of knowledge to the immaterialisation of the business model

This first section looks at the underlying trends that have attained greatest relevance in 2007, in the opinion of a variety of experts and major international research centres. It goes to reinforce several of the underlying trends covered in the 2006 Annual Report, and takes in new views related to some of the trends already observed. These are analysed in the first chapter of the Annual Report of The Observatory of International markets 2007, contributing new perspectives and providing us with a new reference map. Chapter 2 covers the present and future of emerging markets in greater depth, while chapter 3 looks into new realities that both contrast with and confirm these underlying trends, as well as analysing the implications and consequences of the growing integration of emerging economies on the world economy itself and its effect on Catalonia. This abridged version brings together the main ideas expressed in the full report.

Underlying trends or *megatrends*¹ are the phenomena that can be observed now that evoke the potencial for change. These trends are one way of defining present and future, and the interaction among different trends is as important as each of the individual underlying trends themselves. Analysis of these trends forms the starting point for the analysis of our reality, provides some of the key assumptions we make about future and contains part of knowledge on the future in addition

to elements of uncertainty. It is difficult to foresee how society, enterprise and individuals will act and react to these forces that both contribute to and shape this probable future.² Underlying trends have a different meaning for different individuals, companies or organisations, and produce a reaction to or against them, whether consciously or otherwise, when reinterpreted within the context of our reality, e.g. globalisation (vs anti-globalisation, individualisation (vs new communities), accelerating change (vs *slow movement*). These *macro*trends may endure over time or may suddenly change direction due to unexpected events, and with major consequences that give rise to a new or even opposing one with either greater or less force. Trends are used to inspire scenarios in strategic work across the board in management practice, from corporate strategy to innovation of markets to business development, to product development, marketing or human resources.

1. Globalisation intensifies: Towards a Spiky World?

The growing interconnection with the expansion of the flow of capital, persons, goods, services, information, technologies and cultures is by no means a new phenomenon, it intensifies and will have different consequences in the future. Mil-

1. John Naisbitt defines the term *megatrends*, in the 1982 best seller of the same name, which at the time was widely used in prospective studies and trend analysis. In October 2006, he published his latest work; *Mind set*.
2. There are models to forecast social events and for measuring social behaviour patterns.

3. *Annual Report 2006: Future trends and new realities*. OIM Paper num. 1: *Future trends in consumption*. 2007, Observatory of International Markets COPCA.
4. CIFS 2007.
5. Torrent, R., 2007 OIM Notebook, num. 5: *Future of the Regulatory Framework*. 2007, Observatory of International Markets, COPCA.
6. As mentioned in the 2006 Annual Report of the Observatory of International Markets.

lions of players have joined the global economy in few decades, and compared to the past and with other integration processes, the impact this time is much greater.

At present, enterprise and capital are perhaps the most global spheres. FDI tops private financing mechanisms and contributes to linking up the global economy, and labour mobility is approaching productive capitals as a way of shaping the world economy. We are undergoing a growing international division of labour and increasingly moving into global sharing production, as born out by the analysis in the coming sections, and more and more, consumption is leading us to share a determined set of values.³ Globalisation intensifies and is making us more similar to the rest of the world, globally focused, but it is also making us more aware of local variations and of ties that bind us to our respective lands. Regionalisation in markets and enterprise also continues to intensify.

At the same time of growing liberalisation and expansion in trade in many countries and regions, it does not appear that in a near future the world will be sharing either a common set of policies or values.⁴ Although a world of nations and regions may be forming through free world trade, deep seated integration is taking place only at regional level.

To take an example, regionalisation of the legal trade framework is not a new phenomenon, but it is clearly a growth phenomenon, notably in developed countries, mainly the US and Europe, although present throughout the developing world, driven not only by economic and trade ties, but increasingly by politics and security considerations. It is also exposed to the risk of failing to achieve sufficient ground in multilateral negotiations. To illustrate this, Asian nations are considered nowadays as the most proactive states when it comes pushing through regional agreements and their own bilateral accords, which now account for a quarter of all existing regional agreements. According to the Asian Development Bank, the timetable for trade liberalisation will lead to the establishment of a free trade zone, especially among those states of the South East, within the next 10 - 15 years. In fact Asian regionalisation is already being perceived in economic terms. Inter-regional exports among the states of South East Asia already make up some 55% of total exports,

a percentage only bettered by the EU, where inter-regional exports totals 65% of overall trade flows, (whereas the NAFTA average is around 45%).⁵

As discussed in the coming chapters, the core of this trend is formed by asymmetries in the distribution of profits, the limited headway made in multilateral agreements or the scenario of a *spiky world* in which talent, creativity and dynamism are concentrated in specific locations. The rate of convergence between regions and emerging economies is at best moderate, with major gaps between one country and another.

Citizens and consumers alike also appear to portray culturally distinct behaviours and preferences for products and services. A growing number of multinationals organise tailor-made production and marketing for each market.

The main implications behind the growing pace of globalisation, with an upward growth of integration into the world economy of emerging markets will be examined in the following chapters.

2. Convergence information, bio and nanotechnology, and especially energy

The growing convergence between info-technology, bio and nanotechnology, and technologies linked to energy forms, will be one of the main driving forces for change in the coming years. Companies, which know how to efficiently manage these technologies, will gain a competitive edge in the future.⁶

Information technology has led to major changes in recent decades with PCs, Internet, mobile phones, industrial robots, PDAs, ipods, etc. By 2020 computers will be processing data 200 times faster than today with a memory 1,000 times larger. Convergence between computers and networks will lead to a barely imaginable leap in innovation, whilst computers and robots will take a bigger role in more complex tasks, with Internet facilitating the birth of new virtual industries.

Biological developments have given us in vitro fertilisation, genetic engineering and new phar-

maceuticals products. Advances in biotechnology have furnished tools to cure disease, create new drugs and foodstuffs, while biotechnological research is opening doors for new treatments such as gene therapy and cloned organ transplants. Genetic modification of plants and animals may hold the key to ending famine, but biotechnology also raises numerous ethical questions: Is it right to tamper with life? Is genetic modification of fauna and flora being used by the West as another way of exploiting the third world? Might biotechnology one day trigger a worldwide catastrophe?

Nanotechnology as its name suggests, enables the creation of material and devices on a nanometric scale, i.e. a millionth of a millimetre. It has led to a convergence of domains allowing the creation of nanoscale engineering and the redefinition of applied molecular science.

Many analysts believe that nanotechnology will take centre stage amongst technological innovations of the future.⁷ Nanotechnology has become a prime research field in scientific and university circles worldwide and a priority at institutional level (the US, Japan and the EU have recently allocated major sums in order to advance basic research into this area). The bright potential of this technology arises, in part because it is believed that it will have an impact on a wide range of industries and services. The most promising emerging applications of nanotechnology are currently in production, converting and storing energy, improvement of agricultural yields, water treatment, diagnosis and curing disease, drug dosage systems, food processing, curbing air pollution, construction, monitoring of health and early detection and control of contagious diseases. In just a few years, nanoelectronics may replace microelectronics, and further ahead, there could be nanomachines, such as microscopic robots designed for new specific medical applications.

One of the challenges of the 21st century will still being the search for energy supplies in both emerging and established industrialised nations. Experts estimate a 60% rise in the demand for energy by 2030 with an annual investment requirement in of some 568 billion dollars.⁸ Finding a viable alternative to oil⁹ and achieving a major improvement in energy efficiency will proba-

bly become a top priority. Major research is being undertaken into other sources like sustainable, wind and solar energy, as well as with alternative fuels like hydrogen and biofuels. Energy which is concerned for transportation accounts for 50% of overall energy use, and as a consequence of this large share, it is likely to absorb considerable research effort. Use of new raw materials will also encourage the development of new technological processes and advances related to biotechnology. The use of biofuels may be associated with other risks, such as the over exploitation of intensive agriculture which relies on wholesale use of fertilisers and pesticides and machinery requiring oil based substances. It may produce large scale deforestation in order to open up land for the increased production of the raw material for biofuels, it may also produce substitution of food crops, and price increases of the raw material in international markets. Ethanol production has doubled in the last five years and an extrapolation of the distribution of production by continent by 2050 points to Latin America and sub-Saharan Africa as two regions with the greatest growth potential for croplands, whereas Oceania heads the table for more industrialised lands. Towards 2030 it is foreseen that a quarter of all transport fuel needs will be met by biofuels.¹⁰ Some analysts incline towards progress being made in nuclear energy, namely in traditional fission and the still unproven fusion.

3. Global ageing, curbing over population and growing urbanization in developing nations

Consideration must also be given to progressive ageing of the planet's population, and how this might change patterns of consumption and work, public finance and savings, and investment and productivity, in the more advanced as well as emerging nations such as China. There are projections that speculate that by 2050 in industrialised nations the population will drop by 1 million per year. In these scenarios, Italy will have 22% less inhabitants, and Japan 14% less. Some emerging nations will lose population too, such as Russia and The Baltic states. Until 2050, just nine countries will account for 50% of world population growth, namely, India, Pakistan, Nigeria, The D.R. Congo, Bangladesh, Uganda, Ethiopia, US and China.

7. *Annual Report 2006*, Observatory of International Markets, COPCA.
8. *Outlook 2007*, The World Future Society.
9. Article by Mariano Marzo, of The University of Barcelona: "Oil prices: a new cycle or rupture?"; in *Annual Report 2006. Future trends and new realities*, Observatory of International Markets. COPCA.
10. OIM Article, May 2007: "Biofuels: An investment opportunity?" Analysis and Prospection Unit of the Observatory of International Markets. COPCA, available on www.anella.cat

11. Outlook 2007, The Future World Society.
12. Annual report 2006. Future trends and new realities, Observatory of International Markets. COPCA.
13. World Bank 2007, Global Economic Prospects 2007.

Since the mid-fifties of twentieth century, birth rates have been dropping, which leads to a slowing in population growth. If this trend does not continue, then by around 2050, the planet could have between 9.5 - 12 billion inhabitants.¹¹

Most OECD nations have declared ageing to be a priority for their political agendas, they see a growing social concern arising from pressure on the pensions system, health and welfare spending, and burden on national treasuries. These fears fuel the demand for advances in life sciences (biomedicine, non-scientific applications etc.), and for improvements in the health sector and care (and leisure) of senior citizens. In some emerging economies, such as China, also face similar challenges, while also dealing with huge inflows of young people onto the labour market.

Other consequences induced by protecting of this trend are a weakened social dynamism and reduced population of working age, with corresponding pressure on labour markets and salaries, greater international competition and reactions in the form of greater offshoring and outsourcing. The worrying extends even further to include a change in how immigration is perceived, as forecasts set the pace of international migrant fluxes to developed regions at an annual rate of 2.2 million individuals.

Urbanization is also taking on increasing importance. It is often estimated that in developing economies urban population growth could make up half total growth rates in the coming half century. 48.3% of the world's current population of 6.5 billion live in urban areas, whereas 76% of developed world inhabitants are city dwellers. Forecasts point to the figure reaching 53% by 2030; some 3.9 billion.

Nine out of the ten most prolific counties in terms of urban growth, that could make up more than half this rise between 2025 - 2030, are developing nations, namely: Indonesia, Pakistan, Brazil, Nigeria, Mexico, Ethiopia, Iran, Colombia and Korea (while tenth comes Germany).

Just 2% of cities with the highest growth rates are located in industrialised nations, with 40% in middle-income nations, and nearly 60% in low-income states. By continent, Asia leads, housing

nearly 60% of these cities, followed by Africa with 25% and Latin America some 15%. Urban growth is sharpest in cities of intermediate size, between 1 - 5 million inhabitants, which have seen an 80% rise in their populations over the last 20 years.

It is also worth pointing out that of the current 21 megapoli—cities with over 10 million inhabitants—only 4 are to be found in advanced nations—. This generates new demands for goods and services, from water to transport. At the same time this growth can result in environmental problems. Cities represent places of opportunity and require effective management to provide services in order to create safe and healthy environments.

4. Growing prosperity and a rise in inequality. Changes in patterns of demand and the onrush of emerging economies

Growth in prosperity is an underlying trend in most OECD countries and for many groups of emerging states, which are showing marked growth, although with notable differences, which in some cases will become more pronounced.

The gap between emerging nations and the US and EU will narrow, if continues high economic growth rates and an increase in employment in developing nations, which will lead to a rise in their prosperity¹² as part of this gradual process of convergence. It is projected that towards 2030, states such as China, Mexico or Turkey will have an average standard of living equivalent to that Spain currently enjoys. It is also estimated that the number of people living in extreme poverty (less than a dollar a day) will come down from the current 1.1 billion to 550 million by 2030.¹³

It also has to be considered that a new world middle class is emerging, which will have an unprecedented impact on world demand and with new patterns of exigencies, as analysed in the following chapters of this abridged version of the 2007 Annual report. Some estimates forecast that by 2030 there will be some 1.2 billion people in developing countries enjoying family incomes of between \$16,800 - \$72,000, expressed in PPP, a considerable increase compared to the current figure of 400 million. Moreover, they will have a

demand for quality products, international levels of education, and possess spending power to buy cars, durable goods and go on foreign trips. Other contemporary calculations set the segment of incomes between \$3,000 - 20,000 per annum at this time to be in the region of 1.4 billion, which translates into a market of some 12.5 trillion dollars. To take an example, forecasts indicate that the Russian middle class will grow from 50% to 85% in the next ten years, whilst its Chinese and Brazilian counterparts will rise from 5% to 40% and from 25% to 50% respectively.

Asymmetries in the sharing of the benefits of globalisation among nations and within a given society raises a number of questions on factors that may influence its continuity in the coming decades.

Continued economic growth is expected to change the demand for new products, for new business models and new activities. When a country grows, new needs arise, more intangible products are consumed, i.e. leisure, entertainment, experiences, services, savings and investment.¹⁴ Greater prosperity also tends to change our consumer's habits of traditional products, and have to take into account the demands of health, quality, trust, respect for animals, etc.

Greater prosperity and higher consumption change the relationship between costs, prices and profits, and the former relationship between prices and production costs, based on the contribution of labour resources and capital will no longer exist. The lion's share of the value of tangible products in the future will not be represented by production costs, but by the knowledge that goes into them: design, development, marketing, distribution etc. On the other hand, as studied in depth in chapter 3 of the Annual Report, and summarised in the following sections, the insertion of emerging economies into the world economy exercises a competitive pressure on the most highly skilled jobs in developed countries too, due to the increasing level of qualified personnel in emerging economies, which will lead to an improvement of the relative position of skilled labour and labour intensive skilled sectors. As born out by further analysis in the following chapters, the process of convergence in labour costs in some emerging economies has advanced,

opening up windows of cost advantages in other countries. This puts greater pressure on individuals and enterprise alike that have to be geared to change, creativity and innovation.

Intra-society income differences can also give rise to polarisation of consumer patterns, seeing a high demand for luxuries and another for goods and services specifically targeting those with more limited spending power. This gives rise to new business strategies and opportunities in novel market segments situated at the base of the pyramid.¹⁵ Other recent complementary approaches might also come into play corporate social innovation.¹⁶

There are an estimated segment of 4 billion people at the base of the pyramid, with a spending power of less than \$3,000 in terms of local buying power (income in terms of current dollar rates ranging from \$3.35 per day in Brazil, to \$2.11 per day in China and \$1.56 in India), altogether total some 5 trillion dollars per annum in terms of global consumption, and with a specific defined set of needs. Major variations can be observed between countries and regions, e.g. Nigeria has the highest concentration of low-income groups, whilst the Ukraine amasses the highest income segment at the base of the pyramid. Rural zones dominate in African and Asian markets in this new consumer segment. This contrasts with urban areas in the same segment in Latin America and Eastern Europe. Spending models also differ from one place to another. Although food takes precedence in family spending, it tends to decline proportionally as a given country or region increases overall income levels, whereas housing costs remains stable and transport and communications outlay soar. For all regions, half of family spending on health is allocated to buying medicine.

Of the total 5 trillion dollars generated in this sector per annum, Asia (including the Middle East) is the largest, with a population of 2.86 billion and a total income of 3.47 trillion dollars, representing some 83% of the population and 42% of total spending power. Eastern Europe amounts to some 458 billion dollars, taking in 254 million people in this group or 64% of the population with 36% of its income. In Latin America, the market at the base of the pyramid is estimated in 509 billion dollars - 360 million people or 70% of

14. Papers OME num. 1: *Future trends in consumption*. 2007, Observatory of International Markets. COPCA.
15. The fortune at the bottom of the pyramid by CK Prahalad and Stuart L Hart, *Strategy+Business* num. 26, winter 2002 www.strategybusiness.com and the recent work of the CFI and World Resources Institute, where for the first time, apart from the analysis of business cases, the potential of this new market has been measured in *The Next 4 billion: market size and business strategy at the base of the pyramid*. 2007 CFI, WRI, Allen L. Hammond, William J. Kramer, Robert S. Katz, Julia T. Tran, and Courtland Walker.
16. CIFS, *Future Orientation*, 2007.

17. CIFS, 2007, *Creative Man*.

the total population, but with only 28% of total family income, a much smaller ration than that found in other regions. Africa has a market of 429 billion dollars representing 95% percent of its population—486 million people and 71% of its spending power. Sector spending varies in size here. Some outlays are relatively small, such as the amount spent on water (\$20 billion), or ICTs with \$51 billion, although the latter is taking off. Others include media such as healthcare (\$158 billion), transport (\$179 billion), housing (\$332 billion) and energy (\$433 billion). Food is the dominant sector with a total spending of 2.8 trillion dollars.

5. Individualisation in a networked society: more connected than ever

Individualisation is reflected in the changes taking place in collective social rules. General rules and social values seem to be playing a less relevant part in distinctive social action. The stronger trend is centred around differentiation, based on individual values and from which a new balance is emerging between individual and collective values. Some believe that this is giving rise to the atomisation of value systems. They point to the shift in focus of branding towards individualisation as a key aspect of marketing and sales. In the coming years it is argued that this have a large impact on enterprise strategy. Individualisation can be interpreted as the gradual dissolution of traditional segments. In fact it is increasingly difficult to split consumer categories and at the same time maintain the internal consistency of a defined group.

New consumers increasingly expect individual and unique products, adapted to their own particular needs. Mass produced products no longer express anything personal about a given consumer's personality. This implies either a wide variety of suppliers or functions and activities that allow consumers to be their own designers, fitting the product to themselves. This degree of personalisation can become a reality with the aid of today's technology. It is now a possibility, with new advances, new opportunities are coming into play. As pointed out in the 2006 Annual report,¹⁷ this trend is a consequence of the coexistence of a new form of social logic based on creativity and innovation with an industrial and emotional logic

that is providing solutions to the need for personal growth. This responds in part to dissatisfaction with former approaches in developed economies to ways of meeting the majority of needs. In this emerging post-industrial situation the need for personal growth is intrinsically linked to individualisation, creativity, self-realisation, interactivity, adaptability, and networks.

Moreover, the new generations of consumers are not passive consumers. The recent evolution of the social internet (Web 2.0) has armed the consumer with a mechanism to interact via such new media as blogs, photo postings, videos, prototypes, imaginary TV adverts, etc.

Recent examples can be found of companies that have successfully allowed consumers to participate in defining their product or service in a tailor made way and as a consequence have managed to strengthen the bond between the consumer and the brand.

These new consumers are evolving into prosumers that want to be part of conceiving their product and involved in customising it to suit their tastes and needs.

The *net generation* combines new collective values with individual ones and looks to join communities of interest. Often these are global communities of interest, with members that are familiar enough with the subject matter of the community in order to be able to share knowledge with other members. This new generation shows less interest in a single or unilevel community. Individual gain linked to the object theme of a specific community can help them to define themselves as individuals, even as they continue to belong to other groups.

Individualisation has strong links with other underlying trends such as prosperity, technological development, organisation into networks and with the new social logic based on creativity and innovation as well as urban growth.

6. Growing trade. From goods trade to task trade

Growth in types of trading activities is linked to other underlying trends, such as growing glob-

alisation, prosperity, individualisation and digitalisation. This latter phenomenon has made it possible to reach the consumer worldwide. The Internet is driving sales and reducing transaction costs. For business this means the ability to reach the world market. It has also helped raise the profile of more secondary or minority products; those typically relegated to a second division of sales channels because of higher risk and lower saleability. Chris Anderson describes this phenomenon as “The Long Tail”. Put together, the sales of less visible products is much higher value than those of the most popular goods in traditional channels.

The increased vigour of globalisation has greatly influenced the growth of this trade, as testified to in the following chapters, with a rise in the movement of goods, services, people and capital. The volume of world trade is forecast to triple by 2030. Prosperity and individualisation are speeding up sales, because consumers have more available income, whilst increasingly demanding individually adapted products.

As trade continues to grow, there will be a number of consequences, ranging from greater prosperity to further specialisation of business and of jobs. As explained in the following chapters, electronic networks and technological development are allowing for ever increasing interchanges of traded jobs, activities, tasks and services. This has clear implications for both within and between changes in specialisation that have impact on countries and societies alike, with repercussions on both income and welfare levels. Specialisation does not only affect products and differentiated services, but also phases and activities of the productive process. This is why trade, business and financial dynamics also illustrate the growing role of emerging economies. For a given enterprise, this means that it has to distribute more products that are more differentiated, which also means putting greater specificity into product development, innovation, marketing and sales. All of which pushes the knowledge economy further down the path of creativity.

Increasing trade gives individuals greater choice, while increasing competitive pressure on enterprise and generating a growing market for new products. Greater competition pressures compa-

nies to strive towards greater specialisation and efficiency. Some firms then concentrate their efforts into winning with scale economies, centralisation and standardisation. Others head the opposite way and concentrate on decentralising, flexibilisation and niche production, immaterialisation, marketing and customer service.

The changes driven by the Internet in the context of online information, economic organisation and social practices of production have led to the generation of new opportunities. At the same time, these changes have increased the role of non-commercial production, without ownership, with a set of emerging practices, such as software development, research, videos, and multi-use games. There is an increase of scope and models for a greater production of information and culture of an individual and cooperative nature, which is decentralised, lacking commercial goals, and independent therefore of strategies required for products under ownership. On the one hand this leads to a drop in production costs (computation, communication and storage), which make such resources affordable for most of the world’s population, and on the other it broadens the individual freedom to cooperate with others, adding value and without the limits required by productive capital.

In this line, certain “anarchistic” activities have been observed, which are spreading via the Internet to the real world, which may have a major impact on our commercialised world.

Such anarchistic activities on Internet are typified by a decentralised structure. They produce and distribute value from voluntary, unpaid labour. They have no underlying commercial motivation, but offer alternatives to commercial products and services, using protocols and rules that shape their development.

Growing concern over illegal copying of software, films and music, is part of this, although there are legal initiatives which compete with commercial services and products, as illustrated by the case of wikipedia, where people contribute voluntarily with unpaid work to the project. This can also be applied to include the idealist desire for non-commercial alternatives to products on sale. For a number of reasons, there is increasing production

18. www.theoscarproject.com. European futurist conference, November 2006.
19. Estimates from McKinsey Global Institute.

of these “anarchist” and non-commercial products, whose quality is comparable to those sold commercially and which challenge firms selling such items. *Opensource* software like Linux, Open Office suite, or the browser Firefox have obliged commercial producers to develop better products in order to be able to compete. Wikipedia has led a challenge to the Encyclopaedia Britannica, where the latter cannot compete on the sheer bulk of information, and has thus had to differentiate on trust and credibility of information. Then there is Youtube, whose content is user fed, and now more widely viewed than any commercial single TV channel on the planet.

A new scenario of competition has appeared for this type of product and has obliged companies to constantly convince users that their product is superior. In fact, users themselves are the net winners of the battle notably in terms of price. Commercial manufacturers can only compete by offering a much better product in matters of guarantees or service than the free alternative.

This new “anarchy” is by no means limited to digital knowledge on the Internet. This trend can also be observed in the physical world, as illustrated by the case of the Oscar Project that started up in 1999 with the aim of designing and developing a car along open source lines. This project was not conceived with the goal of designing a car as vehicle full of the latest high tech equipment, but searches instead for greater simplicity and functionality, which will allow for greater mobility. The Oscar Project is not only about building a car, but also about looking into new forms of mobility and the transfer of an open source idea to the physical world, taking in a large community. In December 2005, the version 0.2 appeared.¹⁸

Another such recent initiative is that of the MIT's Nicholas Negroponte: *one laptop per child*. In February of this year production started of a computer which costs just \$100 with the aim of distributing 100 million units to schools in the developing world. It has been developed in conjunction with a network of universities that have undertaken the work unpaid. Open source software has helped keep costs down, whilst offering several innovations. In fact, as a result of this initiative, Microsoft and Intel are now developing a laptop to compete with this for just \$400 and with similar aims.

The growing alternative of these new cooperative models, created from unpaid work, to the rising trade in goods, services and labour, along with the atomisation of values, links to the trend towards *corporate social innovation*, with a new social logic based on the creativity and the immaterialisation of the business model itself.

7. Globalisation of knowledge: from working power to brainpower, from cheap manpower to cheap brainpower? Learning becomes informal and creativity gets organised

Extending the logic of certain phenomena might lead to the eventual disappearance of the current division of the world economy between the developed and rich nations (knowledge economies) and developing and poor countries (industrial economies). Although, as analysis in the following chapters goes to show, the bulk of those joining the world labour supply are generally unskilled workers from developing nations, though in relative terms, a notable increase of highly skilled personnel is also being observed. Learning and creativity as factors for greater competitiveness could spread within the coming years, and the Asian economies can be expected to play an important role when it comes to expanding the knowledge base. At present, India heads the developing world talent league, with 30% of its skilled workers, followed by China and Russia with 11 and 10% respectively.¹⁹ China has recently adopted a long term policy to guarantee its workers build on their skill level year by year. With 750 million on the labour market, this is a major challenge for the Chinese education system. South Korea has been heavily investing in education and research for a number of years now, with the result that this Asian nation is now the state with most PhD per capita worldwide, but with some 20,000 jobless PhD too, a clear sign that it is difficult to make the education system and the labour market work hand in hand. Recently, South Korea started to invest in the professional development of the unskilled workforce, i.e. the majority of its workers. The strongest Asian economies, i.e. China, South Korea and India will, to a large extent, become the rich economies among the knowledge economies, not just in the realm of skilled labour, as is the case of Indian outsourcing, but also in research and

development too. China currently has 820,000 postgraduates and India 2.5 million university students. The picture changes in relative terms.

Globalisation of knowledge will grow, and current differences in the quality of education between Asia and Europe will diminish in coming years. The consequence of this for labour and professional prospects in developed countries is an open debate. More competition may lead us from *cheap manpower to cheap brainpower*, as discussed in the following chapters.

Another dimension of these changes is that learning is becoming more informal as such formulas as learning by doing are becoming increasingly common in the workplace, and are starting to become a priority area in pedagogical research. At the same time as new tools are being developed to nurture the highly prized creativity of workers through processes which are becoming more organised and effective.

As creativity becomes more systemised, acknowledgement of informal skills is also on the rise. Today, many organisations are concerned about obtaining knowledge from creative employees. The loss of a creative employee to many firms means the loss of an important body of learning and innovation potential for the company. In the coming years, new tools to stimulate creativity, both collectively and individually will furnish business with better management practices in order to establish a firm place for innovation and development of knowledge within enterprise. Already for many firms wishing to be on board the global economy it is essential to have a strategic approach to creativity and learning.

This trend is linked to growing prosperity and to a spiky world; to the organisation into networks and to immaterialisation of the business model and to the new social logic based on creativity and innovation.

8. Increasing organisation of work, production and innovation into networks: From the community to the network

Networking is a natural phenomenon amongst human beings. A core element in all networks is communication, which motivates society, culture,

identity and economy alike. Networks have become a central expression of the way we live and have permeated our thinking. Greater mobility, the Internet, mobile phones and increasing prosperity have all transformed opportunities for networked communication and organisation.

Technology, transport and a greater openness of trade and finance, coupled with greater opportunities in FDI have all created a more favourable framework than ever for partitioning the value chain into different locations, setting up global production chains between suppliers and clients beyond national boundaries. A recent European study highlights the role of business relationships that go beyond those formerly in place with suppliers and clients. This situation is keenly felt by enterprises, producing a resounding impact on competitiveness.²⁰ Productive processes become decentralised, giving way to global production centres or to specialisation in stages or activities through the production process which can be physically or electronically interchanged, as discussed in the following chapters. Worth mentioning here is the ever increasing importance of the role played by services in the shaping of global networks. This is part of the advent of global innovation networks and their more social nature, as well as the growing impact played by ICTs in linking production networks, the coordination of productive processes and in the transmission of results, all with greater efficiency and quality, thereby broadening traded services and consolidating labour, production and innovation networks.

The new social internet, often called Web 2.0, is bringing new applicatives and a new generation of users wishing to share knowledge. It enables to the creation of local and international networks with common aims and interests in a matter of hours, outside the known players and “official” bodies. The tools used range from mobile telephones, wikis, blogs, instant messaging, VoIP and podcasts. In fact, Web 2.0 has been growing exponentially. There are now at least 55 million blogs, with a new one set up every 7 seconds. A small part are about either positive or negative aspects of products and services. But given the scale, even a small proportion is very important and generates powerful bodies of opinion. Indeed it is reckoned that in the coming years, each firm and organisation of any size will have its own, well

20. Schmiemann, Manfred, Eurostat 2007, Industry, Trade and Services, Statistics in focus 57/2007.

21. Zygmunt Bauman, *Relationships community or network*. CIFS Future Orientation 2007.
22. The Economist Intelligence Unit 2007, *Sharing the idea, the emergence of global innovation*.

organised panel of users taking part and discussing products, advertising, investment, results, services and innovation too.

This trend is strongly linked with the development of other trends, such as digitalisation, globalisation, individualisation, growth of prosperity and trading, social innovation and immaterialisation.

The value of a network grows exponentially as a function of the number of members participating. Changes in net society do not come about in linear way as in the industrial world, which means that changes that required decades in the past are happening much faster now.

Network organisation affects technological, social and economic development alike, and what we are witnessing is just the beginning. The implications of the fast development potential of a net society for business mean on the one hand that it can expand rapidly and on the other, any industry can be left out of the market in a short space of time.

Networks can eliminate hierarchies and create new open and decentralised social structures due to the levelling effect of ICTs. But the need to manage global complexities can also generate needs on a worldwide scale too, leading to concentration and hierarchisation. Networks challenge the way of thinking of traditional institutions, as people participate in networks that are vastly different from those in the past. In the words of sociologist Zygmunt Bauman in a recent interview,²¹ it is no longer up to the state or other social organisations to ensure that self-fulfilment, professional and opportunities to enhance identity are strongly bound. With increasing individualism, the idea of the community, of sharing interests, values and living conditions, solidarity and collective identity are transformed into the idea of a network that lacks a common denominator and that is based on individual identity, and that is without ethical content, yet functional.

9. Social innovation on the up

There are clear signs of a new wave of social innovation: the growing cost and complexity of innovation, the rapid development of skills and expe-

rience in emerging markets, the rise in offshoring in those countries with low labour costs and higher quality of workforces and the generation of global networks. In a recent study, India, the US and China stand out as preferred offshoring destinations for R+D in the coming years.²² A rising need can be seen to open up the innovation process to different partners, universities, clients, suppliers, and strategic partners. This is a part of a growing strategic orientation that centres the process of innovation on the client. Businesses and organisations increasingly find themselves with a global client base that turns global innovation networks into a new growth model. Other areas under the spotlight of innovation, such as the social process, dovetail with corporate social responsibility. At present few companies have managed to evolve from corporate social responsibility to corporate social innovation, but new initiatives are being undertaken. Innovation and its application is a growing social process that takes in broader sectors of society as a whole. More and more, corporate innovative activities are concentrating on the research and development of human needs.

Nowadays, social innovation is catalogued under a variety of concepts; political and organisational change, changes of attitude, market or technological development. The latter includes as an example many ICT advances, along with many new mobile telephone community applications via Internet, such as ohmynews.com, wikipedia, myspace.com, blogs, and Linux, although they are not usually described as instances of social innovation.

Part of the reason social innovation is gathering momentum now and probably in the future is due to the scale of the challenges that are generating this need for social innovation, from both commercial as well as a social standpoint. There are major challenges related to integration, ageing population, chronic diseases, stress related illnesses, balance between work and family life, and growing inequality. In the marketplace, business is increasingly turning to social innovation with a growing involvement of clients, media, society and workers alike. Although change may not come as quickly as observed with other trends, there is now greater awareness as to the nature of social innovation and how it can be developed in practical terms.

Enterprises have always played a major role in social growth and innovation, but as a rule, efforts have been directed as generating profits with the development of new products, processes and markets.

A number of companies have taken the first steps towards a more strategic approach in terms of social innovation. On the one hand, their innovation processes have become more social, involving a greater number of players, and on the other it has been precisely their social role, that of corporate social responsibility that has made them more innovative. There are also critics, who point out that innovation is heading more in the direction of social process. They argue that innovation and change depend in broad terms on the idea an individual may have in the first place, or in other words, that the world needs individuals that pose the right questions that can then be answered collectively.²³

Companies are increasingly offering services and experiences for which the involvement of client feedback has become part of the product, even when it comes to physical products and service represent a major part of the production process. It is no longer the technical prowess or patents of a company that decide commercial success, but the skill in interpreting and responding to the needs of users and clients. This can be achieved via ongoing dialogue with them. It is true that scientific and technological developments open the door for new opportunities that enhance the process, but the developing of new needs also influences technological and scientific development.

Corporate social responsibility (CSR) has become a catchphrase in many firms and for some (especially the biggest), social commitment is awarded almost the same level of importance as financial and environmental information in their annual reports. Consumers are also more concerned by social impacts, because workers want to identify with the social values of their company. New communications media have also contributed to bringing about a greater transparency. Competition is global and consumers can easily find alternatives. Media, politicians and institutions have become more demanding about corporate practices.²⁴

In the change from CSR to corporate social innovation (CSI), two major factors have taken centre

stage. Firstly, the focus on business opportunities rather than on risk control, and secondly that of alliances and collaboration agreements. CSI can become a decisive factor in the make up of society in the long term. It has a great potential that neither business nor society can ignore, nor can it be left to stumble on by chance. In the future, social growth and innovation will become a strategic issue.

Many examples of social innovation exist, such as the \$100 computers or the initiative of the Nobel Laureate Mohamed Yunus, founder of the Grameen Bank. In Pakistan, DHL rather than contributing financially to aid organisations, took on all logistical responsibility for transport and distribution of emergency supplies. The main product of the biotech firm Aresa is Red Detect; a genetically modified plant that changes in colour from green to red when exposed to explosive material, ideal for use in landmine detection. In order to avoid it spreading genetically modified material, it has been sterilised to avoid seeds germinating.

10. Immaterialisation of the business model

The list of current changes with potential implications for the future is a long one: a new economic paradigm, a new social logic based on creativity and innovation, globalisation of knowledge, from working power to brain power, spiky world, integration of emerging economies into the knowledge economy, from goods trade to task trade, the growing importance of trade in services, organisation into networks, new “anarchy” on the internet spreading to the real world, social growth, corporate social innovation, social capital, bridging social capital, social economy, social capitalism... In reality, altogether these phenomena appear to be shaping a future in which profit is no longer the sole aim, where networks will be more important than ever, and where the spotlight will be on sustainable businesses, personal growth and self-realisation. This is a future where creativity will play a pivotal role and make the difference both locally and globally—where the immaterial will gain ground.

Arie de Geus²⁵ maintains that old style capitalism as the core economic system is becoming diluted

23. www.nowandnext.com
24. *Annual Report 2006: Future trends and new realities*. Observatory of International Markets. “10 key trends”.
25. Arie de Geus a *Don't stop thinking about tomorrow*, CIFS, Copenhagen 2006.

26. Alvin Toffler, "Revolutionary Wealth" 2006.

within a broader emergent system. He bases his argument on the fact that the most important factor in production has moved from that of land/property to capital to the current transfer of capital to people, talent and creativity. Industrial era forms of capital have lost the dominant position and have become commodities. Traditional forms of capital have lost its status in the same way as profit in its traditional guise. In the opinion of Alvin Toffler, the mainstays of capitalism, namely: property, capital, markets, concepts like money, the law of supply and demand are becoming blurred. In his latest book²⁶ he explains that physical and material products always contain immaterial elements and that this immaterial side of material property is doubling several times daily. The reason for this is that each product increasingly relies on research and development, on the way it is managed, on human skills and creativity. Property in the capitalist system is becoming more and more intangible and increasingly difficult to protect. Toffler suggests that the consequence of many people being able to use knowledge simultaneously, as opposed to a production line, combined with the scope of new technologies available, make it possible to constantly attack the traditional protection afforded to immaterial rights, intellectual property, patents, trademarks, etc., on which many firms' existence depends. The nation state can no longer create new standards and if a product works on the market, it is quickly copied and sold.

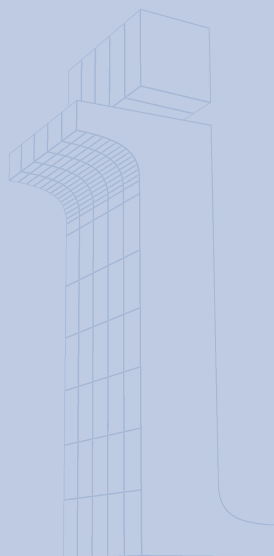
Some of the implications for business models

1. The immaterial market value of a business is increasingly reaching 100% of its value in many firms today. Even traditional manufacturing firms are headed this way. In 1982, intangible assets accounted for 32% of the market value of a company. 10 years later this had risen to a figure of 62%. Toffler affirms that it will prove increasingly hard for investors to obtain material guaranties through material assets.
2. People and workers will become the most important asset for organisations. Creativity and innovation are key elements in a fast moving society, where products, markets and company longevity are falling significantly and where the consequence is the growth of intangible assets.
3. Information and knowledge are becoming a constant need, and management must not only be concerned about a company's finances, but be on top of social, environmental, political, cultural, emotional and technological problems and developments. Another side to competition is the ability to interpret and manage underlying trends concerning future technology, social and economic and market developments, all of which will be determining factors to company' survival. According to McKinsey, greater accessibility to information and knowledge gathering will be the elements which will most influence the profitability of a business. While innovation will be the second major factor that will most contribute to speeding up the rate of change for global business.
4. Value is being concentrated more and more at each end of the value chain (product innovation, design, development and marketing and distribution), while immaterial assets are taking on a greater relevance; brands, networks, know how, new disruptive business models, etc.
5. We are moving towards a future where social innovation will become as important as financial or technological innovation. In contrast to traditional sponsorships, of donations to charity or social responsibility, corporate social innovation is based on a profit-making business model. Today there is potential market of 4 billion people at the base of the pyramid and there will be a new middle class of 1.2 billion in emerging economies come 2030, along with a population of over 60's set to triple, reaching a figure of 1.9 billion people.



CHAPTER 1

*The intensification of globalisation:
analysis of its new dimensions*



1. The intensification of globalisation: Analysis of its new dimensions

This second annual report puts the accent on the intensification of globalisation, which from some angles is taking such proportions, as to replace “quantitative” or upward change with a more qualitative one. The major implications for the existence of enterprise, people and societies highlighted in the 10 underlying trends mentioned in the previous section, will now be further analysed in this part of the abridged version of the 2007 Annual report.

The current stage of globalisation is of a size, which defies comparison with other processes experienced. Billions of people have entered the global economy whether potentially or in physical terms in just a few decades. These people and their nations are now proactive players in labour networks, production and global innovation, which encourages patterns of specialisation and activities requiring a greater skills, within the context of major technological and scientific leaps and capital flows which are more international than ever before.

1.1. The structure of global supply chains, expansion of activities and traded services

Global supply chains have been created with relationships between suppliers and clients which

go beyond national boundaries thanks to improvements in transport and communications, as well as the liberalisation of the policies of most countries. Electronic networks allow information and results of jobs or tasks to be transmitted with ever increasing quality and efficiency, and with it widening the scope of traded activities and services.

An indicator of this situation is that of the upward trend in the percentage of imported inputs of those as a whole used by the manufacturing sector over the last few decades (OECD 2007). Furthermore, FDI leads private financing initiatives, which contribute towards linking up the world economy (World Bank, 2007), along with other indicators, which in turn highlight this linking up of global chains, which combine the trading processes with offshoring and migratory flows. In terms of the trade of intermediate products and semi-finished goods, the total value of the figures in question is highly significant (Nordas, 2007), and where imports of this type coming from China and Brazil are of great importance. Table 1.1. also illustrates the major role of exports of intermediate products in developed economies too.

Another common indicator is that of the degree of vertical specialisation: the use of imported inputs in exports. In this case it is no surprise that

	Imports	Exports
USA	39.7	53.9
Japan	42.0	52.6
Germany	47.8	47.0
Brazil	67.2	42.1
China	61.8	37.7
South-Africa	40.8	59.7

Source: Nordas (2007)

smaller states register higher values, especially Singapore. Values in some European states such as Ireland, Hungary, Estonia or Belgium are also notably high.

This implies major changes in organisational patterns of enterprises. It has repercussions for patterns of specialisation, which ends up determining the place of each country or society in the “new international division of labour” and therefore the subsequent level of income and welfare, as pointed out in the previous section and analysed below. The issue is no longer that of specialising in given goods or services, but also in segments of the production process, in “tasks” or “activities” that will subsequently be the object of exchange or trading in tasks.

Another question related to the implication of the progressive shaping of global supply chains, as an additional source of comparative advantages, is that linked to the ability to react to “volatile demand” in some sectors. In a recent work (Cunat and Melitz, 2007) champion the role of flexibility in the labour market, concluding that this flexibility can confer (comparative) advantages in sectors with a high volatility. A further mechanism to be put into practice would be that of additional incentives to outsource semi-finished products to countries with more flexible workforces in highly volatile sectors, using offshoring as an alternative vehicle to establish greater flexibility among the national workforce. It can be said that these, now common mechanisms of globalisation could be considered ways of “importing flexibility” into the productive processes which national firms are involved in.

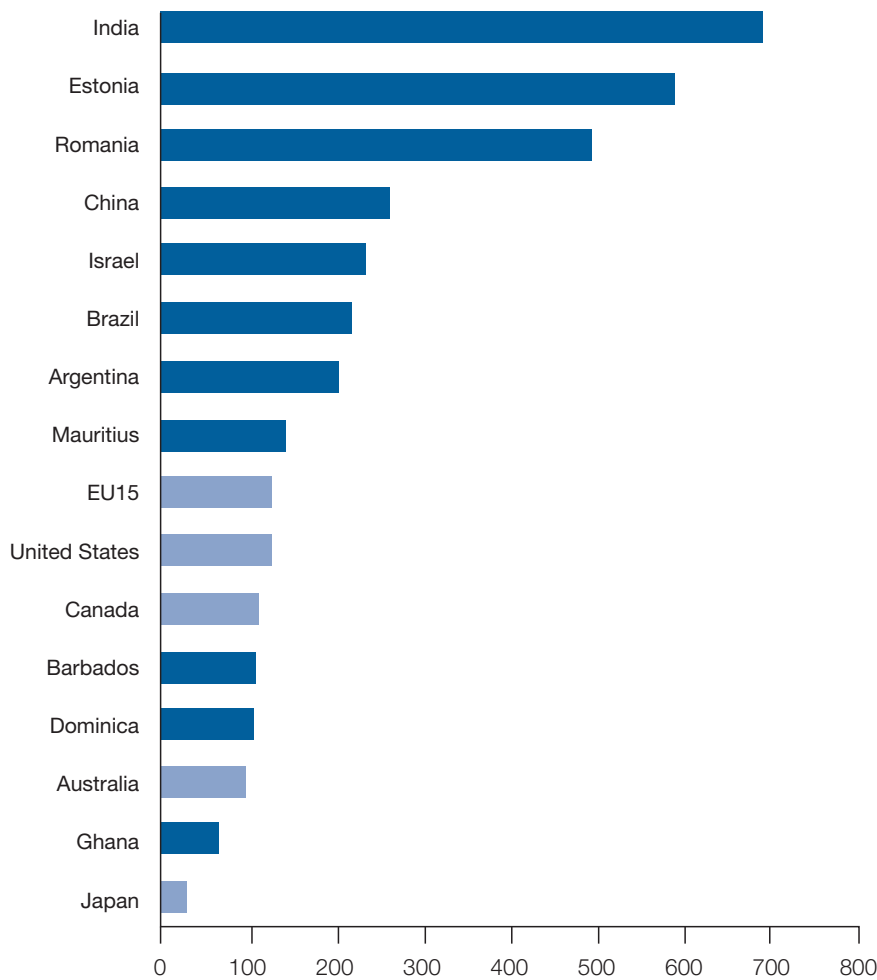
1.2. “Global sourcing of services”

Concerns about *offshoring of services* or *global sourcing of services* arise from the rising breadth of services which are directly affected, from those requiring lesser skills to those with greater skill levels, qualifications and sophistication, (such as software development, consulting and R+D). Moreover, against a background of vertical specialisation in tasks or activities, some traditionally “integrated” services in the core companies can be subject to “global sourcing” too. Growth rates in recent years in the export of business services are highly illustrative of this. The case of India in this context is well known, but new powers are emerging too; Estonia, Romania, and others including China, Brazil or Argentina, as well as smaller nations such as Mauritius, Barbados and Dominica (see figure 1.1). In 2006, trade in services (according to WTO data, 2007), grew by 11% in nominally, although the most traditional components (transport, travel) rose by 8%, whilst the most up to date traded services (business services, telecommunications, software, etc.) went up 13%.

It should be taken into account that despite goods trade growth figures appearing to be systematically higher than those of traded services, the former are to an extent affected by accounting practices that oblige imports and exports to be registered by their total value and not by the added value given by each country, thereby resulting in the fact that intermediate items crossing borders are counted more than once. The scale by which this method of overvaluing affects services is much less, and this “modulates” growth differences. This fact is very important for regions like Europe, which according to some analyses (IMD, 2007) will rely on more sophisticated quality services as an even more key building block of their competitiveness in the years to come.

It should also be added here that statistical information on world trade in services is subject to scrutiny and review from the WTO and IMF, which are now drafting new proposals given the (unsatisfactory) state of play, but regardless of this, the role of services in the shaping of global supply chains is becoming more and more prominent.

Figure 1.1. Cumulative services export growth, 1994 - 2003 (%)



Source: World Bank (2007)

1.3. Global labour supply and task trade

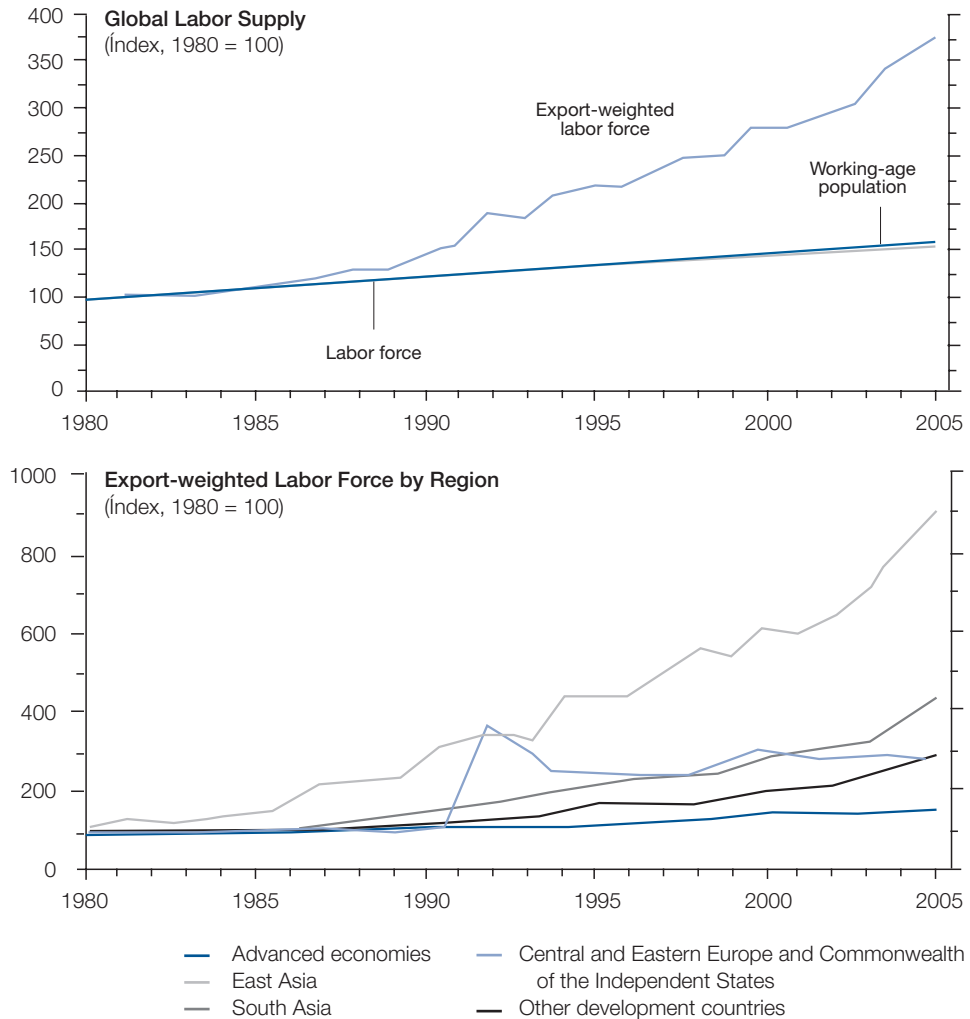
One of the most potentially important effects on all these movements will be the growing integration of labour markets, where it is under discussion whether it is even possible to talk about a “global labour supply” within a “global labour market”, with the implications for opportunities to improve both in efficiency and in terms of new “competitive pressures” with the major adjustments implied.

Labour markets are moving towards this integration for a number of reasons. On the one hand there is the classic mechanism of mutual trade. Furthermore, greater competition among goods and services in an ever-greater number of coun-

tries in the global economy represents a swell in indirect competition of production factors, among which the labour supply, that emerging economies possess in abundance, occupies a key position. On the other hand, migratory flows also represent a more “direct” competition, but also a potential complementarity. Recently the rise in “international partitioning” of production through such vehicles as FDI or international offshoring have added a new way of tapping into this phenomenon.

Indicators bear these trends out—for example, global labour supply has quadrupled since 1980 with an outstanding role played by Asian states and those of Central and Eastern Europe (see figure 1.2). Moreover, both past and future projec-

Figure 1.2. Global Labor Supply 1980 - 2005

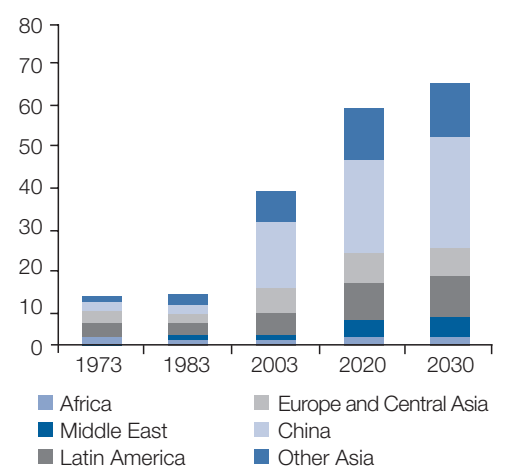


Source: IMF (2007)

tions set until 2030 (World Bank 2007) bear witness to the movement of increasing penetration of imported finished goods of manufactures from “high income” states, originating in emerging and developing economies (see figure 1.3). In terms of migratory flows in global labour supply, the bulk of the increase is accounted for by those moving from developing to advanced nations, mirrored by that of trade flows in the same direction.

The trend of a moderate rise in offshoring, although characterised by a consistent swell in recent years (IMF 2007), also affects different areas of the workforce and skills, as traditional limited “added value” productive manufacturing processes, the target of offshoring also experience increasing offshoring of services that affect not just their limited added value activities (such as call centres)

Figure 1.3. Share of high-income countries' imports of manufactures originating in developing countries (percent)



Source: World Bank (2007)

but also tasks of greater value, from software to certain medical diagnoses or indeed part of their R+D operations (see figure 1.4).

The expansion of offshoring mechanisms along with the alarms raised from time to time have led to a range of studies being made of its impact. On the one hand, the positive overall results on the improvement of productivity are clear, and on the other, the special relevance played by offshoring of services on the figures. The overall results are encouraging, but when broken down into respective distributions, they give rise to other social and economic inferences.

One of these is that in advanced nations an improvement would be brought about in the area of skilled labour (and of skilled labour-intensive sectors) with respect to the unskilled labour (and unskilled labour-intensive sectors), given that in emerging or developing economies unskilled labour abounds. Empirical studies in this area seem to confirm predictions in an overall way.

Nevertheless, it is argued (Feenstra, 2007) that movement of intermediate tasks (such as production of components, etc.) to less developed nations with higher skill requirements to those initially required increases the “average” skill level, with the transfer of successive “tasks” from advanced economies to emerging ones.

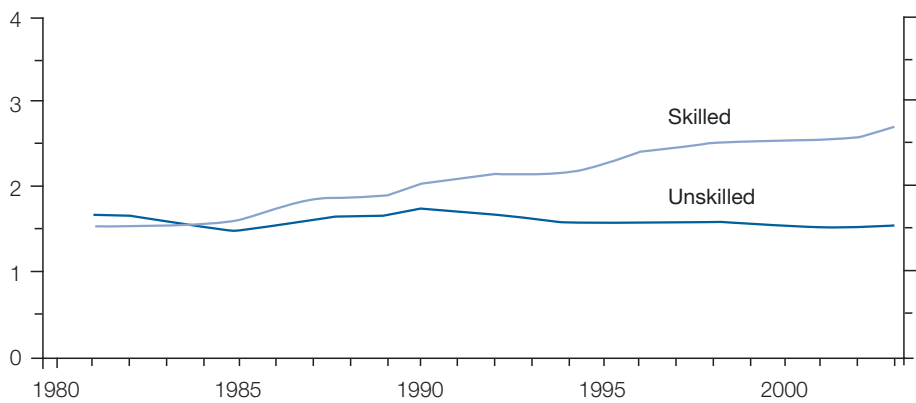
This rising level of skill among segments of the productive process in the realm of offshoring illustrates one of the motives for concern about this type of “relocation”, as the suggestion is that

the risk to more highly skilled personnel and jobs negatively affected in the long run in advanced nations may lead to the risk of “devaluation” of investment made in this segment of “human capital”.

What effect does this all have on income distributions? What variation has been experienced by skilled labour in relation to unskilled? How does this influence overall distribution of labour incomes and other production factors? Do other distinctions exist between labour types and major activities from the angle of greater vulnerability or firmness in a global context? There is a wide range of empirical studies into the above questions and not all coincide, but a number of consistencies do emerge from them.

One of these is the reduction in the proportion of income spent on the labour factor in recent years in advanced nations, coinciding with the intensification of globalisation (IMF 2007) both in The US, as well as in continental Europe, The UK, Canada, Australia and Japan. The IMF points out that the reduction has been more notable in (continental) Europe and Japan, attributing this fact to greater rigidity in terms of labour restrictions and to the type of economies these nations run. However, it highlights the loss of positions in the category of unskilled jobs with respect to skilled labour in all regions of advanced nations. In Anglo-Saxon nations (including the US), the relative pay of skilled workers has improved, whilst in Continental Europe the socio-labour system has kept skilled pay proportional to that of the less skilled labour segment which has hung on to its

Figure 1.4. Offshoring of Unskilled and Skilled Inputs (weighted; percent of gross output)



Source: IMF (2007)

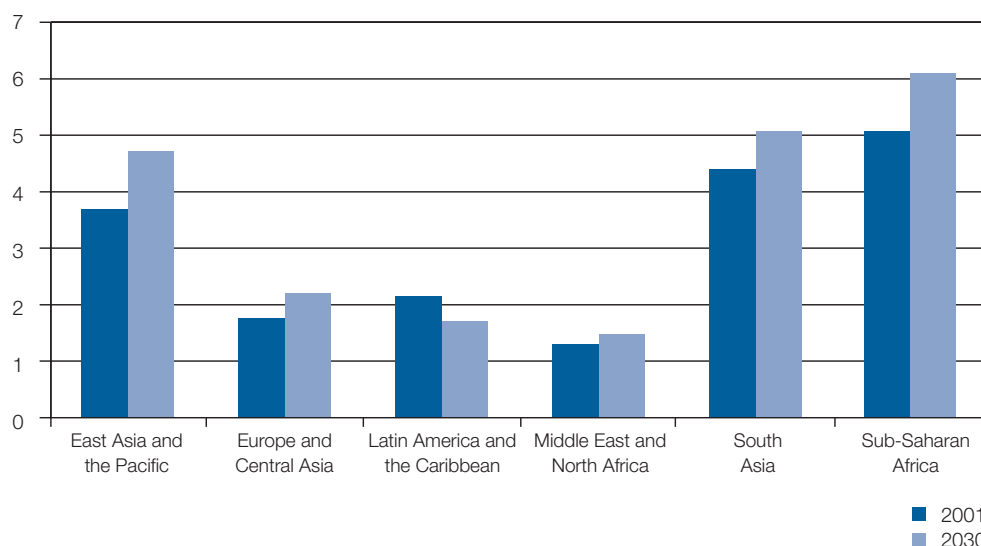
jobs. As in other occasions Anglo-Saxon states have adapted via pay differentials, whilst continental Europeans have done so via employment, although the dynamic of the differential between jobs of a different skill level has been similarly “vulnerable” to growing global pressure.

World Bank research (2007) also goes to show that despite an increase in skilled labour supply, the make up of global demand for labour will tend to create a widening of the salary gap between skilled and unskilled labour in the coming years (see figure 1.5).

territories. Analysis in terms of task trade provides a prolific approach in terms of just where the change of patterns may lead us.

We have gone from the first phase, in which the ability to be transported was the dividing line to which any goods (and work done on the goods) were subject to international competition (initially via trade), to a stage brought about by communications and the ICT revolution, where the relevant cut off point has become the “codeability” or susceptibility of the results of a task to be remotely “delivered electronically” without compromising

Figure 1.5. Returns to skilled workers in emerging and developing economies, 2001 - 2030
(Ratio of skilled wages relative to unskilled wages)



Source: World Bank (2007)

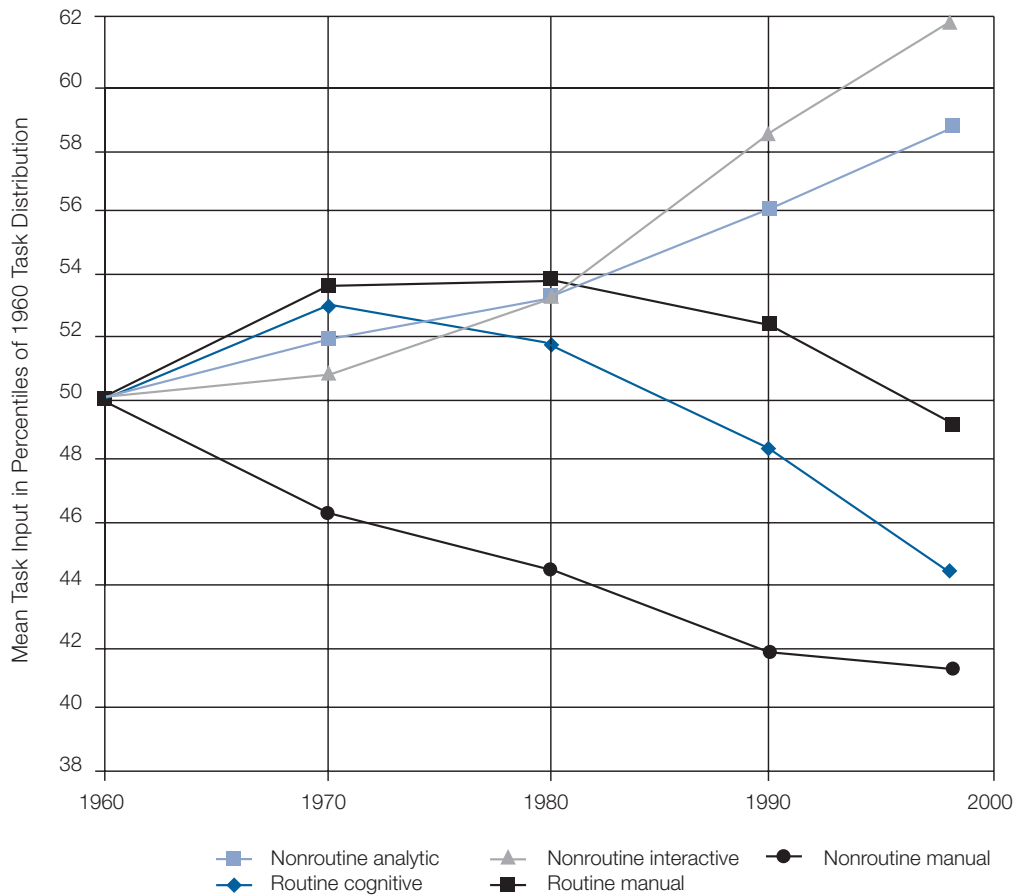
A controversial matter here is if improvement in skill levels, above all in emerging nations can in the mid term, as suggested by Garelli (IMD 2007) serve to complement a phase of a greater supply of cheap manpower from emerging economies at the rate of cheap brainpower (14 million graduates per year) being churned out by Chinese, Russian and Indian universities (as many as in the US), who are well trained and motivated and joining the world market with aplomb.

The matter is not just about more “players” (emerging nations, people), but production “chains” and the creation of added value, which are increasingly flowing over borders, altering the degree of specialisation patterns in countries and

quality. On the other hand, tasks requiring “tacit information”, with a more relevant “personal component” or “relationship” would be exempt from this greater competition. A new side of things is that this dividing line does not necessarily coincide with that of greater or lesser skill levels (see figure 1.6).

The immediate consequence is that more and more, countries are specialising in “tasks” or “activities” instead of in “complete” articles and that therefore, what should be taken into consideration here is “task specialisation” and “international task trade”. The neologism task trade or trading in tasks comes strongly to the fore in the title of the analysis of Grossman and Rossi-Hansberg (2006).

Figure 1.6. Trends in Routine and Nonroutine Task Input, 1960 to 1998



Source: Autor-Levy-Murmane (2003)

Just as international offshoring of activities is a natural consequence of the momentum of trade tasks and as saleable tasks do not necessarily coincide with a greater or less need for skill, but rather for their codeability, so the consequences of such strategic questions take on great importance, questions, such as: what sort of skills or qualifications can/should industrial nationals maintain? What changes (possibly deep seated) are required in formal and “in-company education systems given the new situation? What skills should emerging economies build on in order to attract foreign investment or offshore contracting?

At the same time and at an ever increasing rate the fact that the “units” on which decisions taken on location and/or insertion into global chains are already tasks or activities, raises questions such as the need or for whether it is appropriate to review “sector policies”—that may be responsible for losing efficiency in sectors with heterogeneous

“activities” or “tasks” according to the criteria under study—to statistical processing of data in which until now categories that were formerly clear cut and classical can start to lose their both homogeneity and relevance.

1.4. Financial globalisation

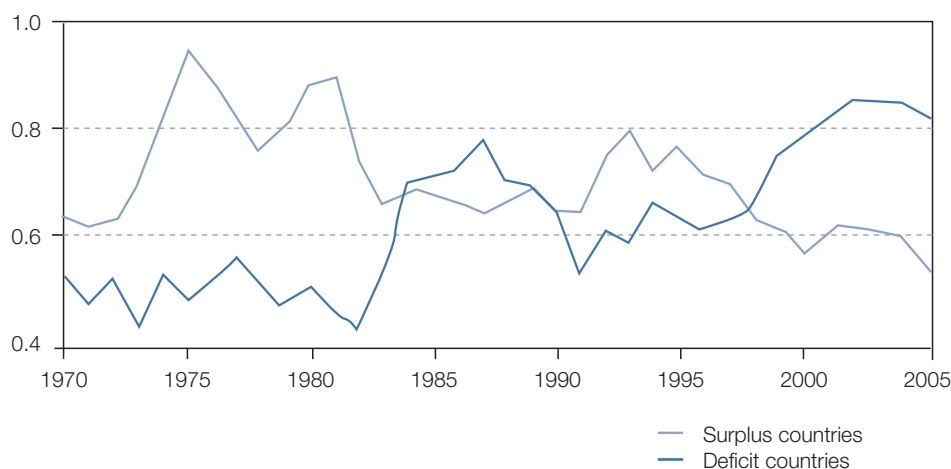
With respect to the financial side of globalisation, it can be clearly observed that this dimension continues to grow at a nearly exponential pace.

External imbalances and new patterns of international financing (in which the US and other advanced countries are the main net capital importers, and where Asian and oil exporting nations the main {net} exporters), raises concerns as to both the suitability and sustainability of this situation.

The current year 2007 has also seen its fair share of instability and concerns, some of them new. Since the beginning of the 21st century, the relative income of capital exporters (countries with a surplus) has been noticeably below the relative income of capital importers (countries with a deficit in their balance of payments (thereby turning historical patterns on their head (see figure 1.7).

“institutional quality” is, according to the annual report of the Business school IMD, the “Achilles heel” of some emerging economies, including China. Thus, according to these interpretations advanced economies would be able to rely on the superior quality of their institutions as a key factor in competition, especially in activities, which demand contractual complexity.

Figure 1.7. The relative income of capital-exporting countries and capital-importing countries (relative per capita GDP weighted by current accounts)



Source: Prasad, Rajan i Subramanian, “The Paradox of Capital”, IMF (2007)

Strategies for managing financial surpluses by those nations (with their savings accounts in the black) have changed. In some cases, until now these resources were allocated to “safe assets” such as China’s well-publicised purchase of part of US public debt, which have resulted in large gains in official reserves for emerging nations and oil exporters alike. However, recently, China and other states have started to take a more proactive stance towards their financial resources, and this implies taking up positions as investors in or controlling companies worldwide, including some major “western” firms.

This movement has major geopolitical connotations, above all when this movement is superimposed on the growing presence of takeovers and investments by multinationals based in emerging nations. It should be pointed out that the direction “net flows” for finance are moving in is compatible with the fact that emerging countries continue to receive Foreign Direct Investment (FDI). The

Nevertheless, the aspect that raises most disquiet is the suspicion that a relatively prolonged period of stability, of low interest rates, plentiful solvency etc, may have relaxed perception of risks, with operations being undertaken that lead to debts being accrued, which may lead to problems in the end, if negative results that have not been properly assessed are returned. The reduction in the “quality of credit” would be the first symptom of this.

Implications of exchange rates: competition through prices

The evolution of the real effective exchange rate indices of the main currencies (US dollar, Euro, Yen, renminbi or Chinese Yuan) from 2000 - 2007 illustrates that the process of slow depreciation of the dollar has led to the direct appreciation of the Euro with the corresponding loss of competitiveness on prices, since the Chinese currency would

hardly be involved in this adjustment. The heralded Chinese “exchange rate flexibilisation” of the summer of 2005 does not appear to have led to any meaningful change. The yen meanwhile continues to lose value—which a given mechanism such as carry trade could be influencing in an additional way. From a European standpoint, there is doubt as to what extent the Euro has to be responsible for the additional adjustment of the US dollar’s fall.

It should also be pointed out that growing vertical specialisation also invites debate on the real effect of the variations in exchange rates on trade volumes. Debate on the effectiveness of devaluations or depreciations on exchange rates are based on the fact that these movements raise the price of “foreign imported goods” and lower those of “national exportable goods”, arguments that become more complicated when a major part of these goods have a home-grown component or when a large part of exported goods contain an imported foreign component.

1.5. Growth limits

One of the most outstanding features of recent years, with milestones reached in 2006 and 2007, is renewed concern over limits to growth—or for a given growth model—as well as those debates centred on energy resources, over consumption or non-renewable raw materials and of late, discussion on climate change and its relationship of causality with the growth model. Both media exposure debate—including the film of Al Gore “An Inconvenient Truth”—as well as studies sponsored by international or government organisations—such as that of the UN within the framework of the Convention on Climate Change, or the Stern Report, commissioned by the British Government—increasingly acknowledge current public opinion on the matter. Non renewable resources and the state of environmental quality are becoming “global commons” to borrow the expression used even by the World Bank (2007a), and these come with all manner of problems associated with management and elements of the “public goods” and “externalities” which hamper smooth running and which by the same token require delicate negotiations in order

to attain coordinated solutions which are perceived as fair.

Without delving into arguments that go beyond the scope of this annual report, it is necessary, at this juncture to comment on the upward trend of many prices for raw materials in the energy sector along with other non-renewable inputs. In relation to previous phases of upward energy price spirals, it has to be stressed that this time it is not due (neither wholly nor in part) to a simple matter of supply (such as former oil price hikes achieved by OPEC’s negotiating ability and unity), but essentially due to demand derived, on the one hand from the increasing requirements of emerging nations which are fast industrialising, and on the other, their adopting of “Western” consumerist patterns.

Some works argue the process of global growth is linked to demand for some raw materials, especially those comparing relationships between the growth of industrial output and aluminium and copper consumption in the processes of industrialisation of already advanced economies and those newly emerging ones. The patterns appear highly consistent, and may even point to a greater “intensity in raw material demand” in the case of those emerging economies, for a number of reasons that range from the pace at which they are following western patterns to “relocation” of polluting industries.

Such comparisons are often the starting point for discussion, when it comes to negotiating how to fit supply to demand. Emerging nations vindicate their right to go down the same path as more advanced states have done, whilst the latter insist in the reality that the “additional pressure” on resources is unsustainable.

Relations of cause and effect between such dynamics and climate change have grabbed the limelight in terms of controversy. Concerns are not just limited to minority opinions, but are now part of the public, organisational, institutional and multilateral domain. Hence, according to a prospective study of the World Bank (2007), as an illustration of the data analysed and the concern about carbon emissions linked to the “greenhouse effect”, it was reckoned that if the trend continued with the present level of technology, by 2030

annual emissions would increase by 50% and double by the year 2050. Taking into account this data explains, on the one hand, the incentives to back scientific and technological developments that can provide answers and solutions to this plight, and on the other, the growing pressure to

sign international agreements limiting, at least in a seemingly “fair” way, such trends. The expression “commons” referring to non-renewable resources and environmental quality appears as justified... including major difficulties to ensure their coordination and efficiently management.



CHAPTER 2

Expansion of world trade and economic activity: New angles to the increasing integration of the emerging economies



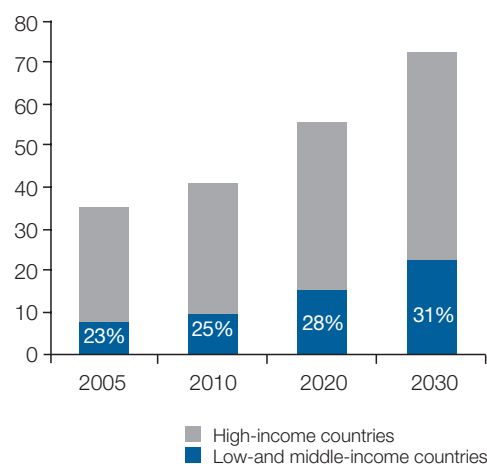
2. Expansion of world trade and economic activity: New angles to the increasing integration of the emerging economies

Despite the drawing out of the expansive cycle of the world economy, familiar fragilities and threats, analyses continue, at least on average, to sketch a favourable picture. In the case of 5 year projections until 2012, world GDP is forecast to keep ahead of the trend of the last decades, regardless of a certain “softening off” of growth, according to the IMF (April 2007) and the UN (2007). Trade, commercial and financial movements all indicate a growing role to be played by emerging states, notably China and India, and to a certain extent, Russia, Brazil and South Africa.

The World Bank study: *Global Economic Prospects 2007* predicts that output worldwide could rise from \$35 trillion in 2005 to \$72 trillion by 2030 (based on REER rates, i.e. in real terms), which implies an average 3% growth per annum, or 2.5% in high-income countries (according to classification of the World Bank itself) and 4.2% in emerging and developing nations (see figure 2.1).

As for international trade and goods (WTO 2007), figures point to a growth of some 8% (in real terms, as nominally it would be nearer 15%), which once again puts it comfortably over GDP growth. This simply confirms the trend of the last 10 years which has seen export figures above variations in GDP, which can be explained in terms of the high sensitivity (elasticity) of international trade in relation to output, coupled with the

Figure 2.1. Developing-country share of the global economy (GDP in 2001 \$ trillions, using PPP exchange rates)



Source: World Bank (2007)

role of overseas trade acting as a “driving force” behind economic growth.

IMF forecasts for trade also point to a certain softening off, coming down from the high levels attained in recent years (in part as a caution, given the difficulties faced in multilateral trade talks of the Doha Round), with the risks of new “protectionist temptations”, but also to a certain extent, due to the pure statistical result of a certain consolidation of global sharing production.

According to World Bank projections, world trade volume is set to triple between 2005 - 2030, going from the current world export/GDP ratio of 25% to 37%. This organisation also highlights the increasing role of emerging economies.

An improvement in positions achieved by emerging and developing economies is a recurring theme in all analyses and perspectives, but here also clear differences are to be found between real and/or potential among a number of countries or groups of countries. Once again, Asian states occupy the top spots in the new prospective models (DBR 2007), but nearer home it is worth taking a look at forecasts for Turkey, Ireland and Spain too.

2.1. Towards a Spiky world?

The approach of Bergheim (DBR, 2006) highlights the lack of uniformity of dynamism and attempts to track down the growth centres using variables such as; investment, human capital, demography and degree of international openness. This approach illustrates one side of the debate made popular by Thomas Friedman on whether “the world is flat” and has given rise to all manner of “alternative descriptions” on what globalisation really means. Hence Richard Florida points out how creativity tends to concentrate in a number of locations with the ability to create, attract and keep talent in such a way that the behaviour pattern of this creative class would lead to a “*spiky world*”.

2.2. The growth of inequality?

A number of other sides to the argument are also emerging, some of which require handling with care, such as those associated with inequality of skills, the possibility and willingness to adapt to new opportunities, realities and rules of the game, which can all lead to conflicts or “social friction”.

The positive role of growth which leads to greater international benefits derived from resources, has led to inroads being made overall in the fight to reduce poverty worldwide. The most common statistically recurring combination has been that

of growth with an increase in inequality. It is indeed arguable, whether this is a transitory phenomenon which is derived from the different pace at which different people or groups adapt or benefit from new growth opportunities, with the alternative explanation being that worldwide growth is being “diverted towards talent”, which is in shorter supply than other “endowed factors”.

An in depth study conducted by Sala Martin (2006) shows a recent decline in the worldwide trend of inequality and inter-countries, but highly conditioned by China (in fact, if China is excluded from analysis, the reduction would turn into an increase in inequality), while inequality intra-countries continues on the up.

2.3. Global middle class or low cost society?

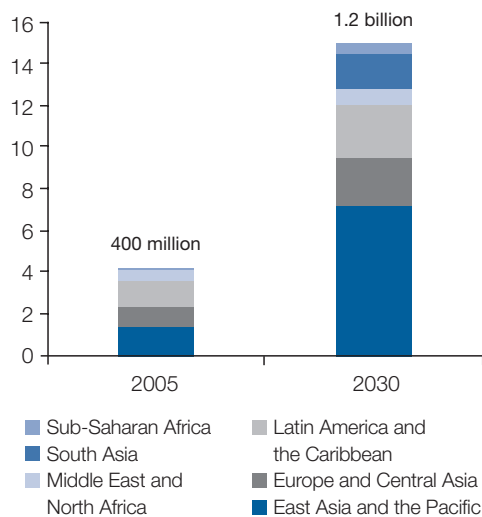
What implications can these trends have on both the type and pattern of demand? Bigger inequality is associated with bigger demand for luxury goods; on the surface, a component of any regular analysis and prospection work. However the specific distribution of income influences in questions such as the future of low cost activities and the so-called “democratisation of luxury” (some types of luxuries including “quality imitations”) and the more recent trend for articles aimed at low spending power segments, such as the initiative of “\$100 dollar PCs” or “cars for €3,000”), i.e. new business models targeting the base of the pyramid.

The role of the middle classes, an important core group of domestic consumers in many economies, is also under the spotlight. Analyses on this group range from the foretold “disappearance” of these middle classes (absorbed into the low cost society, according to Gaggi-Narduzzi, 2006) to the other extreme—the emergence of a “global middle class” which would, in terms of global market scale, play the same role as it has in each country with its own middle class (World Bank 2007), as it goes about acquiring the bulk and variety of goods and services being provided by the new productive and technological horizons afforded by globalisation.

Those 400 million people, who would have come within this World Bank classification in 2005, will

have swelled to 1.2 billion by 2030. In terms of international distribution associated with this figure, there is a notable rise of Asian higher and middle classes foreseen (see figure 2.2).

Figure 2.2. The “global middle class” expansion (population in low-and middle-income countries earning \$4,000 - \$17,000 per capita PPP)



Source: World Bank (2007)

2.4. Catch up... at uneven rates

There is a growing movement in which emerging economies (led by a sub-group) would appear to be “catching up” more advanced economies as suggested by such indicators as per capita GDP and other related data, such as spending power, productivity, energy consumption, consumer spending patterns, although, salaries and other costs etc. of emerging countries still have to “converge” with current levels of advanced nations. Some aspects of this subject have raised controversy, which can be interpreted in a variety of ways. Will technological catch up imply yet more radical changes in the patterns of international specialisation? Will convergence of costs “lesser the burden” of competition in more labour intensive sectors?

In terms of per capita income, the World Bank (2007) highlights the ongoing process of conver-

gence of all emerging economies (except Sub-Saharan Africa) as well as highlighting inequalities moving at their own pace in regions, as well as its relatively gentle overall pace.

It has also been observed that between 1997 and 2006, 40 of the 55 economies analysed had reached levels close of those for US indicators and that only 15 were “losing steam.” Among those gaining most ground proportionally were China, Russia, Estonia, Slovakia, India and Slovenia. Figure 2.3 provides illustrated data of the Asian and Central and East European Regions.

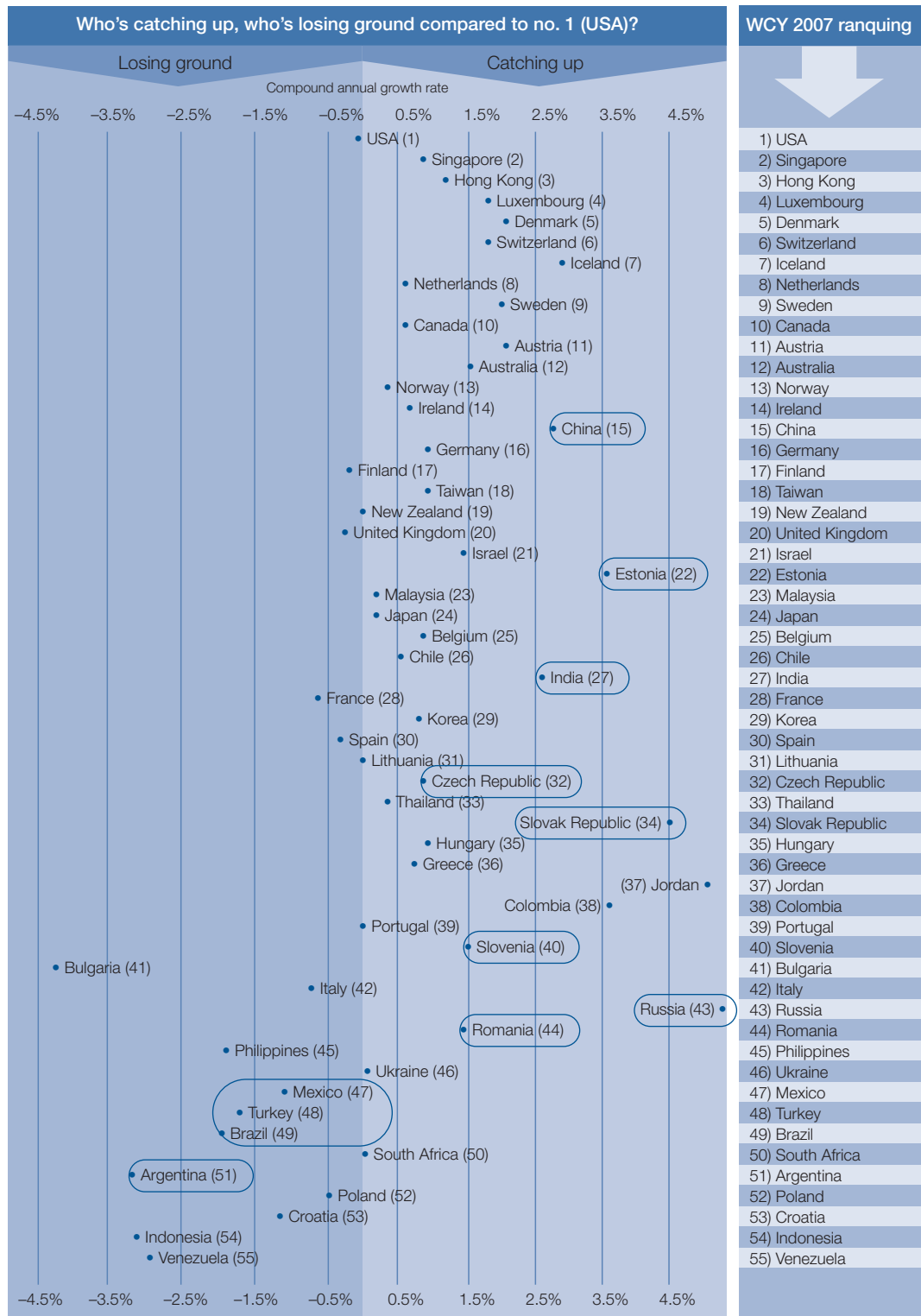
As for economic growth, short term forecasts for the coming 5 years point to Asian markets taking up the lion's share of the thrust with a solid growth in India and China that will be mirrored by an upturn in the ASEAN group economies, notably Indonesia, Vietnam and the Philippines. Whereas in the former USSR, Russia, Ukraine and Kazakhstan will continue to lead. In Africa, where during the next five years growth will top 5% (IMF 2007), optimism does not stem just from the upward spiral in commodity and energy resources foreseen, but also due to encouraging market orientated reforms being put into practice.

Long-term outlooks are also still bright for emerging nations. It is reckoned that altogether, these economies will grow annually by 4% from the period 2008 - 2030, one percentage point above the advanced nation average. All emerging regions without exception will grow above average of the most developed nations and as a result of emerging and developing nations participating, global output is set to rise from 23% to 33% by 2030. Asia will keep on being the motor of world economic progress, led by China and India, nevertheless, there is optimism Africa may take on the mantle of being the second most dynamic region from Eastern Europe and the former USSR, especially in the South Mediterranean, led by Egypt, Algeria and Morocco. The long awaited slowing down of the pace of growth in Eastern Europe and the CIS is predicted to arrive mainly as a result of low birth rates, most notably in the latter's ex-Soviet states.

Real GDP per capita growth in South Asia and Sub-Saharan Africa is at its strongest since the 60s, whilst Eastern Europe and The ex-Soviet

Figure 2.3. Competitiveness in perspective 1997 - 2007

For the first time, the WCY ranking indicates not only the competitive positions of nations in 2007 but also their ability to catch up with the leader (USA). These trends are based on past competitive performance, drawn from the world's most comprehensive database on world competitiveness built up over two decades by IMD.



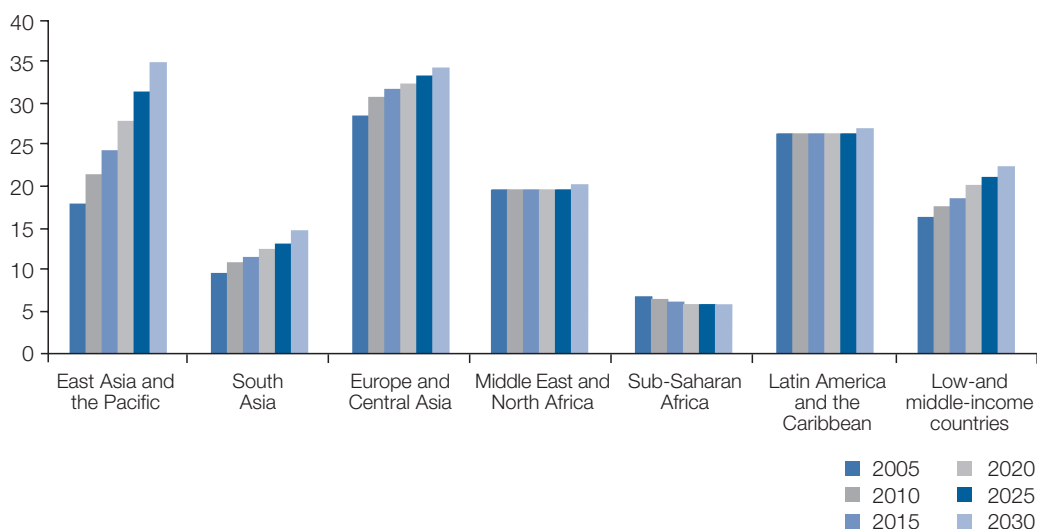
Source: IMD (2007)

states are breaking records. The outlook for the future is rosy and forecasts point to an ongoing process of sustained per capita income growth in all emerging markets. Nevertheless, it is predicted that gains will be proportionally higher in Eastern Europe, the CIS and in South and Eastern Asia, where the process of convergence with advanced nations will gather pace (see figure 2.4).

2015. Sub-Saharan Africa on the other hand despite upward growth, is the only region thought to fall short of the goal, due to high population growth.

As a result of economic growth in emerging markets it is thus reckoned that nearly 1 billion new consumers will enter the global market within the

Figure 2.4. Per capita incomes projections: developing regions will begin to converge with high-income countries (index: high-income countries =100)



Source: World Bank (2007)

Despite poverty declining in all regions, the greatest fall has occurred in Asia and above all in China and India. In China alone, some 500 million have left the ranks of those living in extreme poverty in the last twenty-five years.

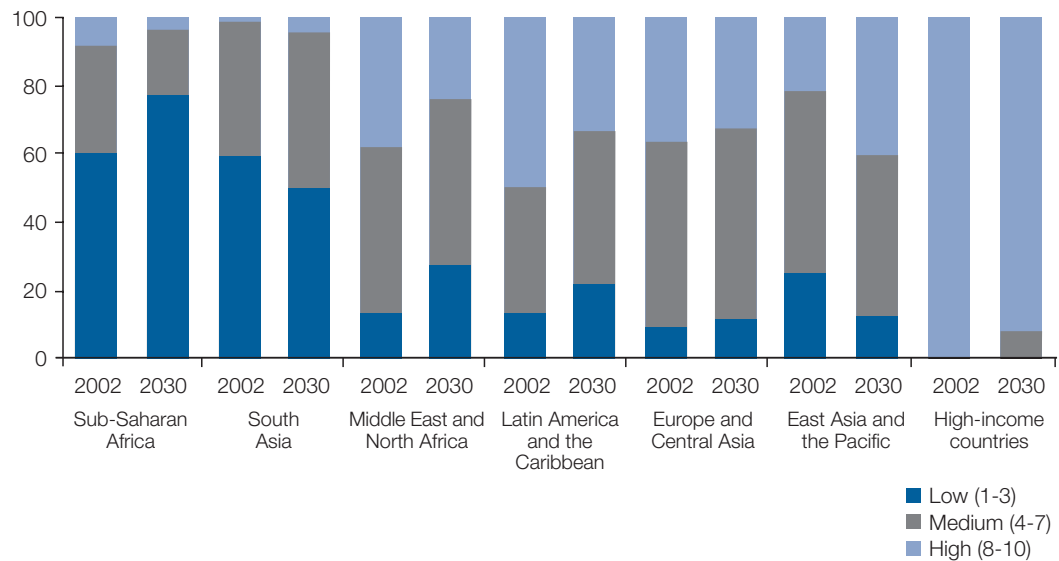
Projections for 2030 lead to suggest that although world population will have increased by 1.5 billion, 97% of which will have been born in emerging or developing nations—the percentage of the world's population living in extreme poverty will have dropped by 4%, with Sub-Saharan Africa still suffering proportionally most (see figure 2.5).

China and India account for the lion's share of this decline, whilst for Eastern Europe and the ex-USSR, North Africa and The Middle East, projections foresee extreme poverty being almost totally eradicated. The same cannot be said of Latin America, although it is forecast that the region will attain the aim of reducing this figure by half by

next decade, and that in 10 year's time, consumption will rise by more than 5 trillion dollars in emerging economies. China awaits a rise in its middle class to 250 million people some time before 2015, and this figure is set to double in the following 10 years, with the wealthiest segment of population concentrated in the 25 - 44 year old band. Meanwhile in Brazil over the same period projections put the rise in the middle classes to be in the region of 50% of its population, while data for Russia set this figure at 85%.

For the year 2030, forecasts indicate the middle class in emerging countries as a whole will surpass the current figure of 400 million to 1.2 billion with a spending power of between \$4,000 - \$17,000 per annum (in terms of PPA, in the year 2000), 60% of whom will be living in Asia, 17% in Latin America, 15% in Eastern Europe and the CIS, leaving 10% in The middle East and Africa (World Bank, 2007).

Figure 2.5. Global income distribution (population of each region by deciles of global income distribution)



Source: World Bank (2007)

Although during the coming decade the US will still be the world's top consumer market, the bulk of the rise in world consumption will take place in emerging markets, specially those of Asia. Taking into account that China and India hold nearly a third of the world's population and will be responsible for 45% of world economic growth during the next decade, it is in these two states where the greatest rise in the share of consumption is expected, as a proportion of the world total, rising from the current 5.5% to 11.5% by 2020. Russia is set to nearly double its share to position itself with around 3%. The other side of the coin will be the EU-15 and Japan which are called to lose a major share of this amount, whilst the two Latin American super states, Mexico and Brazil, are not expected to undergo significant rise, as their joint share (some 3%) is foreseen to remain below that of such East Asian states as South Korea.

2.5. Catch up in Labour costs too?

From the standpoint of competitiveness of the advanced countries, this process of catching up generates concerns based on the increasing similarity of emerging nations to theirs when it comes to patterns of specialisation, with the subsequent rise in competitive pressure they exert in a range of activities and sectors which are becoming con-

tinually more sophisticated and which were considered the "core" of comparative and competitive advantages of developed economies. The other side of the coin is that the mechanism, through which this approach is beginning, will eventually filter down to salaries and with that—wage costs.

Mechanisms of "downward equality", putting pressure in the short term, as commented in the previous section, are set against mechanisms to "spread prosperity" which will tend to level off "upwards", at least in the long run.

This process of catching up is clearly taking place at vastly different rates. In some cases major differentials are being maintained, whilst in others, purely wage based advantages are being chipped away, but this is happening in countries where other sources of competitive advantages appear to be emerging (IMF, 2007).

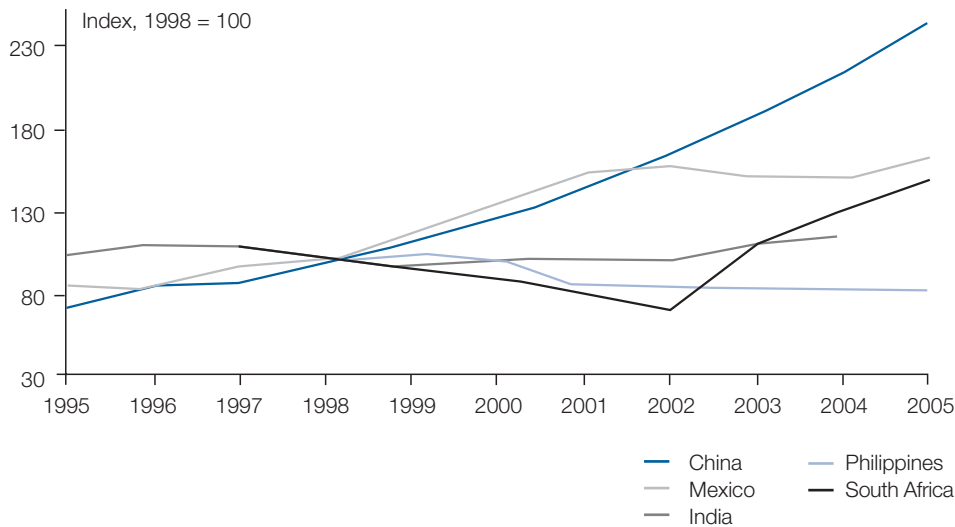
Redistribution of cost advantages among emerging economies

One implication of this heterogeneous state is that of a "rotational" mechanism being established among those countries in terms of wage cost advantages (WB, 2007). Salaries have risen in countries like China as well as in South Africa, opening "cost advantage windows" in other coun-

tries like The Philippines and other Asian states, not only in terms of exports to other countries, but also for exports to the Chinese market itself (see figure 2.6).

duction of components formerly imported, in large part due to direct investment received in these sectors, which have helped domestic output to a greater quality and productivity.

Figure 2.6. Average wages growth in some emerging countries



Source: World Bank (2007)

2.6. Catch-up in productivity?

Productivity is the focus of a great many comparative studies on competitiveness. By this token, the methodology used in one of the most widely known works, the “Global Competitiveness Report” of the World Economic Forum (Davos), stresses the leading role of productivity as a base for sustainable improvement in both living standards and prosperity.

Hence, among factors explaining the increasing presence of emerging economies, notably Asian ones in world trade, the role of the evolution of productivity in these countries should also be taken into consideration.

Data from the IMF (2007) illustrate this gradual, but slow catch up in relation to Western productivity levels (see figure 2.7). It should be stressed that these are “aggregate” figures and therefore include highly significant differences between sectors and segments. Along these lines, it can be seen that in certain high and middle-high technology sectors, China is taking on domestic pro-

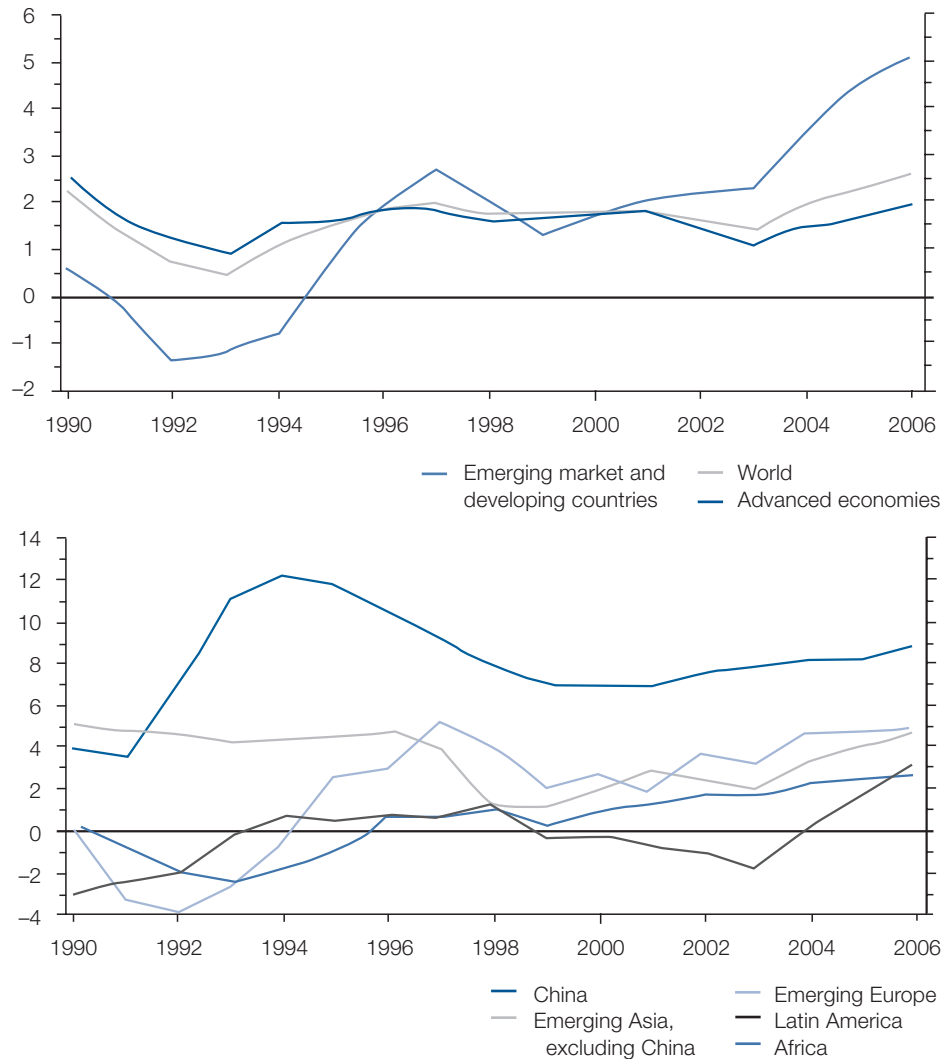
2.7. Catch-up in trade? South-South trade on the up

Trade growth is no longer limited to the most dynamic emerging nations (most of them in middle income category), but as a whole, low income countries have undergone considerable rises, although at times they have started from very far behind. The World Trade Organisation highlights aspects of 2006 figures which have led to all time highs in exports from developing countries, amounting to 36% of the world total. World Bank figures for the last fifteen years show that this percentage has practically doubled.

When it comes to the evolution of goods exports from 1960 - 2006 the EU still leads, although emerging economies are catching up steadily on this front.

In recent years, growth rates, both in imports and exports in emerging economies have doubled those of advanced economies and the outlook for the coming years is that this higher rate will be sustained (see figure 2.8).

Figure 2.7. Evolution of productivity (%)



Source: IMF (2007)

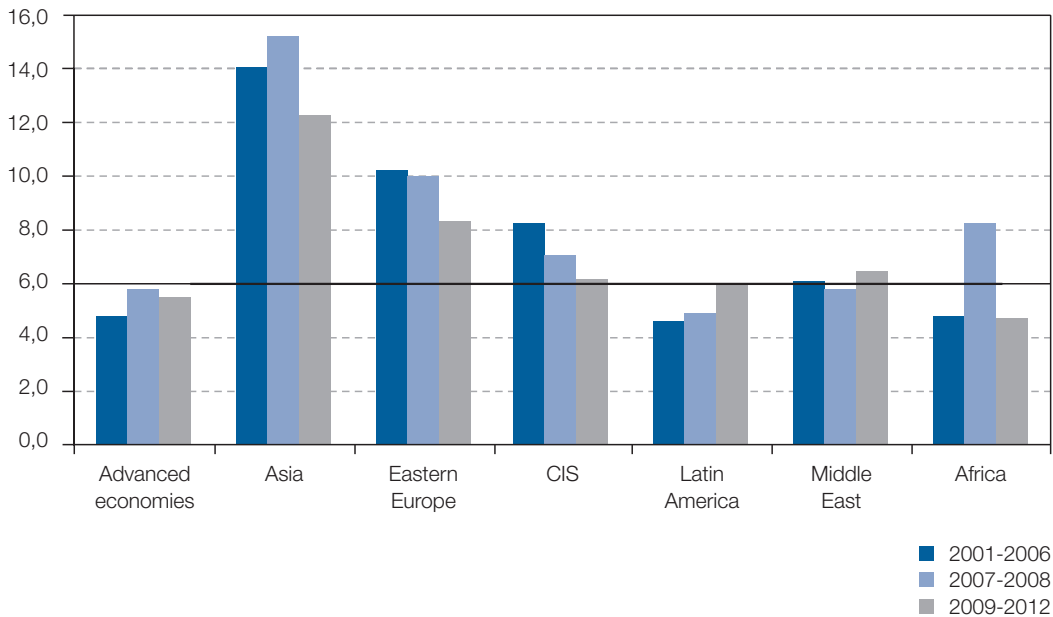
The most intensive growth levels are taking place in Asia, Eastern Europe and CIS, and will continue to do so above world average rates—situated at 6%. It is of particular interest to observe the rise of imports in the Commonwealth of Independent States, where more than half this increase is down to Russia, the region's main market, although Ukraine and Kazakhstan are also playing a major part too.

Growth of Chinese exports in 2006 reached 27%, which nearly doubles the world average of 15% (in real terms 8%). Other countries among the top 30 goods exporting nations to have topped a 20% increase in 2006 include, India, Poland and Russia, along with healthy figures in the Baltics.

As for import growth, which is a faithful indicator of “absorption” capacity for exports, once again China, with 20% stands out. However, among the top thirty in terms of growth in 2006 were Russia with 31%, India (25%), and Poland and The Czech Republic (22% each).

Further to cyclic factors and the rise in raw material and energy resource costs, liberalising reforms have also taken a major role in the expansion of trade. Tariffs in emerging and developing countries are currently on average at 11%, 5 percentage points lower than in 1997 (World Bank, 2007). The vast majority of emerging nations have cut trade barriers since 2000, most notably China, India, Egypt and Nigeria, as well as many Latin American states.

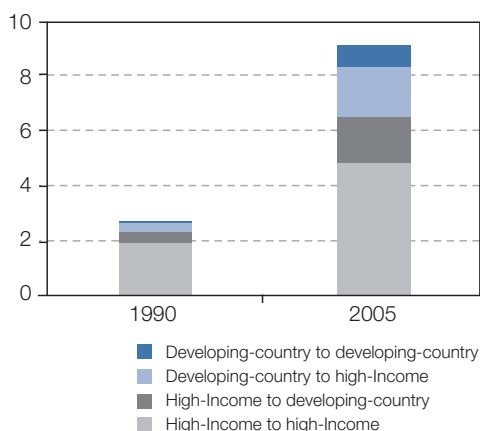
Figure 2.8. Exports of goods and services (Average annual growth; %)



Source: Created by the OIM from IMF data

It is also interesting to compare trade exchanges by origin or destination, whether for high income states (“The North”) or for those developing ones (“The South”). In the period from 1990 - 2005 South-South trade grew by 13% annually, whilst North-North trade only rose by 6% (see figure 2.9). On the other hand, it must be acknowledged that part of this rise is due to raw materials (including energy), but it is worth taking a look at “southern” countries that apply, in average, higher tariffs than “Northern” ones.

Figure 2.9. Exports of goods (trillions of US dollars)



Source: World Bank (2007)

All the same, China in its race to ensure a lasting supply of raw materials and energy resources, has signed major agreements with Sub-Saharan African states and Latin America. Both in the latter region and especially in Asia there is a new drive for regional integration taking place. In fact more than 50% of Asian exports are now intra-regional. Asia has become the second region worldwide in terms of goods exports after Europe, and is in third place in terms of service, closing in on North America. Nevertheless, Asia, with China and India as the driving forces, have altered the dynamics of South-South trade. This is due to rising export growth from Latin America and Africa, composed mainly of agricultural products and natural resources, which means that the dependence of these regions on richer states is declining.

One matter open to discussion is how negotiation and the eventual putting into practice of regional agreements between emerging and developing economies will end up emphasising this trend. China’s interest in signing “ASEAN+3” style accords or other such formulas with its Asian neighbours needs to be followed closely, in the light of such initiatives leading to the creation of a common trade region as an eventual counterweight to possible failure of the multilat-

eral talks which kicked off in Doha—this apart from the ongoing negotiations taking place between China and other Asian neighbours or those with resource rich Latin American and African states.

Emerging nations, which currently account for a third of world trade today will make up some 50% of world trade by 2030, with more and more states leaving the twilight to become serious competitors.

2.8. Catch up in the quality of their exports?

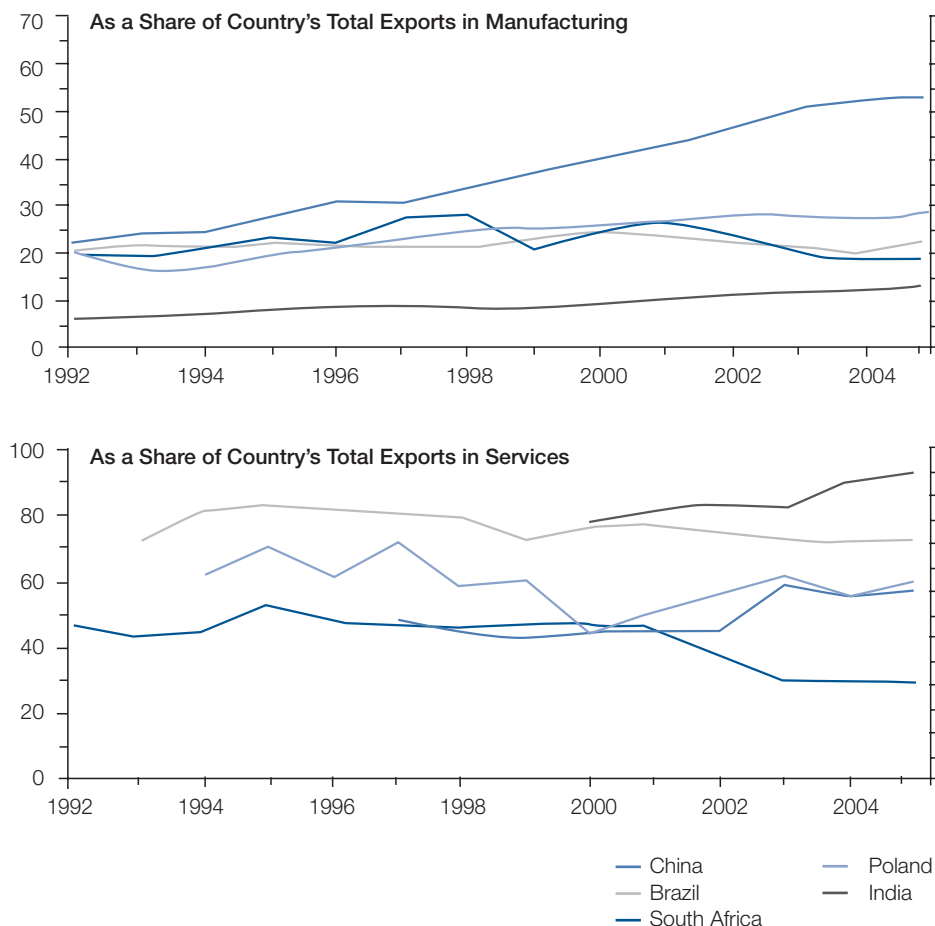
The role of quality of exports is receiving increasing attention of late. The demands of consumers who are becoming better informed and sophisticated, whilst the requirements of the production

process in which quality standards are also becoming increasingly strict.

A concise and practical way of visualising the process of catch up by some emerging nations can be gleaned from data concerning the degree of export qualification, both from manufacturing as well as services. These indicators go to show that not only is there a growing quantitative presence of emerging countries, but qualitative, in terms of the levels of exports quality, both in manufactured goods as well as services (IMF 2007), (see figure 2.10).

The two regions, which have improved their quality most, are the emerging states of Asia and Central and Eastern European (EEC-8) nations, which joined the EU in 2004. The evolution of the EU 15 and other “candidates” (of which Bulgaria and Romania joined in 2007) is somewhat more mod-

Figure 2.10. Developing countries: Exports of skilled manufacturing goods and services (%)



Source: IMF (2007)

est, but higher than Latin America and other industrialised nations. Improvement in quality has allowed countries of the EEC-8 to achieve gains in world export share, despite the appreciation of their currencies. It may serve as a lesson to such economies as the Spanish and Catalan, which are also experiencing problems of real appreciation.

2.9. Catch-up in services too?

The proportion of exports of services with respect to GDP has gone from 3.35% to 4.9% in the twenty years from 1984 - 2004 in high income countries, whilst in developing economies taken as a whole, this rise has gone from 2.0% to 4.7%, adding another side to the process of catch up. Data shows that this pattern is by no means a phenomenon linked to India (South Asia), but takes in nearly all regions in the emerging economies worldwide. Concerns on the potential of Eastern Europe expressed in Catalonia in recent studies, have met their empirical counterpart in these figures.

As for trade in services, and in the light of growth both in quantity and quality mentioned (among other reasons due to an increasingly significant added value), it is worth drawing attention here as well to exports of services from India and to a lesser extent China and Brazil (see table 2.1). In 2006, China went up a place (from 9 to 8) and India too (from 11 to 10, with a rise of 34% from 2005 and an improvement of 0.4% of world share just in the last year). Other Asian nations are also gaining positions. The US still leads, but some European states, such as Germany and The UK, (as well as some "small" and more advanced countries) are either holding their ground or even scaling positions with greater success than for export of goods.

On the subject of importing services, India has undergone a major rise of imports with respect to 2005 with service imports up 40%. This is the other side of the coin for Indian potential as an offshore service destination, and an invitation to take advantage of the extraordinary capacity India has to take in services. In this field, rises in Korea and Brazil both stand out, making it clear yet again that the rise in presence on the world stage is a two way path.

Table 2.1. Leading exporters in world trade in services, 2006

	Share of world exports; Change 2006 - 2005; Change 2006 - 1997		
1. United States	14.3	-0.4	-3.2
2. United Kingdom	8.2	+0.4	+1.7
3. Germany	6.1	-0.1	+0.3
4. Japan	4.5	-	-0.7
5. France	4.1	-0.7	-2.0
6. Italy	3.7	-0.2	-1.8
7. Spain	3.7	-0.1	+0.4
8. China	3.2	+0.1	+1.3
9. Holland	3.0	-0.2	-0.7
10. India	2.7	+0.4	+
11. Hong Kong	2.6	-	-0.2
12. Ireland	2.5	+0.3	+
13. Singapore	2.1	+0.2	-0.2
14. Belgium	2.1	-0.1	**
15. Canada	2.1	-0.1	-0.1
16. South Korea	1.9	+0.1	-
17. Denmark	1.9	+0.2	+0.6
18. Luxemburg	1.9	+0.2	**
19. Austria	1.8	-0.4	-0.4
20. Sweden	1.8	-	+0.5

+: It did not figure among the 30 first countries

**: Belgium+Luxembourg together + 1.1

Source: OIM based on WTO (2007) data and International Trade Statistics 2005 and 2007.

2.10. Catch up in investment?

In the first five years of the new millennium, flows of foreign direct investment (FDI) targeting emerging countries has grown at the rate of nearly 14% per year, while direct investment in developed economies has lost ground, especially as a result of the recesses—over 10% per year—between 2001 - 2003. This rise in foreign investment in emerging areas has kept the average of global investment volume up to levels reached during the investment boom that started in the mid-nineties. Nevertheless, it has meant that emerging and developing countries have, since 2004, absorbed some 40% of the total volume. At present, foreign investment in Eastern Europe, The CIS and Africa is breaking records, whilst in Asia it is continuing at the same fast pace as experienced in recent years. Latin America alone is feeling a certain decline in this area.

It is reckoned that the pace of growth in investments in advanced economies in the coming years will speed up, which will contribute to sub-

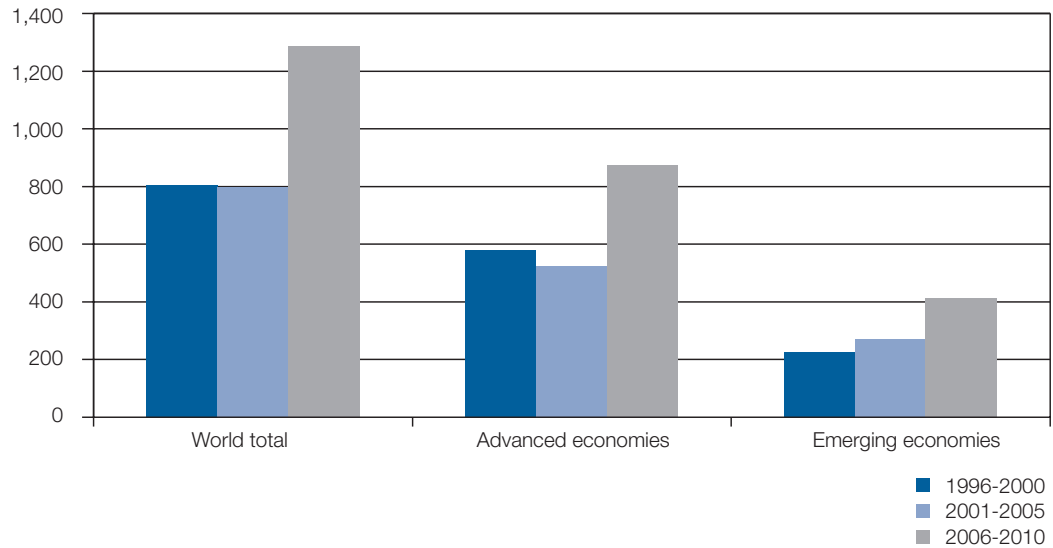
27. At the end of 2006, the Chinese National Development and Reform Commission decided to put the breaks on the excessive growth of investments, especially in the steel, coal and automobile sectors (The Institute of International Finance, 2007).

stantially raising the worldwide volume of direct investment (EIU, 2007). From 2006 to 2010 an annual flow of more than \$800 billion is forecast to be put into advanced economies and about half that figure in emerging economies (see figure 2.11).

second place in the table of emerging regions receiving foreign investment.

As for this latter region, it is worth pointing out that investment in the new EU member states will stabilise except in the Balkans—the last states to

Figure 2.11. FDI inflows (Annual average for the period; in billion US\$)



Source: OIM based on UNCTAD and EIU data

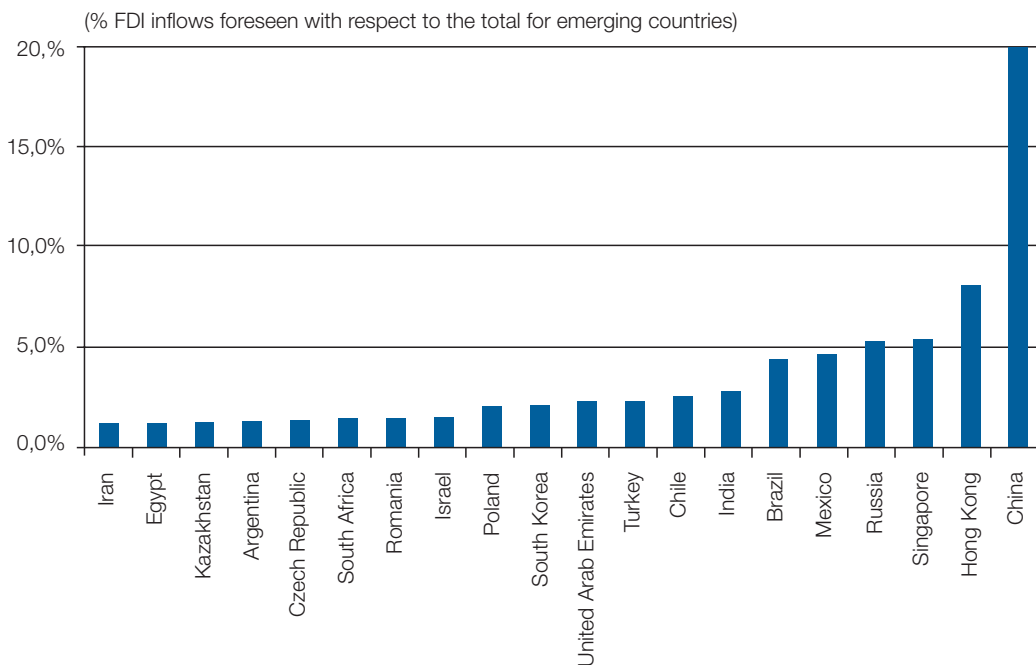
Of these emerging economies, Asia will continue to be the top destination for outside investment and China will remain on the receiving end of a large chunk (see figure 2.12). That said, forecasts indicate that the pace of investment growth in China will tail off, due to saturation in some industrial sectors,²⁷ along with Hong Kong and Singapore, given high cost of locating business there, hence leading to a limited relocation of direct investment to cheaper climes, such as the ASEAN countries of Indonesia and Vietnam, where the latter has recently joined the WTO, strengthening its position. Investment in India is also set to grow, though more moderately.

Latin America will be affected by competition with other low cost locations and forecasts for foreign investment are moderate. Brazil and Mexico, with Chile some distance behind will attract the lion's share. As a result of this limited growth, it will lose comparative muscle in relation to the other emerging markets, and Eastern Europe and The CIS or ex-Soviet states will likely move up into

join, especially Romania. The trend is for investment to keep heading ever eastwards, towards Turkey and ex-Soviet republics such as Ukraine, Azerbaijan and Kazakhstan, and above all Russia. Although the business climate is less than ideal, (unpredictable regulations, corruption etc.) this is not deterring investors, given the major opportunities for business offered by the huge Russian market. Furthermore, forecasts that situate Russia in the WTO soon will have a positive impact both economically and well as from the standpoint of paving the way for an improvement of the business climate and without doubt, it is called to be one of the main FDI destinations over the coming years.

The processes of liberalising trade and capital movements set in motion in many African nations and some in the Middle East have forecasts predicting a significant boost to investments in these regions, and most of all in North Africa. Egypt is standing out as a possible major destination for the area, due to the programs of

Figure 2.12. Emerging countries: Leading host economies, 2006 - 2010



Source: OIM based on EIU data

privatisation, flexibility of the labour market and greater freedom for incoming capital. Moreover countries of the Southern Mediterranean such as Morocco, Algeria and Tunisia are ideally located with respect to their markets on the Northern shore.

Although high demand for natural resources will continue to drive direct investment in emerging and developing nations and the dynamic of locating labour intensive manufacturing operations there will be hold up, trends suggest investment in the service sector will take over from manufacturing there. Outsourcing of services will continue speeding up due to the ongoing slump in telecommunications costs, which will therefore lead to a rise in competition in the worldwide market both for low skilled activities such as call centres, data input and text processing as well as more skilled jobs such as software development, medical services, consultancy and R+D. The location of some of these services is already underway, particularly in India, Eastern Europe and Northern Africa (Morocco and Egypt), and it is forecast that R+D linked investment is set to strengthen in Asia and Eastern Europe.

Foreign investment originating in the so-called *BRIC* (Brazil, Russia, India and China) group along with that coming from the Asian tigers is starting to make its mark worldwide, and amounts to nearly a quarter of direct investment across the globe. From a sectorial angle, almost two thirds of investment has targeted services, especially transport, distribution, storage and financial services. Nevertheless, mining and oil production also take a prominent role in Chinese overseas investments, and in terms of manufacturing, electronics is the star (Asian tigers) and garment making when it comes to searching in the area of low cost regions. Movements have also been detected in India in terms of expanding its zone of technology and information to other countries in the zone.

2.11. Catch-up in training?

As mentioned above, according to IMF estimates, in overall terms, the vast majority of those joining the “world labour supply” are still those with only basic education, although the increase in those with higher (university) education has risen 50%

since 1980, and it is growing faster of late as a result of specific policies of those nations who have staked their future on skilled labour, such as China and India, but also many of those of Central and Eastern Europe too. As commented in the previous section, the expansion of a major supply of cheap manpower from emerging economies, added to a wave of cheap brainpower, to the tune of 14 million graduates from China, India and Russia alone (as many as the US indeed), who furthermore are well trained and motivated and are taking the world market by storm, will also have major repercussions, not just for the advance of innovation, but for income patterns in more advanced nations.

As pointed out too in the section before, movement—due to globalisation and especially offshoring—to less developed countries and especially *offshoring* of intermediate tasks such as component assembly etc. to less developed countries requiring skill levels above those “delocalised” at the start, will lead to the “average” skill level rising with the transfer of successive “tasks” from advanced economies to those in emerging ones.

This will have the result of leading to an increasing presence of emerging nations in the “export basket” as well as in the development of prod-

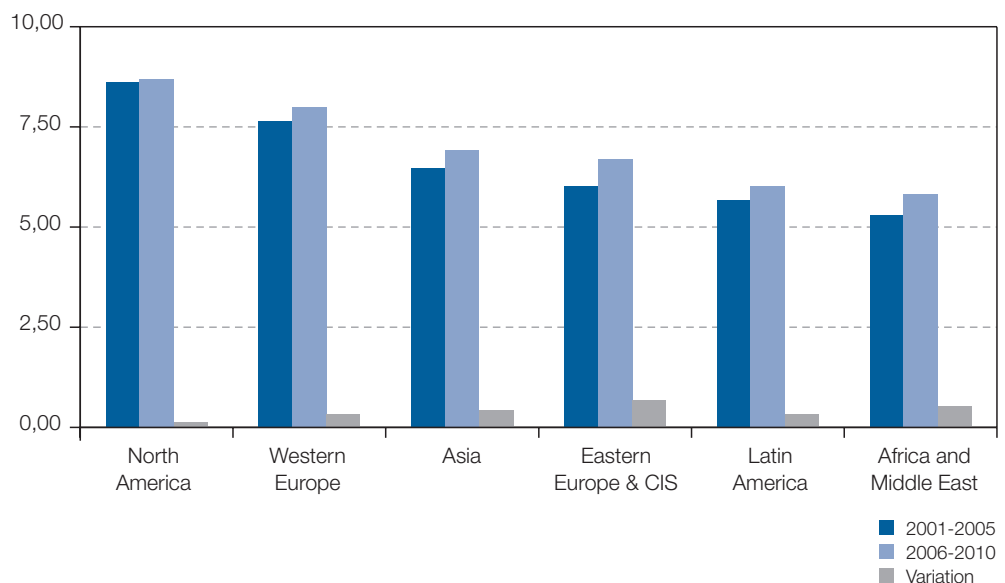
ucts requiring a greater skill level, both in terms of manufacturing as well as in services as explained above.

2.12. Catch up in quality of institutions?

The areas where the fastest moving reform processes have taken place are also those of the greatest growth, such as South East Asia, Eastern Europe and the CIS (see figure 2.13). Georgia, followed by Romania top the list of countries where most reforms have been undertaken in the last two years, with China in fourth place, (CFI, *Doing Business* 2007). Kazakhstan has managed to scale 20 places in the 2007 world ranking of economies with the best climate for doing business, with levels now similar to Slovenia. Nevertheless, it is no surprise that this ranking is topped by Singapore, Hong Kong, Taiwan and South Korea, where along with the most advanced nations, the best conditions for doing business are still to be found.

Both Northern and Sub-Saharan Africa are in third place in the chart of regions where most reforms have been put in place, just behind Eastern Europe and the CIS and the high-income

Figure 2.13. Regional score and ranking for business climate (score from 1 - 10, with 10 representing an ideal climate)



Source: EIU

nations of the OECD. Two thirds of all African countries have introduced some type of reform in the last two years, with Ghana and Tanzania currently among the top ten reformist countries worldwide. As for the 2007 ranking and for ease of doing business, South Africa and Mauritius now find themselves in positions near those of Austria, and Namibia is encroaching on Portugal.²⁸ Moreover, the report advises that this trend is set to gain further ground.

There is certain unanimity of opinion when it comes to pointing out that, in spite of improvement, in terms of macroeconomic growth and stability, the region of Latin America, will continue to lag behind due to the weakness of its systems, policies and shortcomings in education and the labour skill levels (Fantoni, 2007; EIU, 2006). In some countries, regulatory pressure on the business climate is even on the up, such as in Bolivia and Venezuela, whilst Chile and Mexico—where major steps forward have been made—are the exceptions in a region, where little headway has been achieved, and where there is a clear need to strengthen institutions, reform labour markets and cut the black economy (IMF, 2007).

The contrary is true for the evolution of the East European states, where there has been a strong commitment by governments to improve conditions for the market and the business climate. The endgame—that of eventual membership of the EU has been a key policy adopted since the first reformist came to power, meaning that they have been gradually been adopting *l'acquis communautaire*. At present, Slovenia has joined the euro zone and the Baltic States and Slovakia come within the European exchange rate mechanism-II zone, a prior step to monetary integration. On the other hand, Romania and Bulgaria left out of the first wave of eastward expansion, have joined the EU just this year. The former Soviet republics, led by Georgia and Kazakhstan are taking major strides, but they still have ground to cover especially in the area of improving their justice system and keeping the lid on corruption.

Nevertheless, the perceived feeling of relative sluggishness of emerging economies in catching up in many facets of “institutional quality” in com-

parison to more advanced countries is, in some circles, considered an “asset” which is worth valuing (IMD, 2007). It points out its importance as a factor that goes to explain specialisation patterns in activities requiring a high “contractual intensity” are beginning to come to fore, thereby converting institutional quality into a true “comparative advantage”, the influence of which holds its own, even if other, more “classical advantages” (skilled labour, capital etc.) enter into the equation (Nunn, 2007).

Institutional quality thus appears as an important factor in competitiveness, which may keep Europe and the rest of the Western world ahead, notably in areas requiring complex contractual legal affairs, credibility and service based activities and “management of global complexity”.

2.13. Catalonia's position relative to emerging markets

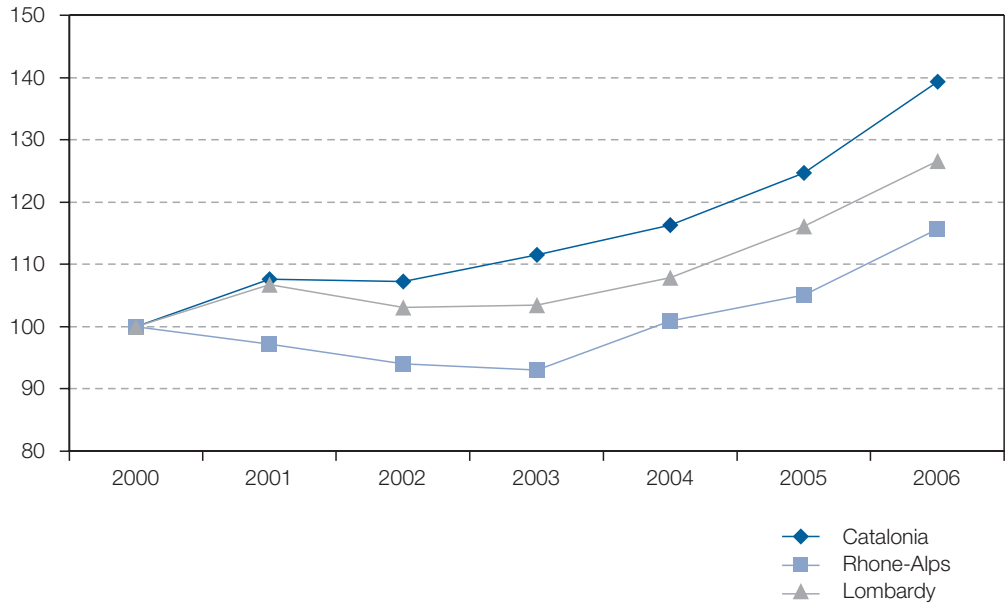
In the period from 2001 - 2006 the pace of exports of Catalan goods grew at a nominal average of 5.7% per year, one point above the EU average. In the two years from 2002-3 there was a serious downturn with values plummeting to 1.1% in each financial year, whilst a remarkable recovery has taken place in the last three years, from 2004-6. In 2006, Catalan exports grew at a faster pace than any time in the previous 6 years and surpassed GDP growth in 4 percentage points, with the growth rate of Catalan exports sales outstripping imports for the first time since 2001.

Indeed, when compared to the Rhone Alps and Lombardy regions, Catalan exports were still greater from 2001-6 (see figure 2.14). Since 2000, Catalan exports have gone up by 40%, nearly doubling those of Lombardy and three times those of the Rhone-Alps. This rise is put down both to exports to advanced nations, mainly the EU-15, as well as to the greater export drive to emerging and developing nations in more recent years.

The emerging nations referred to however are mainly Eastern European and former Soviet republics (see figure 2.15), who have now

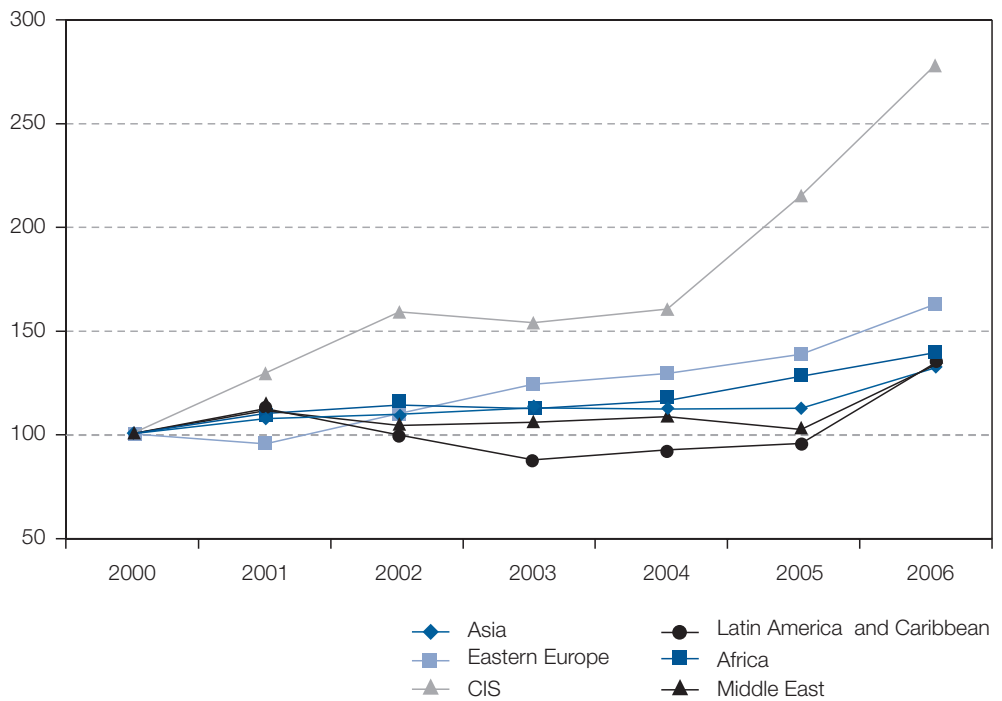
28. Nevertheless it must be pointed out that the indicators used by the World Bank to measure the ease of doing business does not take into account either proximity to major markets, nor the quality of infrastructures, among others. Therefore, it is simply a measure of regulations imposed on business activity.

Figure 2.14. Evolution of exports 2000 - 2006 (year 2000 = 100)



Source: OIM based on DG of Customs, INSEE, and ISTAT data

Figure 2.15. Evolution of Catalan exports in emerging countries 2000 - 2006 (year 2000 = 100)



Source: OIM based on DG of Customs, INSEE, and ISTAT data

become Catalonia's second market, knocking such a market place as Latin America from its spot. On the downside, it cannot be ignored, that despite the meteoric growth of the Asian economies and proportionally soaring imports to them, Catalonia has failed to get onto the export boom bandwagon in the region.

What is more encouraging is the major rise in exports to Africa, nearly 50%, most notably to North Africa in keeping with the increased economic thrust of the region, whilst it can be easily observed that export growth to Latin America was sluggish over the same period.

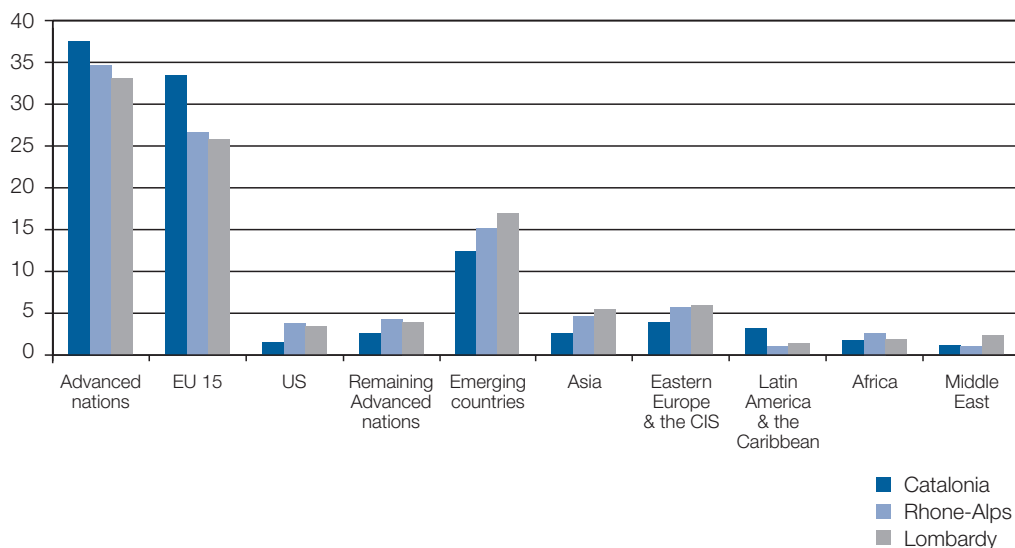
Breakdown of exports into geographical regions in comparison with the Rhone-Alps and Lombardy regions reveals Catalonia's greater reliance on EU markets, and despite rises to Eastern European and CIS states, is still lagging behind the two of the other European motors (see figure 2.16). On the other hand, in keeping with cultural and historical ties with Latin America, this region is better represented in Catalan exports than the others. Nevertheless, it is once again noteworthy how Catalonia lags behind the other two in terms of exports to Asia. In this area, the percentage of Lombardian exports to Asian markets doubles that of Catalonia.

It is clear that although Catalan enterprise has emerging countries in its sights, there is room to achieve a far greater presence in Asian markets. Hence, one of the outstanding challenges at this time for Catalonia is to speed up its internationalisation process aiming at Asia, which is the centre of the global economic activity not only at present, but doubtless in the future too.

As for Catalan foreign direct investment from 2001-6, two thirds went to EU-15 states and a further 15% targeted Latin America (see figure 2.17). This makes it apparent that the predominant factors were geographical proximity and cultural and historical ties when it comes to investing. Therefore, with the exception of the American sphere, Catalan money in other emerging areas is at best scarce.

Another point to mention is the high level of concentration of Catalan investments in relatively few states. A total of 96% of foreign investments were channelled into 20 countries between 2001 - 2006. Indeed, just four countries, France, the UK, Belgium and the US accounted for 50% of accumulated investment over the period in question. On the other hand, over 80% of Latin American investment targeted three countries, Brazil, Argentina and Mexico, whilst Hungary and

Figure 2.16. Geographical breakdown of exports by region, 2006

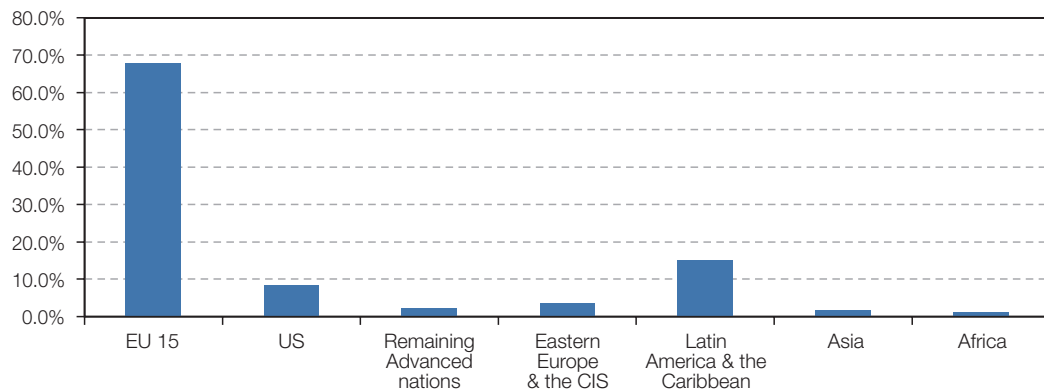


Source: OIM based on DG of Customs, INSEE, and ISTAT data

Russia accounted for three quarters of all investment headed to Eastern Europe and the CIS. Meanwhile, 70% of all Asian capital ended up in

either India or China, and Morocco alone received more than half continental Africa's foreign investment.

Figure 2.17. Geographical breakdown of FDI by region: Accumulated FDI 2001 - 2006 (% of total)



Source: OIM based on Secretary of State for Trade and Tourism data.



CHAPTER 3
*Enterprise and internationalisation:
New realities*



3. Enterprise and internationalisation: New realities

The so-called “dividend of globalisation” comprises of a number of elements. Among these can be included: the shaping of global supply chains, exploitation of the potential of globalisation, the generation of global innovation chains or access to the global labour supply (investment in areas of higher profitability, fragmentation of production processes to locate each stage of a task in the most efficient, profitable or productive place, organisation of production according to the most flexible patterns, etc.). All these will lead to significant all-round improvement in efficiency and productivity.

This also means a revaluation in the ability to “manage complexity” worldwide. Managerial skill in these new environments (the so-called global teams, global management and corporate governance, etc.) are coming to the fore as major competitive edges.

Following on from this, one of the most important areas of trade analysis and direct foreign investment of the moment is focused on the characteristics of firms with an international export and/or investment portfolio.

Development analyses underline a systematic productive edge in favour of exporting firms. The

link between internationalisation and improvement in productivity belies notable ties, that may be useful when it going towards explaining the upward trend in worldwide productivity: one of the main arguments put forward in favour of new global realities, associated with gains in efficiency that leads to taking greater advantage of specialisation and “international labour divisions”, not only in terms of “finished” goods but also in production stages, tasks or activities in the added value chain of a product.

Bernard et al. (2007) analyse what they refer to as the exporter premia or differential in favour of those exporting firms in relation to specific parameters. Some results go to show that exporting firms gain some 26% more in “added value per worker” (a simple measure of productivity), 19% more in terms of worker skill, and salaries some 17% greater, in all cases compared to no exporting firms (see table 3.1).

Exporting firms are more multi-product in nature. Other results bear out that, when taking into account differences between industrial companies, exporting firms produce some 27% more goods than non exporting ones in their segment and furthermore return 73% greater sales per product (see table 3.2).

Table 3.1. Differentials between exporters and non-exporters (US manufacturing sector, 2002 data)			
	Exporter Premia		
	1	2	3
Log Employment	1.19	0.97	-
Log Shipments	1.48	1.08	0.08
Log Value Added per Worker	0.26	0.11	0.10
Log TFP	0.02	0.03	0.05
Log Wage	0.17	0.06	0.06
Log Capital per Worker	0.32	0.12	0.04
Log Skill per Worker	0.19	0.11	0.19
Additional Covariates	None	Industry Fixed Effects	Industry Fixed Effects, Log Employment

Source: Bernard-Jensen-Redding-Schott (2007)

Table 3.2. Differentials between exporters and non-exporters: number of products and shipments/product (US manufacturing sector, 2002 data)		
	Exporter Premia	
	1	2
Log Number of Products	0.23	0.27
Log Mean Shipments/Product	1.25	0.73
Additional Covariates	None	Industry Fixed Effects

Source: Bernard et al. (2007)

3.1. Extensive margin and quality of exports: a boost to creativity and innovation

The Annual Report of the OIM 2006 already summarised some of the implications of these analyses and those of different skills with a view to capitalising on the new potentials of open markets, as well as—the other side of the coin—to deal with increased competition. It also highlighted the importance of the fact that in the new global framework, countries were capable of improving not only the so-called “intensive margin” in exports (the same companies exporting higher amounts of the same goods to the same foreign markets), but most notably increasing their “extensive margin” which would amount to more companies and/or products boarding the export train and/or exporting to more places. In order to achieve this, the role of both quality and creativity are quite clear.

One common obstacle is to be found in the “start up costs” of embarking on an international adven-

ture (market studies, distribution chains, trustworthy partners, etc.). Action by public institutions in conjunction with the private sector can go a long way to breaking down these hurdles, especially when it comes to providing incentives for the “extensive margins” for SMEs (Helpman-Melitz-Rubinstein, 2007).

The extensive margin in Catalonia

One of the studies carried out by the OIM in the 2006 notebook collection (ESCI-UPF, 2006) illustrates the importance of the extensive margin over the intensive margin for the Catalan economy. The first conclusion it reaches is that with very few exceptions, the overall trend of the Catalan extensive margin from 1988 - 2004 portrayed a clear growth for all economies and markets in the study. In 2004, 36.5% of Catalan export volume was made up of products that had either not been exported at all or very little, back in 1988.

Nevertheless, the results are different when it comes to the end markets for Catalan exports. Overall the EU-15 take the highest slice, and are those where the extensive margin grew relatively slowly, up to 37.7% by 2004, whereas those countries which joined the EU in 2004 returned much more dynamic extensive margins for exports, reaching 84.4% in the last year under study.

By country, and leaving aside the new EU states, the highest growth in the extensive margin in Catalonia between 1988 - 2004 is to be found in Russia, Libya, Brazil, China, Japan, Taiwan, India, South Korea and Hong Kong. In 2004, between 87% - 97.5% of Catalan exports to these states were comprised of products that had not been exported before to them or at most in minor amounts back in 1988. This demonstrates a clear diversification of Catalan exports to emerging countries, which are leading and driving strong and sustained economic growth in recent years, such as the Asian, East European nations and those of the ex Soviet republics or CIS, but most of all China, India and the CIS.

In comparison to other European nations, the extensive margin of Catalan exports is greater to those of many economies of a similar size, such as Eire, Greece, Finland, Portugal or Hungary. This bears out the importance of the extensive margin in Catalan exports as a whole, coinciding with the periodical analysis commented on earlier which had witnessed such a significant rise from 1988 - 2004.

3.2. Speeding up internationalisation: the role of intangibles

The growing process of the globalisation of the world economy and integration into markets is transforming enterprise strategy. Nowadays, the question is not about seeing internationalisation as a complement to local business, but the trend of creating an international stance is increasingly favoured as a business model in itself. This explains the rise of a recent phenomenon, also

present in Catalonia; the appearance of born globals that look at business from the viewpoint of internationalisation from their inception. Indeed, a number of cases are studied in the first OIM Notebook (ESADE, 2007). Likewise, it is being observed that established firms are redefining their international agenda, developing a global side to their business in order to generate a new edge. These are the so-called reborn globals.

Recent advances in information and communication technologies (ICTs) and the drop in transport and communication costs have led to a speeding up in the internationalisation processes of big and small firms alike, as they are able to reach out further to ever more distant markets. As a result of this, international competition is growing in all sectors, and whether it be for reasons of scale economies, loss of local market share or internationalisation of major clients, enterprise ends up having to face the reality of becoming more international. In this context, intangible assets, such as experience, knowledge of networks, contacts and technology are elements, which can prove of great help in the process of internationalisation.

The traditional model of internationalisation; the gradual one, defined by a variety of stages (sporadic exports through agents, then the setting up of a branch sales office, and finally overseas production)²⁹ starting with the closest markets both geographically and culturally, is being increasingly displaced by the fast track internationalisation of born globals and reborn globals. These new business formats usually skip the first two stages of the traditional model, starting either with direct export or by establishing strategic alliances with foreign suppliers or distributors. Growth at home runs parallel to international expansion and this expansion overseas is determined by reaching the best markets, regardless of the geographical or cultural proximity, as priority is given to collaboration with suppliers and other business partners. They have a well-defined strategic alignment and rely on the prior international experience of their management team, counting on a worldview, where use of international networks and channels are essential factors.

29. Uppsala's Model (Johanson i Wiedersheim, 1975)



ANNEXE 1
*Index to the full version
of the Annual report*



Annexe 1

Index to the full version of the Annual report

Annual Report 2007 Observatory of International Markets

*Mapping new markets and opportunities
Taking part in global business networks*

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 - 3.1.4. On the sources of advantages
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 - 3.1.6. Evolution of world trade
 - 3.1.7. Trade in services
 - 3.1.8. Major exporters and importers
- 3.2. Labour and activities in a global world
 - 3.2.1. Moving towards a global labour supply
 - 3.2.2. Mechanisms of global competition in labour and activity markets
 - 3.2.3. Differences in skill levels
 - 3.2.4. Distributive implications
 - 3.2.5. *Task Trade*
 - 3.2.6. Types of tasks or activities
 - 3.2.7. Globalisation and changes in organisation of enterprise: flattening off vs hierarchies
- 3.3. Global finance: risks of imbalance and fragilities?
 - 3.3.1. The global financial framework
 - 3.3.2. External imbalance
 - 3.3.3. Eventual impacts of the dollar's depreciation: the role of Europe
 - 3.3.4. International financial fragility?
 - 3.3.5. New realities in global finance

References



ANNEXE 2

*External Collaboration taken from
the full version*



From future trends to business strategy

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Strategies are supposed to work in the future. You do not make strategy for the past unless you are a husband returning home very late or a criminal facing a judge.

The difficulty with the future is that it does not exist. It is not easy to study something that does not exist. Historians are saddled with the same predicament. You could say that historians and futurists are working two sides of the same thing, namely the present. Historians are working on the basis of more or less reliable memories plus what remains today from the past. Futurists are working with dynamics of the present and what they might entail plus what the past has taught us.

There are many reasons for studying the past. I will leave to the historians to argue for the merits of studying the past. There are also many reasons for working with the future. It is inspiring, not to say fun. The ‘aha-effect’ you can experience when you suddenly see things coming together can be quite exhilarating. However the decisive reason for working with the future is that that is where your decision and strategies are going to work.

Working with the future is therefore both hopeless and unavoidable. You can’t study something that does not exist and you can’t exist without having at least assumption on what kind of future your decisions and strategies will to work in.

The outcome of working with the future can be threefold:

- getting an awareness of what you are basing your decisions and strategies
- becoming inspired hopefully to better decisions and strategies
- being able to see when you are wrong, ie. getting a warning and therefore getting a chance to do something about it.

There has through history been developed many ways of trying to predict the future. The basic difference between almost all earlier attempts to predict the future—be they crystal balls, the innards of birds or the position of the planets—and modern futures studies is that modern futures studies both acknowledges that we at any given time are facing multiple potential futures and that any statement on the future has to be argued along an ‘if-so-line’. The arguments—the ‘ifs’—are very important because they enable you to see as early as possible when you are wrong.

As practised by the Copenhagen Institute for Futures Studies there four ways of ‘attacking’ the future:

- **Prognoses** are used if you are interested in the development of a clearly defined and delimited

area on a short time horizon. Here you study the situation today, its historical past and make a prognosis of what the situation could look like in for example 6 months. Demography is a special category situated between prognoses and megatrends. Population does—luckily—change very slowly and can therefore usually be prognosticated quite far into the future. Of course a true pandemic or a global natural catastrophe can play havoc with that kind of long term prognoses. The future is uncertain. On the other hand demography has such long range and broad consequences that it is usually considered a megatrend.

- **Megatrends** are the big, broad and inertia rich trends that that characterize the development. Trends that are so all-embracing that nothing and nobody is not influenced by them: neither nations, nor companies, nor organizations, nor individuals. You should always include the use of megatrends if you are working with changes in a longer perspective.
- **Scenario analysis** is a method that was originally developed during the 2. World War by the military in the US. It was used as a way to figure out the outcome of a military action with all possible factors taken into account. Basically the aim is to create alternative, coherent and relevant pictures of how the future may turn. By creating more than one picture—which would be close to a prognosis increase the likelihood of having taken account of most of the potentialities. Futurists have been using this method for around 40 years and the method has of course been further developed and refined. Working with scenarios is a way to develop a picture and open the mind for the possibility of many different, potential futures.
- **Wildcards** are finally are defined as events that are extremely unlikely, but full of consequences should they be realised. September 11 is already now a classic wildcard. Wildcards can be used when you have made up your mind on how you think the future is going to be. To test your vulnerability you can use wildcards to explore various 'what if...'

The Copenhagen Institute for Futures Studies has now for many years been using scenarios in

working with companies in their strategic planning. As a result of this we have developed a concept called 'Dialogue based scenario processes'.

It is based on a dialogue between futurists and people working for the company. This may seem selfevident. It has however not always been that way. When we started working with scenarios in the 1980's we looked at the company and then went home, wrote the scenarios which then were delivered to the company. That way of working does not ensure a transfer of ownership from the futurists to the company. People in the company tended to say that the scenarios looked very interesting and that they would take a closer look at them sometime in the future and that somehow very often did not happen. So the first reason a dialogue based process is that this is a precondition for achieving a result. The second reason is that futurists are always amateurs in the company of people who know their business better than the futurists. It would be stupid not to draw on the knowledge residing in the company.

The scenario process has 8 steps

1. **Choosing the subject.** The most common timeframe for the scenarios is 10 years—a period long enough to make it likely that something will change and short enough to ensure that people do not think they are entering the sphere of science fiction. This is not a rigid rule some subject may be better seen in a shorter timeframe, others in a longer. At this stage it is equally important to use some time on a précis definition on what the question at issue is. Is it the future for specific product, is it for the company at large? Any kind of vagueness in this question will make the work in the later stages more difficult.
2. **Megatrendmining.** The current list of megatrends at CIFS consists of 15 megatrends. It is trends like demography, digitalisation, globalisation, individualisation, digitalisation, immaterialisation, democratisation or commercialisation. The idea at this stage is to take each megatrend and analyse what consequences they could have for the question studied. The aim is first to take a look at all that is rather certain. This does of course imply some work because megatrends by definition are broad

trends. Drawing the connection between a given megatrend and the subject at hand can thus demand some analysis.

3. Uncertainties. Having covered the more certain aspects of the future the time has come to focus on the true uncertainties. This is a central stage in the scenario process. Here the participants have to focus on the question: what is it that on the one hand is very important for the subject (company, product, market) and where we on the other hand are very uncertain as to which direction it will take. Each uncertainty comes in pairs: 'either—or', 'to—from'. They have to be each others' opposites: function or emotions, polarization or equalization, slow digitalisation or fast digitalisation. The process of defining uncertainties can easily end up with 10 - 20 or 50 uncertainties. This list can then be whittled down by eliminating all those that are not true uncertainties, do not really constitute opposites, are not really relevant for the subject.

4. The two most relevant uncertainties. Choosing the two most relevant uncertainties is also a very important stage, because this choice will determine the scenarios you create. Let us take an example: true globalisation or glocalisation. Will the world accept a continuing globalisation on all fronts, ie. Economic, cultural, media, political and so on. Or is glocalisation a better bid for the true direction. This does not imply that globalisation will stop. Globalisation is after all a megatrend. It does however imply that people will want to combine a globalisation of some aspects—say goods—and not on others—say migration. Glocalisation implies thus a continued role for the local aspect. Another example could be: function or emotion. Will the relation price /quality be the most important in the future—function—or will the important driver in consumption be brands, and storytelling—emotion—be dominant.

5. Crossing the two uncertainties. By crossing the uncertainties you create a skeleton for the four scenarios to be created where you can combine true globalisation with function and

with emotion and glocalisation likewise with function and emotion.

6. Making the scenarios. Now you have to flesh out the four possible scenarios made possible through the choice of the two most important dimensions of uncertainty. Here you have to create four different and convincing stories about how the future could be. The best scenario is a 'round character' describing all the 'PEST-factors'—Political, Economic, Social and Technical factors for the given scenarios. The ideal situation is that each scenario is so convincing that most people will say: that sounds most likely

7. Create profiles: for each scenario you now work out how our subject (company, product, market) will be. For each scenario is worked out what kind of business development is needed, what kind of product development is indicated, what HR development will be demanded. In short for each scenario a proper strategy is developed. Now you have come along most of the way from trends to strategy.

8. The final phase of the scenario process is where you choose the most likely and the most wanted scenario. You may be so big a player in your area that you can push developments in a preferred direction. If that is the case you have first to be sure, which direction you would prefer. You also have to focus on which scenario is more likely. Maybe all four scenarios are likely, but you can see that some are more important than the rest and therefore need a sharper focus in your strategy.

This is how we see it at CIFS for the time being but we know that change is the only truly predictable factor so we also may change our mind as times go by. What probably won't change is that strategy has to be founded on assumptions on what kind of future the strategy has to meet. I will probably also in the future be important that these assumptions are explicit. Not necessarily because they are right but because you then are better placed when you are wrong. In this respect the strategy is like a budget. Deviations are not always bad, but it is bad if you don't know that you are deviating.

The potential of nanoscience and nanotechnologies

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Nanotechnologies, which are defined by the control exerted over the properties of material and use of devices measured by millionths of a millimetre, in conjunction with the scientific, technological and commercial applications, which have sprung from this phenomenon, have already become a reality on a worldwide scale. Indeed, already in the year 2004, governments, enterprise and investors throughout the world had put a total of some 8.6 billion dollars into nanotechnology related R+D+i. Since publication of Nikolai Kondratieff's "long wave" economic cycle theories in 1926, at the time of the rise of the chemical and electrical industrial booms, two further cycles have been subsequently identified: that of the automobile and the electronics industries, and more recently, that of information and communications technology. According to various experts, nanotechnology is a firm candidate to lead a new Kondratieff cycle, perhaps in conjunction with biotechnology. The fact that nanotechnology has been identified as a serious contender to lead this cycle is due to the reality that its potential applications are present in all spheres of human activity.

Nevertheless, nanotechnology is still in somewhere between science fact and long-term research analysis, between incipient results and future expectation. It should be remembered here that the term "nanotechnology" is not limit-

ed to a single concept, but encompasses an entire range of distinct technologies and approaches. For this reason, it is more expedient to analyse such developments and approximations being currently laid down in the definition of the sub-areas of nanotechnology such as nanomaterials, nanoelectronics, nanobiotechnology and nanomedicine, or even indeed, nano-tools and nanodevices.

Nanomaterials are expected to exert a major influence on all fields where the development of new materials is currently a key factor, such as in the area of ultra-thin coating layers and active surfaces as well as in the new generation of chemical engineering (catalytic processes).

Nanoelectronics is destined to make its greatest impact in information and communications technologies, and is called to fall in line with (or even surpass) the predictions of Moore's empirical Law, which is being inexorably fulfilled since the first integrated electronic circuits appeared in the sixties. This law envisaged a doubling of both storage capacity (defined by memory per unit of area) and processing speed of integrated circuits every 18 months.

Nanobiotechnology is also now making a contribution to medicine through diagnostic systems, both at molecular level and via imaging technol-

ogy, as well as in new, more selective and efficient treatments. It also plays a role as a technological support in regenerative medicine. Furthermore, such newly discovered applications are destined to have a major impact on the agro-food industry.

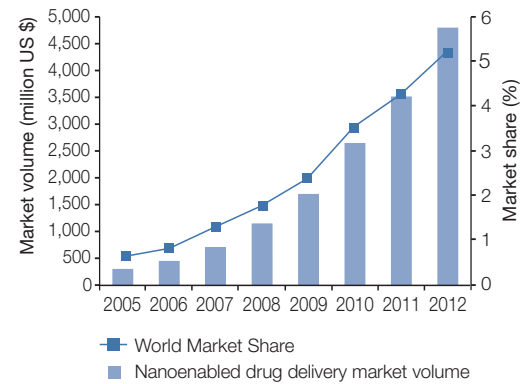
Nanotools and nanoinstruments are becoming a necessary part of the devices of the range of instruments required in order to develop and use nanotechnologies themselves. Such examples include those of new microscopy systems and those of ultra high precision equipment.

Turning to the foreseen economic impact of nanotechnology, it would be appropriate at this juncture to take a glance at estimated market volumes according to a variety of sources. Many market analyses take the year 2000 as a starting point, with a projection span of some 15 or so years. In 2001, the National Science Foundation calculated that the worldwide market for nanotechnology would reach some US\$ 1 trillion by 2015. Nevertheless, according to what anyone's definition of nanotechnology itself is and its contribution to a product's final value, added to the degree of optimism felt about its evolution, some truly extreme values have been forecast: from the more modest US\$ 150 billion by 2010 (Mitsubishi Institute, 2002) or at the top end, US\$ 2.6 trillion by 2014, estimated by Lux Research (2004).

In light of such predictions, a look back at the growth of nanotechnology in recent years yields the following:

In a specific given sector, such as that of the production of new drugs, it is interesting to observe the evolution forecast for the influence of nanotechnology and its resulting impact on world markets (figure 2).

Figure 2. Market and market share for nanotechnology based drugs



Source: Moradi, 2005

Having commented on the worldwide outlook (see table 3 for the compilation of data on the economic outlook), below is a projection of geographical breakdown (figure 3).

It is also revealing to compare data on public investment into nanotechnology R+D+I by country, as published by the European Commission in 2005, where it can be seen that only by adding total European investment does spending match that of the federal US budget.

Figure 1. World market for nanotechnology by segments

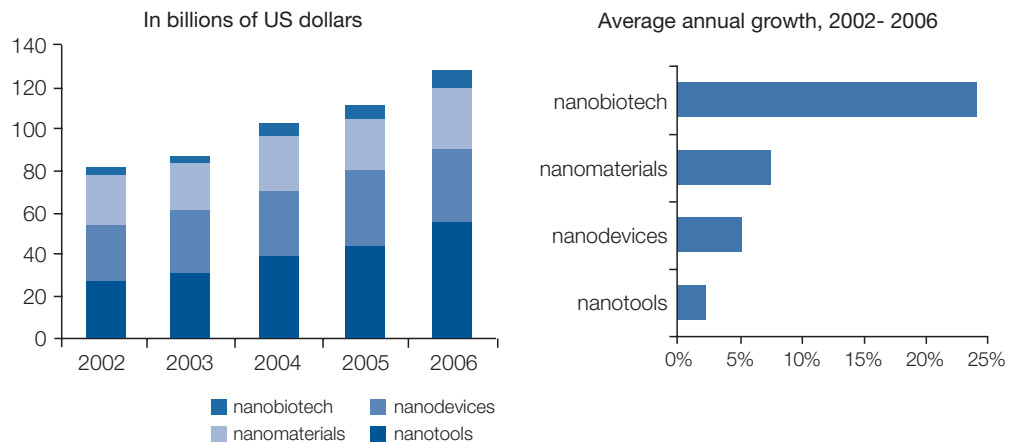
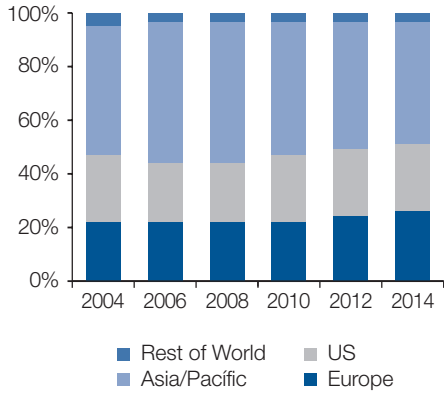
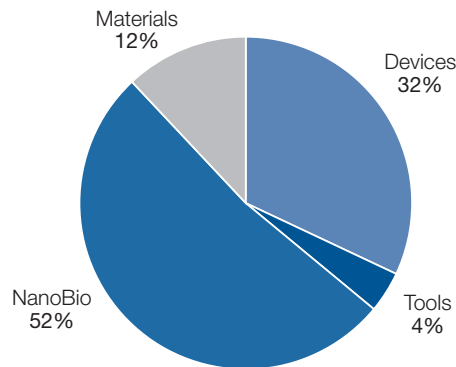


Figure 3. Percentage of worldwide sales of products manufactured with use of nanotechnology by area



Taking into account that this is a fledgling sector in terms of economic and industrial development, it is worth taking note of both the analysis and subsequent investment being made by the capital risk sector. Figure 4 eloquently illustrates that “nano-bio” applications are attracting more than half all capital risk investment in nanotechnology.

Figure 4. World capital risk investment in nanotechnology



Source: Pauli et al. (2003)

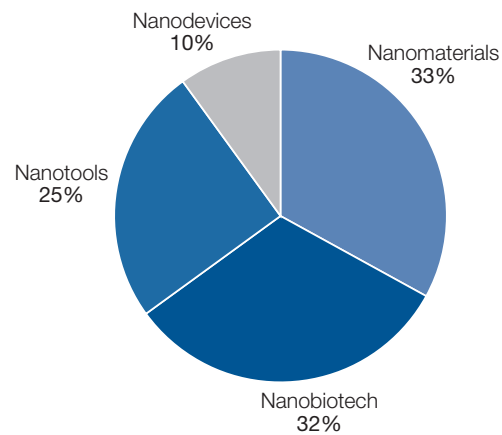
Table 1. Public investment in nanotechnology in thousands of euros

USA (Federal)	910,000
Japan	750,000
European Commission	370,000
USA (States)	333,300
Germany	293,100
France	223,900
South Korea	173,300
United Kingdom	133,000
China	83,300
Taiwan	75,900
Australia	62,000
Belgium	60,000
Italy	60,000
Israel	46,000
Netherlands	42,300
Canada	37,900
Ireland	33,000
Switzerland	18,500
Indonesia	16,700
Sweden	15,000
Finland	14,500
Austria	13,100
Spain	12,500
Mexico	10,000
New Zealand	9,200
Denmark	8,600
Singapore	8,400
Norway	7,000
Brazil	5,800
Thailand	4,200
India	3,800
Malaysia	3,800
Romania	3,100
South Africa	1,900
Greece	1,200
Poland	1,000
Lithuania	1,000
Others	2,800
Total	3,850,000

Source: European Commission, 2005

Compare this graph with that which analyses companies already involved in nanotechnology and divided by sectors, and those of the distribution of companies and nanotechnology research institutes (see figures 5 and 6).

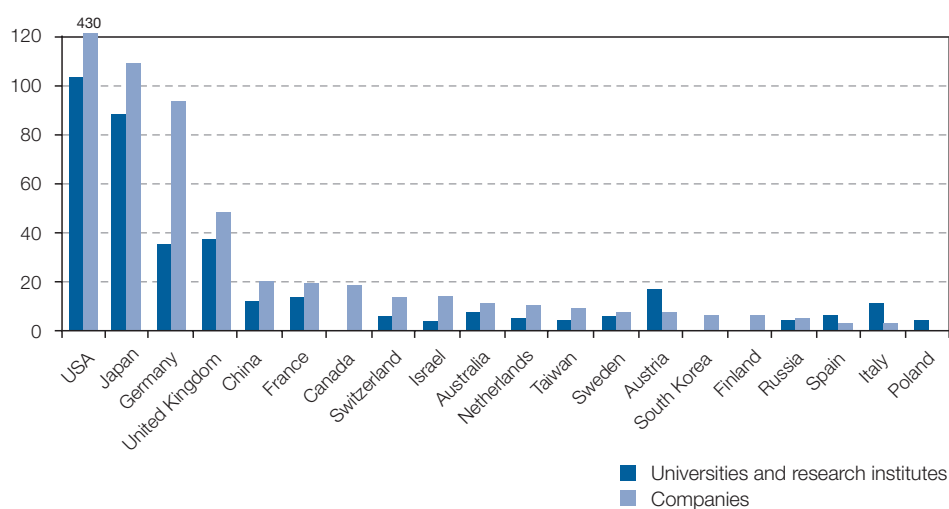
Figure 5. Breakdown by segments of companies engaged in nanotechnology



Source: Fetch et al. (2003)

	Products	Market Billion US \$	Product Pipeline	Companies
Drug Delivery	21	5.4	98	113
Biomaterials	8	0.07	9	32
In vivo Imaging	3	0.02	8	15
In vitro Diagnostics	2	0.78	30	35
Active Implants	1	0.65	5	6
Drugs & Therapy	0	0	7	7
Total	35	6.9	157	208

Figure 6. Breakdown by country, companies and research institutes engaged in nanotechnology

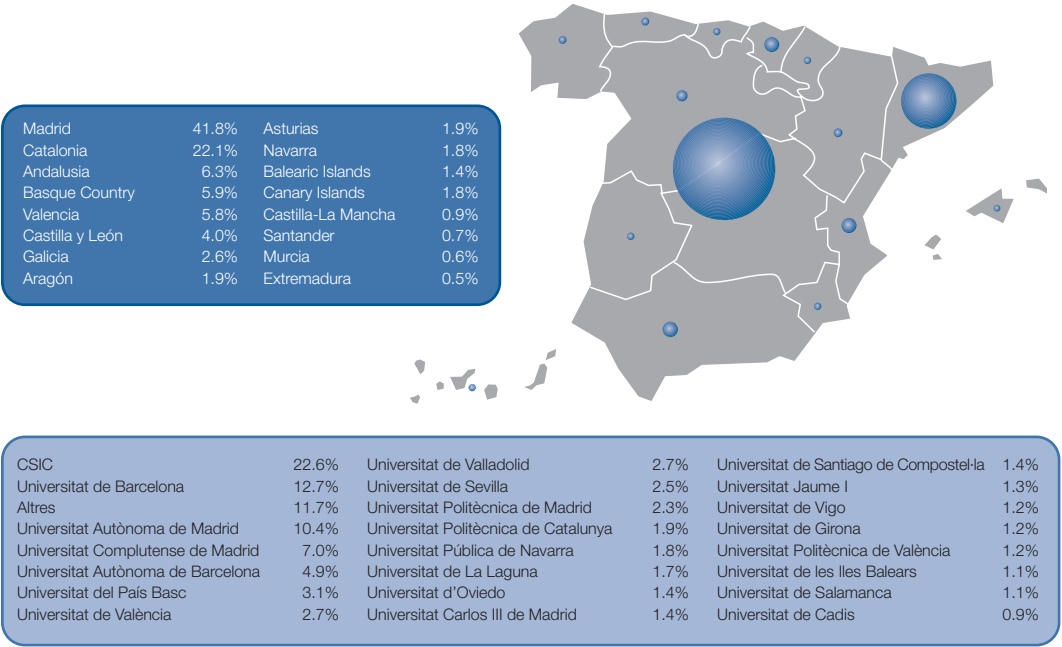


Source: Cientifica 2003

The situation in Catalonia can be best summed up by the scientific output as presented in the chart below (figure 7), which also highlights the concentration of research centres in the Community of Madrid, along with the high scientific output of Catalan universities.

Despite a lack of specific economic data on nanotechnologies for Catalonia, some sectors are nearing critical mass and have forged a notable international profile, particularly in the fields of nanomedicine and nanotechnology applied to biomedicine, as illustrated by figure 8, which portrays the most important clusters in Europe and The USA in this field.

Figure 7. Nanotechnological activity per sector nationwide in Spain, (academic, commercial) has been classified in 2 ways for the study: on the one hand as an indicator of whether activity has been detected in projects, patents and thematic networks, and on the other, percentage indicators with corresponding articles and minutes of congresses obtained using INSPEC and Current Contents



Source: : CINM Círculo de Innovación en Microsistemas y Nanotecnología - the Circle of Innovation in Microsystems and Nanotechnology. The CIMN is a joint initiative created by The General Directorate of Universities and Research of the Department of Education of the Community of Madrid and The National Institute for Aerospace Technology - El Instituto Nacional de Técnica Aeroespacial (INTA)

Figure 8. Nanomedicine clusters - US and Europe. Of note is that Catalonia is on the world map, represented both by research centres (Parc Científic de Barcelona - Universitat de Barcelona and the Instituto de Bioingeniería de Catalunya, IBEC,) as well as by enterprises, which are taking an active role in the CENIT Oncnosis projects to diagnose cancer, led by the laboratories Ferrer Internacional and Nanopharma.



Table 3. Compilation of data on world markets for nanotechnology by sub-area, from a variety of sources (cont.)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nanoelectronics										12,000 (15)	300,000 (3)		40,000 (15)		76,000 (15)	300,000 (5)
Nano-based semiconductors						500 (2)		355 (2)	18,000 (19)			65,700 (19)				500,000 (3)
Organic semiconductors			38 (2)									340 (2)				
Nano-based ultra capacitors											160,750 (4)		442,020 (4)		741,864 (4)	
Nanostorage																
Sensors					9 (2)											
Nanointermediates					851 (4)		7,888 (4)		37,890 (4)							
Nano enabled products					12,001 (4)		43,455 (4)		110,944 (4)		344,204 (4)		962,511 (4)		1,818,126 (4)	
Nano enabled products in auto and aerospace					8,500											6,500 (2)
Automotive					1,110 (2)											70,000 (5)
Aerospace																
Sales in food and beverages sector			150 (16)		860 (16)			13,600 (25)			24,000 (16)		115,000 (25)			
Textiles																
Pharmaceuticals	100 (9)				140 (9)											180,000 (5)
Chemical processing																100,000 (5)
Healthcare															30,000 (4)	30,000 (5)
Sustainable processes																45,000 (5)
Ultra precise surface processing		3,000 (12)														

(1) http://freedomia.eonet.com/comicoms2/summary_0285-21108_ITM

(2) Frost&Sullivan 2002

(3) Alexander E. Braun, cited by AllienzGroup report

(4) Lux-Research 2004

(5) NSF 2001

(6) Datamine technology review

(7) Deutsche Bank 2005

(8) VDI Company survey

(9) BCC 2002

(10) SRI 2002

(11) Mitsubishi Research Institute 2002

(12) D. G. Bank 2002 (les dades són en euros)

(13) UPI

(14) III-Vs Review

(15) FTM Consulting

(16) Helmut Kaiser Consultancy, 2004

(17) Stevenson, 2003

(18) Aspen systems

(19) NanoMarkets report

(20) Reuters 2002

(21) BASF 2002 (les dades són en euros)

(22) VDI-TZ 1998 (les dades són en euros)

(23) Fecht et al., 2002

(24) Nanomarkets, Venture Development Associates, 2005

(25) Certifica, 2006

Conclusion

It is clear that great hopes have been vested in the application of nanotechnologies in a variety of sectors at industrial level. It is also apparent that a number of European states are rapidly developing their research capacity into nanotechnologies, which are seen as an interdisciplinary opportunity for innovation. In fact, all sectors analysed portray nanotechnology as a key element for those products requiring intensive R+D+i evolution and in which, reducing size, weight, material and energy consumption all lead forging a competitive edge. Not to be overlooked either are the new fields in which nanotechnology can be applied to enable us to face up to new challenges.

There is firm evidence, which points to the fact that Catalonia possesses both sufficient scientific critical mass as well as a high enough competitive level to be able to branch out into the commercial fabric of the nation. This will require further advanced development and assistance from a variety of initiatives stemming from such networks as Nanospain, Plataformas Españolas de nanomedicina, players in the field of nanoelectronics, sustainable chemistry, etc. Further evidence of such forward movement can be taken from the 2004 and 2005 think-tank gatherings, organised by the Parques Científicos of Barcelona and Madrid under the auspices of the FECYT, with the additional news that the first winners of competitions such as those of Ingenio 2010 (CENIT projects), have already been announced.

References

- Científica, *The Nanotechnology Opportunity Report*, edition 2003.
- European Commission: *Some Figures about Nanotechnology R&D in Europe and Beyond*, Comisión Europea, Research DG, December 2005.
- European Commission: *Nanosciences and Nanotechnologies: An action plan for Europe for 2005 to 2009*, Communication, 2005.
- European Commission: *Towards a European Strategy for Nanotechnology*, Communication, 2004.
- European Commission: *The economic development of nanotechnology. An indicator based analysis 2006*.
- FECHT, H. J., ILGNER, J., KÖHLER, T., MIETKE, S., WERNER, M., *Nanotechnology Market and Company Report - Finding Hidden Pearls*, WMtech Center of Excellence Micro and Nanomaterials, Ulm, 2003.
- Lux Research, *The Nanotech Report 2004*, 2004.
- Mitsubishi Research Institute 2002, citat per Kamei, S., *Promoting Japanese style Nanotechnology Enterprises*, 2002.
- NanoForum database a <www.nanoforum.org>, 2005.
- NanoInvestorNews database a <www.nanoinvestornews.com>, 2005.
- PAULL, R., WOLFE, J., HÉBERT, P., SINKULA, M.: *Investing in nanotechnology*: Nature Biotechnology Vol. 21, No. 10, p.1145, 2003.
- Plataforma española de nanomedicina a <www.nanomedspain.net>.
- Verein der Ingenieure - Technologiezentrum (VDI-TZ) *Nanotechnologie als wirtschaftlicher Wachstumsmarkt*, Company Survey, 2004.

Global Growth Centres 2020 - Challenges and choices for Europeans

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The rise of the Asian economies will remain one of the most important developments in the global economy over the coming decades. Japan started its ascent in the 1960s, “tigers” such as Korea and Taiwan in the 1970s, China in the early 1980s and India in the early 1990s. It seems that the recipes for economic success are being passed on throughout the region. But what are the ingredients of these recipes? Will the rise of China and India continue? Why are some countries left behind in Asia and elsewhere in the world? And what challenges does this pose to the rich countries’ governments, companies and individuals?

Foresight Model for Economic Growth

Only a careful and systematic analysis can provide the answers to these questions. Deutsche Bank Research (DBR) has developed *Formel-G*, its Foresight Model for Evaluating Economic Growth to provide a structure for thinking about long-run economic growth and to generate forecasts for GDP growth until 2020. The model has three layers: First, the ultimate goal is GDP growth, the most relevant measure for economic activity in markets. Second, there are four drivers of GDP growth: population growth, changes in human capital, changes in trade openness and the accumulation of physical capital. And third, a

broad-based trend analysis that tries to capture structural breaks. The first and second layers are linked through an econometric equation, while the second and third layers are linked through a less formal, but still systematic approach.¹

The model’s forecasts support the view that the rise of Asian economies will continue over the next decades. From 2006 to 2020, India will be the star performer among the 32 countries analysed. Its GDP is expected to grow by an average of 5.5% per year. Strong population growth of 1^{1/2}% per year contributes to this impressive long-term performance. Ranking second, Malaysia is likely to see GDP growth of 5.4% per annum, while its per-capita GDP today is already more than three times that of India. In third place, China is likely to see the highest growth of per-capita incomes, but its slow population growth limits overall GDP to a 5.2% annual gain during 2006-20, according to *Formel-G*.

However, not all economies will grow that strongly. In Asia, Indonesia is an example of a country that has not yet applied the recipe for economic success. By the year 2020, its per-capita income level will probably have fallen behind India’s. The Latin American countries also do not rank among the growth stars: expected GDP growth of around 3% means that they will lose ground in international rankings of income levels. Signifi-

1. The model is presented in detail in Bergheim, Stefan (2005): *Global growth centres 2020*, Deutsche Bank Research, Current Issues, available on www.dbresearch.com/globalgrowth

cant differences will also prevail among the rich countries: While Ireland, the USA and Spain should see GDP growth of 3% or more per year, Japan and Switzerland may manage only around 1%. The chart shows the ranking across all 32 countries.

Major differences will prevail in 2020

The world in 2020 will remain one of major differences across countries. There will be very rich and quickly growing economies like the USA, rich and slowly growing economies like Japan and Switzerland, extremely poor and quickly growing economies like India, and poor but slowly growing economies like Indonesia. In the year 2020, India will still be a relatively poor country on average with a per-capita GDP of just 20% of the US level (even when using purchasing power exchange rates). To be sure, none of these forecasts are set in stone. Economic policy can and will influence outcomes. Some countries will apply the recipe for success in a more thorough way than currently anticipated while others may lose their focus unexpectedly.

The significant differences across countries imply difficult decisions for European companies. Some markets may be attractive production locations today, but rapid wage increases may eat into this attractiveness over the coming years. Other countries may only be small markets for European high-quality products today, but may gain tremendous importance going forward. Again others may see stagnating overall income growth, but still present excellent opportunities for European products because of high income levels. More generally, the rise of Asia forces all companies to reassess their business models on a regular basis—or face being marginalised by competitors at home or abroad.

Explaining the differences

The *Formel-G* framework not only produces forecasts for GDP growth, but also allows systematic analysis of the sources of growth and of country-specific strengths and weaknesses. This implies that the model can be used as a blueprint for economic policies as well. After all, economic

success does not simply fall from the sky. Poor countries are not guaranteed to grow faster than rich countries. If that was the case, then there would be no differences in income levels today. Poor countries may have more “upside potential”, but the key question is whether they will make use of this potential. Economic success requires hard work and the right policy decisions—in poor and rich countries alike. These decisions have to be analysed in order to generate reliable forecasts for GDP growth. Fortunately for growth forecasters—but unfortunately for policymakers—a large fraction of growth in the next decade depends on decisions that were taken a long time ago.

Demographics is one example of a slow-moving development that can be reasonably well predicted for many years ahead. For example, the one-child policy enacted in China more than two decades ago implies that fewer and fewer young people will enter the labour market over the coming years. In Japan and in some European countries the absence of family-friendly policies has caused birth rates to fall far below the replacement level: each generation only replaces itself by two-thirds! Shrinking populations will become (or remain) a characteristic of Japan, Switzerland and Italy. In these countries, immigration will not be large enough to offset the natural decline. By contrast, Malaysia, India and Mexico are expected to see population growth of around 1¹/₂% per year. India's population will exceed China's in a few decades.

With stagnating or even shrinking overall populations, rich countries could decide to make better use of the existing labour resources. Over the past decades, the opposite was the case in many European countries: shorter work weeks, rising unemployment and early retirement led to a decline in labour input. Total hours worked per capita fell by almost 10% in Austria and Germany between 1994 and 2004. Spain provides a sharp contrast with a rise of hours worked per capita of more than 30%. Extending the retirement age, reducing unemployment, integrating more women into the labour market and increasing immigration are options for all rich countries. To be sure, these changes require significant societal change that challenges some vested interests. The countries exercising these options will see stronger per-capita income growth going forward.

Human capital is the key to growth

A second slow-moving ingredient in the recipe for economic success is human capital: the human brain is one of the main sources of wealth and growth. Increases in human capital lead to an increase in income levels. The best available yardstick is the average number of years of education per capita of the 25 - 64 age group. Improvements in the rich countries come mainly from higher university graduation rates. Unfortunately, it takes many years, if not decades, before today's policy changes lead to higher graduation numbers. Put differently, today's shortages of highly qualified workers in some rich countries are the result of policy mistakes made a decade or more earlier.

Just as in the case of population growth, there are major differences across countries both in the level and the growth rate of human capital. Germany has a very high level of 13.5 years, but is experiencing stagnation. By contrast, the average Indian has been in school for less than 5 years, but a rapidly increasing number is now attending school. In Spain, the current average level of education is not among the highest. However, almost 40% of young Spaniards graduate from university, compared to a graduation rate of 10% among the 55 to 64-year olds. As a consequence, the new entrants into the labour market are much better educated than those leaving it—the average level of human capital of the workforce is rising rapidly.

More human capital also allows more innovation. There is a high correlation between the average years of education and spending on research and development. Poor countries usually do not have to engage in much research—they tend to copy best practice from abroad.

Openness and good institutions

If a country trades more with other countries, then the competitive pressure on companies and the government increases, leading to efficiency gains and a higher production potential. Poor and business-unfriendly institutions are simply not compatible with open market access for foreigners. Therefore, openness can also be used as a

proxy for institutional quality, a concept that is even harder to measure than openness. In addition, the country can benefit from technological progress embodied in imported capital goods and it may realise economies of scale in production. More output can be produced with the same amount of human capital.

The best measure of a country's openness is based on the average shares of imports and exports in gross domestic product. However, the simple share of trade in GDP is not appropriate because small countries naturally trade more with foreigners than large ones. After all, companies in large countries have plenty of customers to sell to and learn from in their own country, so they have less need to look abroad. Therefore DBR adjusted the trade share for country size with the help of regression analysis to generate the openness measure.

In the years 2003/04 Germany, Belgium and the Netherlands were among the most open economies in the world. But what matters for GDP growth is the change in openness. Countries are not destined to stay closed and poor forever. Asian countries such as Malaysia, China and Korea are already eyeing the top of the openness ranking. Their rapid opening to the rest of the world over the past years goes a long way to explaining their economic success. The changes we are seeing in Asia and Europe can set an example for other areas of the world that still have to catch up, such as Latin America.

The openness measure is also helpful in detecting countries' relatively weak points: For example, Finland is less integrated into the global economy than many think. Its trade share is roughly equal to Germany's but it is a much smaller economy. Of course, location matters here—and it does in the globalised economy! Further abroad, India is a poor country partly because it is still so closed and has the business-hampering institutions that can only survive behind high walls.

Fixed investment

The fourth and final ingredient in the growth recipe is fixed investment, the accumulation of

physical capital such as buildings and machines. Companies' inclination to invest in new capital depends on the future returns they hope to achieve. These expected returns have to be compared with the cost of capital in the financial markets. The current investment boom in China with investment worth more than 40% of GDP partly stems from interest rates being far below the growth rate of nominal GDP (a good proxy for economy-wide return expectations). Eventually, this rapid pace of capital accumulation will have to slow down—although probably not as rapidly as it did in the Asian tiger economies in the late 1990s.

Across the rich countries, there are significant differences in investment rates and in the rates of increase of the capital stock. Japan has a very high investment rate but also a high depreciation rate. Therefore, its capital stock is growing only slowly. Faster growth of the capital stock (partly stemming from housing investment) can be seen in the USA and in Spain. While the exceptional rates of increase of the past few years are unlikely to persist, they should remain relatively high and explain why the USA and Spain are among the OECD countries with the highest growth rates of overall GDP expected between 2006 and 2020.

Challenges for Europeans

The integration of large Asian economies into the global economy poses major challenges for European governments, companies and individuals. Governments have to ensure that their countries benefit from globalisation by allowing imports of cheaper products from abroad, but also by providing new opportunities for workers of declining industries at home. Lifelong learning and flexible labour markets are crucial for coping with these changes. In addition, they should make their economies as strong as possible by encouraging an efficient innovation system and liquid financial markets. Companies have to be aware of the most attractive sourcing locations in the world—be it for labour-intensive manufacturing or for high-skilled research activities. And individuals in rich countries need to be aware of the opportunities and challenges they face. Can their product be shipped from China in a 12-foot container or can it be coded in zeros and ones to be transmitted from India? Then they'd better explore alternative employment opportunities, which may include changing industry or occupation in mid-life.

More information is available at
www.dbresearch.com/globalgrowth

Figure 1. Formel-G: Ranking of GDP growth 2006 - 2020



Source: Deutsche Bank Research

Table 1. Growth rates 2006 - 2020					
		GDP per capita	Population growth		GDP total, model forecast with trend
India	IN	3.93	1.61		5.54
Malaysia	MY	3.68	1.74		5.43
China	CN	4.39	0.83		5.23
Thailand	TH	3.48	1.01		4.49
Turkey	TR	2.87	1.20		4.07
Ireland	IE	2.69	1.07		3.76
Indonesia	ID	2.47	1.01		3.48
Korea	KR	2.82	0.47		3.29
Mexico	MX	1.88	1.33		3.21
Chile	CL	1.85	1.26		3.11
United States	EUA	2.08	1.02		3.10
Argentina	AR	1.91	1.10		3.01
Spain	ES	2.78	0.04		2.82
Brazil	BR	1.57	1.18		2.76
Canada	CA	1.80	0.54		2.36
France	FR	1.96	0.34		2.30
Norway	NO	1.59	0.56		2.15
New Zealand	NZ	1.48	0.66		2.15
Austria	AT	1.92	0.20		2.13
Portugal	PT	1.95	0.01		1.96
United Kingdom	GB	1.40	0.45		1.85
Sweden	SE	1.80	0.01		1.81
Greece	GR	1.75	-0.01		1.74
Denmark	DK	1.45	0.27		1.72
Italy	IT	2.02	-0.43		1.59
Belgium	BE	1.51	-0.03		1.49
Germany	DE	1.36	0.11		1.47
Finland	FI	1.22	0.12		1.34
Netherlands	NL	1.06	0.27		1.33
Australia	AU	0.68	0.65		1.33
Japan	JP	1.41	-0.10		1.31
Switzerland	CH	0.98	-0.28		0.70

Catalonia: to be or not to be logistic

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What is globalisation?

Whether we like it or not, we are bound up in an unstoppable and giddy process of globalisation. This process has led to a sensational growth in economic and commercial exchange, predominantly between nations of the same continent until recently, but now more and more between nations of different ones. This process of globalisation, resumed with the firm resolve of Europe following the second world war, via a marked development of integrated trade, has more recently been given a further boost with the removal of the Berlin Wall, and subsequently, the advent of the Euro—one of the most tangible indicators of this progression. The process of globalisation, which is moving increasing amounts of people, goods and capital (indeed the key indicator today is that of a capital factor which is perfectly mobile from one country to another), would only be brought to a halt by new world wars or major natural disasters; events which lead countries to withdraw into more protectionist postures. The thrust of globalisation has led to spectacular economic growth in a number of emerging economies, such as China (achieved at any price), and is now tempting other such emerging powers such as India and Brazil to follow its lead, to possibly imitate some of the more questionable practices of the Chinese model, such as that of the peculiar fixed rate exchange system, with artificial

currency devaluation brought about by strict controls on capital, in order to compete still more aggressively with the West.

Recent eastern Enlargement of the European Union has made Catalonia more peripheral, as the entire economic and demographic gravity of the Union pushes eastwards, something which will only be exacerbated, if we take into account Russia's future adhesion to a full market economy. This will shift the geographical centre of Europe to somewhere between Berlin and Vilnius. Nevertheless, at present, Catalonia in South West Europe is still not too far from the established European economic centre of gravity, barely 2 - 3 days by truck from what is known as the "Great Banana": the curve running from the North of Italy to London, taking in South West Germany, Benelux and Paris. The fall of the Wall in 1989 put a whole range of states with low salaries and a high potential productivity within spitting distance of the great banana. In fact, these countries situated in the centre and east of Europe are now returning to their former position in the continent following forty years of communism, which acted as a historical check on their development, depriving them of their natural centres of gravity, namely, the two great German speaking powers. From a Catalan point of view it is necessary to be aware of the chances and opportunities afforded by history. If the Berlin Wall had fallen five years earlier,

it is almost certain Volkswagen, instead of investing in Martorell, would have opted more readily for Eastern Germany, Poland, The Czech Republic or Hungary.

Despite the risks of globalisation due to intercontinental trade, this phenomenon represents a major opportunity for Catalonia: further growth of European trade with Asia will provide a boost to shipping in the Mediterranean. Indeed, current sea traffic between Asia and Europe represents nearly a third of worldwide East-West shipping, (almost thirty-five million TEUs annually). Furthermore, in 2006 the European Union became China's largest trading partner, with an annual growth rate above 10%. Trade between Europe and Asia has doubled in the last five years and this growth is foreseen to continue in the future, which can only improve the prospects for trade of the major Western Mediterranean ports.

What is logistics?

The new economy fashioned by the information society and new technologies have forced a new perspective to be taken of the industries present in Catalonia. An in-depth look at the countries, which are at the forefront of development of new economic sectors, reveals that none have neither shed nor axed their traditional industries. Nineteenth century industry was immovable, whereas today's sector is required to be multiply located, to the extent that today, when a factory is built, alternative uses are taken into account, given the possibility of its relocation after a number of years. Regardless of this, there is a widespread view here that Catalonia is essentially a service based economy, and therefore, we can abandon industry to its fate, which goes against the grain of policies adopted in other states, where governments and companies are backing each and every one of their industrial sectors to the hilt. The reason they are doing this is simple. There can only be an information economy, if there is a traditional one that already exists.

In the new world order marked by globalisation, competitiveness and the information economy and infrastructures of mobility (which include both people and information as well as goods), are all

playing decisive roles. In this new scenario, logistics is no longer a simple matter of goods transportation. These days a product is designed in one place, manufactured in another, controlled in a third location and sold in yet another. In the industrial revolution, products were manufactured and sold in situ. In the information revolution, products are made and sold and are manufactured again in a very short time, taking on board the modifications which consumer use dictates in order to improve them. Thirty years ago, the life cycle of a product was relatively long, and goods were considered valid for a number of years or at least months, depending on genre, whereas at present this cycle is being reduced to a question of months or even weeks, with the ultimate goal of many companies to simply shift stocks. Within this new set up, logistics has to meet the needs of the entire production cycle, and furthermore take into account that both information and people have to be moved too, which therefore dictates that land, sea and air transport networks play a key role in competitiveness.

The new way in which the logistical chain is being organised worldwide means a radical shift in both how the physiognomy and ports are conceived with respect how they were formerly managed. Clients increasingly ask for intermodal tariffs, linked to door-to-door integral transport solutions, which means serving the hinterland too. Ports are therefore called to diversify activity, taking on board and offering such facilities as warehousing, transport, logistics and distribution services. Links from ports to other major infrastructures will play a pivotal role in the future competitiveness of any region, along with the synergies that distinct infrastructures may be able to generate among themselves, which will ultimately define their success or failure on the intercontinental stage. In the case of Barcelona, the port and airport would have a great potential to act together as a single intermodal platform with the subsequent outstanding potential synergies. To take an example; each vessel arriving from Asia unloading containers, represents a number of direct intercontinental flights to Asia arriving at Prat Airport full of executives and technicians keen manage their correct unloading and subsequent distribution.

At present in Catalonia, many councils, especially the Barcelona Borough Council are not inter-

ested in having “dry ports” , nor international goods centres nor container traffic within their municipal boundaries. These councils would be well advised to take a glance at socialist Aragon, which has been able to interpret that logistics is going to be a key economic sector in the future. In contrast to ideological prejudices prevalent among so many city councils on the Metropolitan Area of Barcelona that refuse to accommodate logistic activities, Aragon, with the help of European Commission (due to a more forward thinking vision of its government—like Catalonia, Socialist) has become a model European region in terms of logistic development. Whenever any central or east European country asks for advice or counselling on matters of how to boost their activity in this sector, Brussels usually redirects them straight to Zaragoza.

Why Flanders?

In light of the current status quo in Europe, where industrial delocalisation is gaining ground to the benefit of the newly emerging continents, and given the notable differences in terms of their ability to produce, European states and regions have to reconsider what exactly their future output is to be. In the case of Catalonia, one of the most suitable examples to look to try and follow would be that of Flanders. This is a region that was historically one populated by Belgian peasant farmers, but which, during the course of the twentieth century went from rags to riches, due largely to growing integration of the world economy and the subsequent economic and logistical impact of the Flemish ports led by Antwerp, second in Europe and fourth worldwide today. The case of Flanders truly reflects the axiom of wealth entering through its harbours. The downside for Belgium comes in the shape of Wallonia, an industrial heavyweight in the 19th century, unable to find its way out of the industrial malaise, which has dragged down other regions in the North of Europe throughout the last thirty years, such as Hamburg and Liverpool.

Hence, Flanders’ qualities of being a logistic locality-region as well as having one of the major ports for European trade with other continents has led to Flanders to consolidate its pre-existing

main sectors of production, some of which are surprisingly similar to those of Catalonia, such as transport manufacturing, chemicals or pharmaceuticals. Moreover, the virtues of being a logistic region coupled with being one of the main ports of entry for European trade with other continents, has helped Flanders attract new sectors of economic activity, such as that of nanotechnology of late. Its position as a logistics capital and principal port of exchange for European and intercontinental trade has also led to Flanders specialising in traditional manufacturing processes with a higher added value, as semi-finished goods from overseas arrive at Flemish ports, are thereupon unloaded and further processed nearby to add further value to them.

The finished product is then reloaded and either distributed within Europe or exported further afield. This is therefore a good example to illustrate that the best way to ensure Volkswagen stays in Catalonia is to guarantee that the port of Barcelona becomes the port of entry for all that this German multinational produces and aims to produce in Asia for the European market. Northern European ports are playing a key role in value creation and value chains, spreading their area of influence towards their hinterlands within the continent via logistical “dry ports”, thereby generating services beyond the actual areas of the ports themselves.

Flanders is located at the centre of Europe’s most productive and populated region lying next to: France, Germany and The Netherlands and just across the North Sea from the United Kingdom. Flanders can be considered a role model for Catalonia on how to take advantage of the possibilities of a centralised geographical location, of being a corridor, an area of transit within a European context of ongoing economic and commercial integration. It is due to the above reasons that Flanders has an edge and marks a possible path for the Catalan economy to follow. Belgium ranks 11th worldwide for export volumes in 2006. Taking into account that 80% of these come from this region, therefore makes Flanders the world’s 14th largest exporter by volume, quadrupling Catalan export figures, despite occupying an area the size of the province of Lerida. Therefore, its export potential has to be a reference point for the Catalan economy.

Flanders has four ports, of which the largest in Antwerp, the second largest in Europe and fourth in the world. Flanders also boasts Europe's fifth largest airport in terms of goods volume and one of the world's densest road, rail and navigable canal networks. Due to the importance of the port of Antwerp, Flanders is the leading logistical region of Europe, taking into account the ports of Zeebrugge (European leader in automobile traffic) and Ghent. Antwerp is the most efficient train-shipping intermodal port and is a true reference point for Barcelona to take notice of. The collaboration among Flanders' four main ports is a model to be copied by Catalonia's two major shipping centres, to which Valencia could be included too, as the benefits of a possible collaboration to be reaped among all three ports would be infinitely greater working together than competing on their own against each other.

Flanders is the world's number 1 automobile industry cluster, ahead even of Chicago, Illinois. Eight multinationals have production facilities in the region: Volkswagen, Ford, Opel, Volvo, Toyota, Fiat, Honda and DAF; in addition to six others, which despite not possessing manufacturing operations, have located their European logistics operations within the territory. These are namely: Hyundai, Isuzu, Subaru, Mazda, HD and Bridgestone. In terms of the automobile industry, Flanders is a paragon of agglomeration economies, in terms of competitiveness itself. Flanders stands to gain hugely from the rapid spread of new technologies, new procedures and in the quantity and quality of its workforce. One thing is sure in the case of Flanders, that come the year 2050, there will still be an automobile industry present there, due to its unbeatable logistical base. This is in stark contrast to Catalonia, where there is constant uncertainty as to whether Volkswagen will up and leave within the next ten years. In this case, the best way to ensure it stays and in addition, attracts new multinationals with production facilities in other regions, is to set up logistical bases, making the port of Barcelona the gateway

for components that multinational automobile manufactures make in Asia.

Along the same lines, Flanders is now the world's second largest chemical industry cluster behind Houston, Texas. Ten of the world's top twenty producers in the sector are located there: Bayer, BASF, Proviron, Borealis, Solvin, BP, Degussa, Monsanto, Du Pont and Chevron. As with the case of the automobile industry, other multinationals lacking production plants have also located their logistical operations for Europe there. Among such companies are: Total, Tessenderlo, Haneka, Eva Europe, McBride. This goes to explain why Flanders is responsible for 8% of total EU sales and 17% of the sector's exports. Lastly, the fact that so many multinationals have their headquarters there explains why Flemish universities are among the leading higher educational institutions in the world, due to investment in R+D they finance within their region. Indeed, Flanders is currently leading the world in nanotechnology, automobile, chemical and pharmaceutical research...which goes to show just how much it has in common with the Catalan economy!

Flanders is considered the premium logistical base in Europe (*Macroeconomic Strengths & Weaknesses Study, 2004, Cushman & Wakefield*). The five major fortes of Flanders when it comes to doing business are: The standard of living, the workforce, the outstanding telecommunications and transport infrastructure, the stability of its social fabric and its excellent logistical facilities (*Source: Ernst & Young*). In a comparison with North American productivity, where the latter is taken as a base of 100, Flemish productivity reaches the figure of 113 per hour worked (*Source: OECD, "Estimates of Labour Productivity for 2004"*). The telecommunications infrastructures in the region are highly developed too: 96% of companies are connected to internet, with 70% enjoying a broadband connection, compared to 89% and 53% respectively throughout the rest of the European Union (*Source: Eurostat 2005*). All in all, Flanders is a possible model to copy.

	Catalonia	Flandes*
Surface area	32,000 km ²	14,000 km ²
Population 2006	7.1 million inhabitants	6.0 million inhabitants
GDP 2006	163,000 million €s	170,000 million €s
Exports 2006	42,000 million €s	182,000 million €s
Export growth rate 2006/05	4.6%	16.4%
% of exports of state total	28%	81%
World export ranking**	36	14
Degree of openness = [(X + Q) / GDP] * 100		
1995	42%	165%
2005	65%	210%

* Excluding Brussels

** The World Factbook 2006, CIA, USA

Source: Own material and Idescat, Belgostat, Flanders in Figures and CIA

	Catalonia	Flandes*
R+D as a percentage of GDP, 2004	1.34%	2.25%
High technology patents	44	222
Per capita GDP 2004	23,533 €	27,517 €
Productivity per worker, 2003	54,573 €	64,963 €
Exports by sector of production, 2005		
In € million and as % of the total		
Chemical industries	9,323 (22%)	27,119 (16%)
Motor vehicles	8,955 (21%)	21,315 (12%)
Machinery and electrical material	4,197 (10%)	26,862 (15%)
Agro food products	3,609 (8%)	6,299 (4%)
Textiles, leather, footwear and clothing	2,946 (7%)	5,436 (3%)
Metallurgic and metal based products	2,317 (7%)	11,898 (6%)
In 2005 Flanders exported mineral products for a total value of €31.2 billion, €12.81 billion in jewels, pearls and diamonds, €8.8 billion in synthetic fibres, artificial fur and rubber, €3,996 billion in biological products, sylviculture and plants and €3,593 billion in wood, paper and card		
Exports by technological level, 2005,		
as a % of the total		
High	18%	26%
Medium high	53%	48%
Medium low	11%	14%
Low	18%	12%

* Excludes Brussels

Source: Own material and Eurostat, Idescat, Belgostat and Flanders in Figures

Table 3. Comparison between the ports of Antwerp and Barcelona, 2005 and 2006		
	Port of Antwerp	Port of Barcelona
Position in world ranking	4	26
Position in European ranking	2	13
Traffic in millions of tonnes		
2006	167,372,296	46,406,199
2005	160,054,365	45,038,526
Estimated traffic in millions of tonnes		
2008	185	55
2011	210	70
Traffic by TEU containers		
2006	7,018,799	2,318,239
2005	6,488,029	2,071,480
% containers palletised	78%	-
% of goods unloaded onto trains	27%	6%
% of goods unloaded onto barges	36%	-
% of goods unloaded onto trucks	37%	94%
Average waiting time for goods	6 hours	18 hours
Regional sister ports	Zeebrugge, Gehnt and Ostend	Tarragona
Strictly defined port surface area	22,057 Ha	2,000 Ha
Daily train traffic	220	18

Source: Own material and data from Barcelona and Antwerp Port Authorities

Asia: Recent Economic Developments and the Outlook

Alessandro Zanello

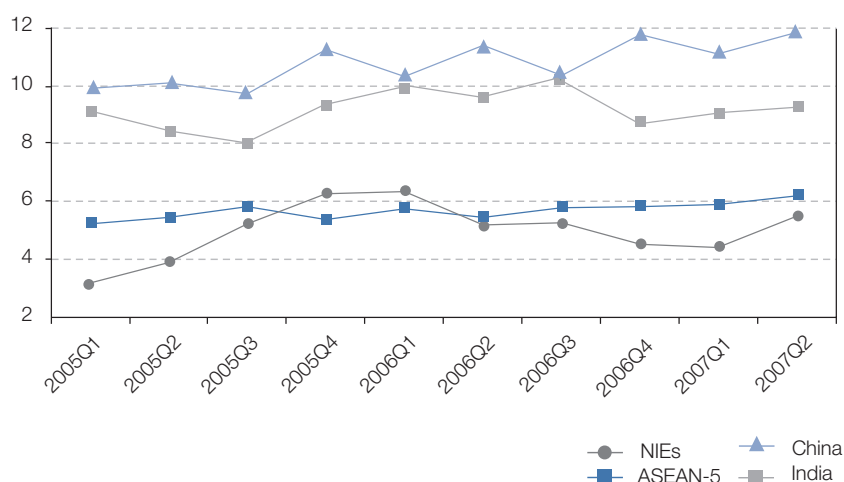
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International Monetary Fund

This article provides an overview of recent developments and prospects in Asian economies from a macroeconomic perspective. The short story is that, through mid-2007, growth was stronger than

July. Nonetheless, improved fundamentals and policy frameworks give ground for optimism. And Asia is likely to continue to be a bright spot in the global economy.

1. Emerging Asia refers to China, India, Hong Kong SAR, Korea, Singapore, Taiwan Province of China, Indonesia, Malaysia, the Philippines, and Thailand. NIEs comprise Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.

Figure 1. Emerging Asia: GDP Growth (Year-on-year- percent change)



Source: FMI, APDCORE database; and staff calculations

expected and domestic demand is making an increasing contribution in a number of economies. However, exports continue to be an important driver of growth, creating a vulnerability to adverse shocks from outside the region. From this angle, the outlook is clouded by the global financial market turbulence that has swept the world since late

Recent Developments

Growth across much of Asia continued to rise in the first half of 2007, particularly in Emerging Asia.¹ While *China* and *India* continue to lead the pack with growth rates (y/y) close to 10 percent, the pace of overall activity trended modestly high-

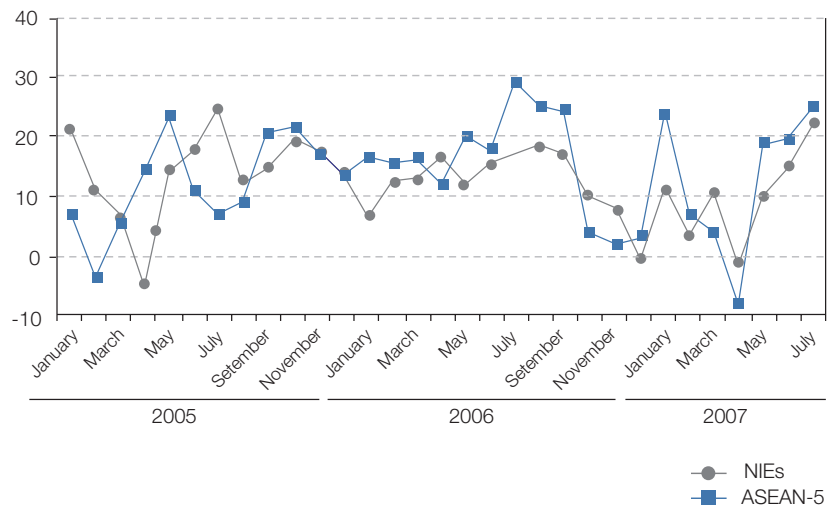
er in the *Newly Industrialized Economies* (NIEs) and the ASEAN-5 (*Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam*). In industrial Asia, output in *Japan* contracted in the second quarter while *Australia* and *New Zealand* reported strong growth. Overall, regional growth has exceeded earlier forecasts.

Importantly, the contribution of domestic demand to growth in Emerging Asia has showed signs of strengthening (especially in the NIEs, Thailand excepted). Growth in *China* and *India* is still led by investment, but with different underlying trends. In China, growth picked up despite the authorities' efforts to slow the pace of investment, as exports

and private consumption strengthened. *India's* growth, by contrast, reflects strong productivity gains and appears more sustainable. Consumption and net exports continue to contribute to growth, but have eased recently.

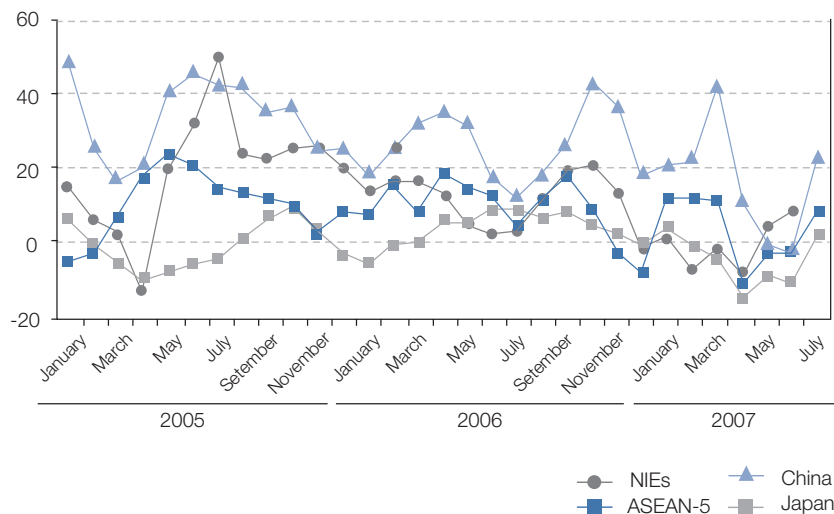
Domestic activity across much of Asia has remained robust so far in the third quarter of this year as well. The most recent data suggest that investment looks healthy (*Japan* may be an exception, though). The broad picture regarding household consumption is somewhat less clear, given mixed readings on consumer confidence and other high-frequency indicators in a number of cases.

Figure 2. Emerging Asia: Exports of Goods (3-month percent change of 3-mma, SAAR)



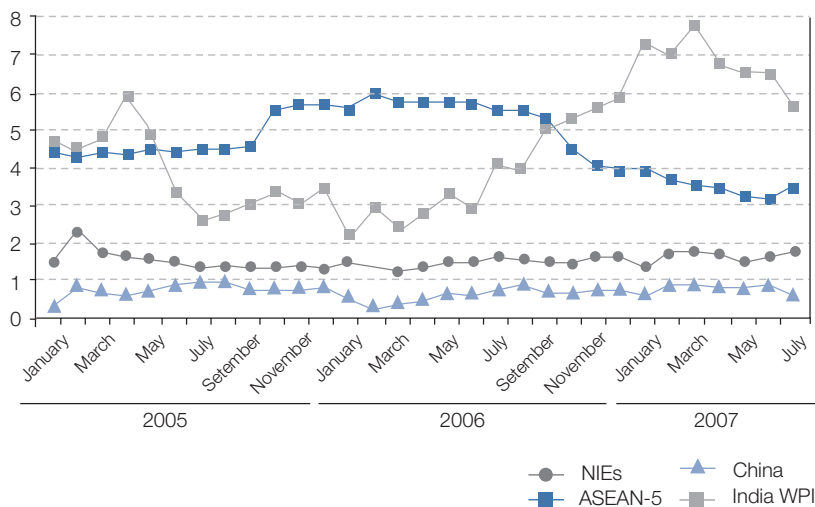
Source: CEIC Data Company Ltd. and IMF staff calculations

Figure 3. Asia: Electronic Exports (3-month percent change of 3-mma, SAAR)



Source: CEIC Data Company Ltd. and IMF staff calculations

Figure 4. Emerging Asia: Core CPI (12-month percent change)



Source: CEIC Data Company Ltd. and IMF staff calculations

Following a soft patch earlier this year, exports across Asia recovered in mid-2007 and have surprised on the upside. Available data suggest that the greatest demand for Asia's exports came from Europe followed by other Asia, while demand from the United States remained soft. Exports of electronics have recovered much more modestly than overall exports and the outlook for the sector is mixed.

Inflation pressures have remained contained in most economies. Headline inflation has risen to 4 percent at end-July, up from 3^{1/2} percent at end-2006 mostly owing to spikes in food prices. China saw food price inflation reach 18 percent in August, with headline inflation accelerating to 6.5 percent, a 10-year high. In India, by contrast, producer price inflation has come down by almost 3 percentage points as monetary policy has become more restrictive. With oil prices easing somewhat in the first half of this year, domestic fuel prices have not played much of a role in overall price developments.

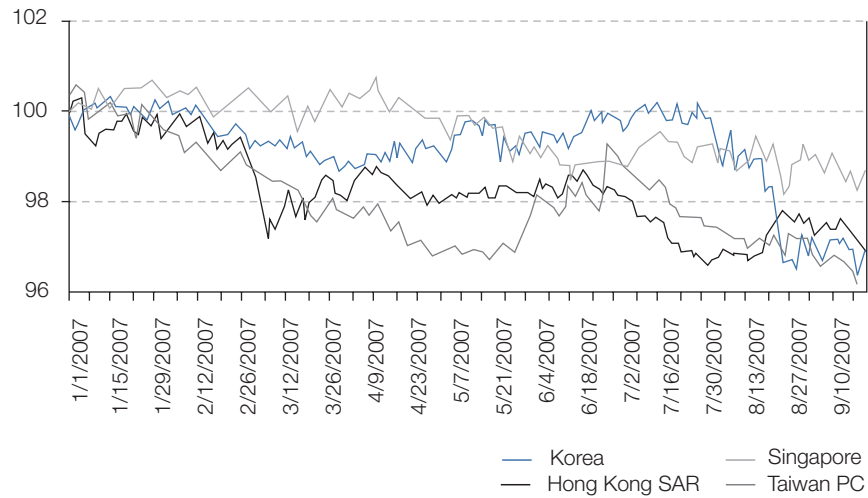
Most countries in the region continue to experience large current account surpluses. With exports generally surprising on the upside, and declining oil import bills, the region's current account surplus in the first half of 2007 surpassed the outturn of last year. China, India, Hong Kong and Singapore registered the largest gains in their external positions.

Exchange rate developments in Asia varied substantially in the first half of the year. While the Chinese renminbi appreciated by a modest 2 percent in nominal effective terms, all of the NIE currencies and several of the ASEAN-5 currencies depreciated. In contrast, the Thai baht surged by close to 20 percent and India rupee and Philippine peso rose by about 8 percent through end-June. The Australian dollar and New Zealand dollar continued to strengthen as well.

The financial market turbulence since mid-July has altered the pattern of exchange rate developments more recently. There has been an unwinding of yen carry trade positions as evidenced by a sharp rise in the Japanese yen and an even sharper drop in some of the "target" currencies, the Australian and New Zealand dollars. By mid-September (the time of this writing), the unwinding of carry trades has partially reversed, although volatility in the exchange and other markets remains high.

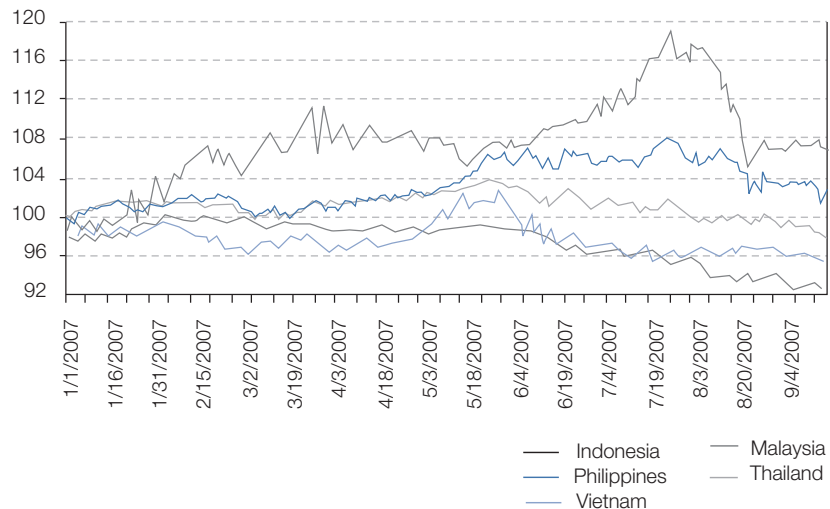
With strong competitiveness and continued capital inflows, reserves have continued to grow strongly in the region, again led by China. Emerging Asia's official reserves as a whole reached about \$2.7 trillion at end-August, up from \$2.3 trillion at end-2006. Compared with last year, the quarterly rate of reserve accumulation in China doubled to \$130 billion in the first half of this year, reflecting for the most part large trade surpluses.

Figure 5. NIEs: Nominal Effective Exchange Rates (January 1, 2007=100)



Source: IMF, Information Notice System; and APD staff estimates

Figure 6. ASEAN-5: Nominal Effective Exchange Rates (January 1, 2007=100)



Source: IMF, Information Notice System; and APD staff estimates

The rate of reserve accumulation in India and the ASEAN-5 has also accelerated in 2007, driven by both the current and capital account developments.

With reserves in many Asian economies well above the levels needed for liquidity purposes, a number of central banks have launched or are considering launching Sovereign Wealth Funds. The objective of these entities is to increase returns on foreign currency holdings, although in some cases (Korea) they have a secondary objective to help develop

local capital markets. It remains to be seen what impact, if any, a more aggressive management of such vast financial resources will have on the global financial markets.

The Outlook and Risks

Looking ahead, the baseline scenario for Asia remains broadly favorable for the near term. Growth for the region should reach about 8 per-

cent in 2007 (broadly unchanged from 2006) before moderating to about 7^{1/2} percent in 2008. This projection reflects a slowdown next year in the region's largest economies (China, Japan, and India) as well as the NIEs,—the result of slower growth in the United States and the euro area. Investment demand is projected on average to lose some steam in line with growth and exports, while consumption growth should also decline modestly. Growth is expected to remain robust in the ASEAN-5, however, supported in some cases by public investment. But, broadly speaking, given Emerging Asia's integration into the global trading system, no meaningful de-linking from foreign demand is expected in the near term.

While the baseline near-term forecast for Asia is encouraging, downside risks have increased. They are mostly external, notably:

- *Contagion from the current financial market turmoil.* Asian banks do not face systemic risks given their limited exposure to U.S. subprime and other asset backed markets. However, credit conditions have tightened in the region, particularly for riskier borrowers. Continued volatility in financial markets and persistent risk aversion could dampen capital flows to Asia, with knock-on effects on confidence, investment and growth.
- *The financial turmoil persists (or worsens) leading to a much sharper-than-expected slowdown in both United States and the euro area*

growth. As said before, Although domestic demand in Asian countries has picked up and intraregional trade has increased, Asia still remains reliant on foreign demand for growth. If the slowdown in the major economies is sharper than currently projected, Asian exports and growth could be adversely affected.

- *Oil prices remain vulnerable to adverse geopolitical events.* A supply-related price spike and the associated inflation pressures cannot be ruled out. Moreover, the pass-through from world oil prices to domestic prices has remained modest in much of emerging Asia so far, any sharp increases are likely to be passed on to consumers, especially if corporate profits or budgetary revenues decline. Higher inflation could sap the purchasing power of households and drag down private spending.

Conclusion

It would be unfair to conclude this brief overview on a negative note. Choppy waters may lie ahead in the near term, but it should not be forgotten that Asia has come a long way in building up the macroeconomic underpinnings, institutions, and policy frameworks that ensure resilience in testing times. Regardless of possible cyclical blips, growth in the region is expected to remain the fastest in the world—and Asia remains a bright spot in the global economy.

The base of the pyramid: an unrecognized opportunity

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Concept and significance

The base of the pyramid (BOP) is made up of more than 4,000 million people who subsist, or try to subsist on less than two dollars a day. In essence, the idea is that businesses should contribute in a profitable way to satisfying the enormous and multifarious needs of those people who have had the misfortune to be born into the BOP. In other words, it is not a question of mere philanthropy, but a totally genuine way of doing business.

For many in the business world the BOP is a new concept. Nevertheless, as we shall explain in this article, businesses would do well to incorporate it into their values, the strategies and their management ideas. The reasons for this are varied and some are presented below. In the first place because today's worldwide environmental, social and economic problems are impossible to deal with if we forget about two thirds of the world's population. Secondly, because businesses are the social institutions with the greatest capacity, and therefore the greatest responsibility when it comes to facing these problems. More so, because civil society is demanding that businesses behave responsibly. At the same time, because this situation is, if nothing else, one of the most important causes of the despair which moves some people to immolate themselves in

the new forms of terrorism familiar to all. Lastly, because the BOP constitutes business's biggest opportunity for healthy growth in the coming decades. For proof of this a simple example suffices: according to the Inter-American Development Bank, the potential size of the BOP market in Latin America is 534,006 million dollars. Even though the article is centered on this last argument, businesses must bear in mind that all the reasons mentioned are intimately related to each other, so that the ethical and practical arguments reinforce each other mutually. We next examine some of the prejudices which businesses must set aside in order to perceive the opportunity and the main challenges which they have to meet to compete successfully at the base of the pyramid. Among the numerous cases which we could describe, the "Patrimonio Hoy" project (see the box below), is an example of how a business, in this case CEMEX, was conscious of these obstacles and found a way to overcome them successfully.

Some prejudices

The first prejudice which businesses have to set aside is the idea that where there is only poverty there can be no market, not even a potential market. In this sense, many managers take only into

account that at base of the pyramid the only thing noticeable at a cursory glance is the income of less than two dollars of its members. Nevertheless, they are forgetting the enormous importance of the informal economy (small businesses, subsistence farming, barter, etc.), which is larger than the formal economy in many countries where the BOP is predominant. Thus, according to research by the economist Hernando de Soto (whose ideas, according to ex-president Clinton, stand the best chance of helping to end poverty), extralegal assets (dwelling and farming property) of the BOP worldwide are worth the incredible figure of US\$ 9.3 trillion; a sum which represents for example 46.5 times the amount of World Bank loans made in the last thirty years or 93 times the development aid granted by governments.

Another strongly rooted prejudice is that to compete in the BOP it is enough to simplify the products or services offered in the markets with strong purchasing power. As we have had occasion to discover, when studying the cases where businesses are operating successfully in the BOP, this is an assumption which is doomed to failure. To be successful, the products and services offered to the BOP have to start from a deep understanding of its needs and from innovation processes which make it possible to satisfy those needs.

Lastly, another prejudice or problem is ignorance of the fact that, even though it may seem a contradiction in terms, living in the BOP is very expensive. The prices paid by the members of the BOP, even for products and services of first necessity, are more expensive—and often scandalously so—than those paid at the higher levels of the socioeconomic pyramid.

Main challenges

As we have seen, businesses have to set aside false assumptions to operate successfully in the BOP. At the same time they have to get around some real obstacles such as those we shall now examine.

The markets of the BOP suffer from a range of shortages as regards the physical infrastructures such as those relating to transport, water and

electricity, etc. At the same time their social infrastructures are different from those which are normal in high income markets; in brief, instead of legal contracts and intellectual property rights, contracts in the BOP are mainly informal, rather than legal. Businesses which succeed are those which are able to work round these difficulties and even turn them into opportunities.

Another real problem, both for businesses which decide to enter the BOP and for those in it, is the lack of credit. For this reason many of the successful business models consider ways in which potential customers may access credit. Some even make it the central pillar of their business. In addition the income of potential customers in the BOP is scant and irregular. For this reason, businesses have to be a lot more aware of the need to create value with what they sell. Some businesses have got round this difficulty by basing their business model on facilitating shared access to goods and services.

Another very important barrier to overcome is business's dire lack of knowledge concerning the BOP customers and market. And in many cases they will have to overcome a preliminary obstacle: realising that they really know nothing. Only in this way can they approach the BOP humbly, with respect and an open mind, and learn what they can do, how and with whom. Because another important challenge is recognizing the need to establish alliances with non-traditional partners, such as the community leaders, NGOs of different types, etc. Practically all successful business models which we have had occasion to get to know in detail include this kind of alliance.

Innovation the key to success

In this brief overview of the prejudices and challenges surrounding the BOP it is easy to see the great importance of innovation. Businesses which are operating successfully in the BOP have developed innovations not only in the products and services, but also in the very models which allow them to study and satisfy this market. Innovations in marketing, distribution, in R&D, in manufacturing, etc. If one had to single out one key to success, it would be without doubt the capacity

to innovate. And next to this alongside comes the capacity for dialog, trust and collaboration which is needed for it to work. In this respect, in addition to its positive influence on the world's economic, social and environmental sustainability, the BOP could represent something more: promoting a substantial change in the way businesses operate, making them really responsible and sustainable.

CEMEX: "Patrimonio hoy" Project

Cemex, founded in 1906, is one of the main businesses of the cement industry worldwide. In 1998 it decided to launch the "Patrimonio Hoy" (home ownership today) project, in the hope of increasing sales to the low income segment. In this sector, it is quite common for the family itself to build or extend its own home. In order to reach its objective, Cemex trained a team made up of various company managers and external assessors, who spent a year and a half living in Mesa Colorada, a township situated in one of the most depressed zones in Mexico. No sooner were they installed, conscious of the fact that they knew nothing of the reality of people with low incomes and those who built their own homes, drafted and signed a "Declaration of ignorance". Thanks to the research which they did they realized that the three main problems facing the builders were the lack of technical preparedness, the terrible service they got from the distributors, and the lack of credit. All of which considerably lengthened the construction times.

With the information obtained, they designed and launched the Patrimonio Hoy project. This combines access to credit, technical expertise and the sale of cement and all the materials necessary for construction. The access to credit is organised through the creation of saving systems formed by three members, so that the group pressure encourages the repayment of the loan; this system is modeled on the "tandas", a social institution by which the Mexican poor help each other mutually. In this way, Cemex set up offices in each community, called cells, with the presence of an architect where they offer technical assessment to the participants of the project. In the same place payments are made and construction technique training workshops. Finally, Cemex brought in the collaboration of the distributors to participate in the project. Those who showed interest in doing it undertook to improve the quality of service, which would be regularly monitored by satisfaction questionnaires to the home-builders. It should be added that the business model is completely new and involves the collaboration of NGOs, local leaders and the Mexican government. With these elements Cemex has created a system which reduces construction times by 75% and the cost by 40% at the same time as increasing its sales considerably.

In view of the success so far, Cemex has been extending the program progressively to cover all Mexico, and is introducing it to other developing countries. Up to now, over 120,000 families have benefited and every month between 1,500 and 1,600 new customers join the program.

Trade, Investment and the break up of the Global Market: is Latin American getting left behind?¹

**Bernardo Kosacoff,² Andrés López³
i Mara Pedrazzoli⁴**
CEPAL / ECLAC

In recent years, Latin America has demonstrated a solid economic performance, aided, on the one hand by a favourable international situation—not least of which includes high prices for its major export commodities—as well as by a prudent macroeconomic handling, notably at fiscal level, coupled with an overall economic policy which has sought to maintain high exchange rates, aimed at giving rise to a determined export thrust.

Despite the above policies and associated favourable forecasts, which as a whole foresee a further macroeconomic upturn in the coming years, numerous observers—the authors included—consider it is necessary to take advantage of this boom to tackle the structural transformation required to put the region onto the path of sustainable growth over time, which will also allow it to get to grips with the serious social problems which have plagued Latin America in recent years.

High on the list of matters to be redressed is that of how to fit the countries of the region into the world economic map, which at present is symbolised by an ever increasing integration of national economies—via trade, investment and finance etc.—and a continually greater internationalisation of production due to so-called global value chains or GVCs.

It is clear that in the last two decades, most countries in the region took major steps to liberalising their economies, which has led to them being far more open to trade and capital flows than at any time since the crisis back in the thirties.

The results of this greater integration are however somewhat debatable. A pivotal argument in this context, drawing from arguments of more traditional heterodox economists in several recent works on the subject, puts forward that for some time now, the decisive factor behind the chances of development in the longer term, is the way in which these countries are to become inserted into the world economy.

As a result of this, when pondering on how, as the title of this work underlines, Latin America is “getting left behind” in the context of the new worldwide situation, it is necessary to look beyond export growth rates, trade balances or the FDI attraction index to the roots of the respective trade and investment flows, as well as prevailing domestic conditions inherent in the countries of the region, which are determining factors behind the impact of the integration perspectives of economic and social development.

In order to suitably analyse such phenomena it is necessary to understand those changes, which the world economy has undergone in recent

1. This is a summarised version of a paper with the same title to be published in: “Después de DOHA: La Agenda Emergente del Sistema de Comercio Internacional”, (edited by) Roberto Bouzas, Marcial Pons Editores (Madrid).
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4. Centro de Investigaciones para la Transformación (CENIT).

decades. Even if transnationalisation of the productive model is an old phenomenon, trends in this direction have clearly become more ingrained in recent times, giving rise to a surge in “International integrated production systems.” (UNCTAD, 2002), “Global Production Networks” or those mentioned above, “Global Value Chains” (Gereffi *et al*, 2001).

The progression of new information and communication technologies (ICTs) clearly plays a part in giving impetus to the thrust of the ongoing spread and current extent of GVCs, as they help reduce coordination, logistics and monitoring costs of the geographically decentralised operations undertaken. This lowers transport costs—as seen not only in the field of physical goods - but also for the movement of intangible goods too—and furthermore in the freeing up of trade and FDI, marked by a proliferation of different bi-national or pluri-national trade agreements, that range from regional integration processes to investment treaties. All the above factors go towards redefining strategies on a worldwide scale of those organisations at the heart of the GVCs; namely large transnational corporations (TNCs).

Opportunities and challenges arising out of the GVC phenomena are wide ranging and do not always produce similar results. Insertion into GVCs may, on the one hand, contribute towards the diversification of exports, creation of new jobs and the acquisition of new technological know-how in keeping with best international practice, raising competitive levels in countries, which are further behind. Nevertheless, distributive and spillover effects—and ultimately their overall impact on development itself—are more varied.

A review of available empirical evidence on hand, demonstrates that developing countries taken as a whole have been able to take better advantage of structural changes at international level, when compared to previous decades, both in terms of attracting FDI flows—including those earmarked for R+D, as well as in the “modernisation” of their trade specialisation patterns.

Integration of global production networks or GVCs founded a key mechanism that enabled a number of countries to catch up. These states had been left lagging behind in terms of produc-

tive practices, technological standards, human resources etc. with respect to more central states. That said, such integration is still a long way from being evenly spread within that group of countries undergoing such development. Hence, upon analysing in greater detail how change has taken place in Latin America, there are warning signs that the region as a whole has still not managed to insert itself into the mainstream of the world economy in order to guarantee a sustainable path of growth in the long term.

Firstly, it is necessary to take into account that the “Countries of Latin America” taken as a whole, are in reality a highly heterogeneous block, and within individual states themselves there are several environments present, as a result of the structural heterogeneity, which is the hallmark of the bulk of the region’s nations. In fact, some regional economies still remain fairly isolated from new international trends, having been able to preserve their social make up and traditional economies. Meanwhile, other smaller states in the Caribbean and Central America have integrated into the world economy through their supply of cheap labour, which has led to exports of goods from garments to medical instruments or electronics mainly to the US, through assembly operations and such like “maquilas” or through tourism, financial or transport services.

Lastly, two different models can be observed among the region’s larger economies; one based on cheap labour—similar to that of the above paragraph, e.g. Mexico—and another, which in real terms belongs to more internalist market development models, where integration, to a great extent, is primarily based on an abundant supply of raw materials, complemented in some cases by relatively extensive internal markets, e.g. Argentina, Chile, several Andean states and to a degree, Brazil as well.

Going beyond such regional diversity, the fact is that even if the new economic model put in place following industrialisation to substitute imports afforded the region the chance to reach greater heights of integration with respect to the world economy, it is nevertheless true that Latin America has still not yet been able to satisfactorily transfer this into hard and fast results, from either a quantitative or, more importantly, a qualitative angle.

Indeed, on the subject of quantitative results, in terms of trade flows and FDI (both inward and outward) is proportionally below those figures observed some 30 - 40 years earlier. That said, Latin America is making moderate steps to take new trends on board, such as involvement in decentralisation of R+D activities or tertiarisation of technology based business services.

Turning to the qualitative side, and going beyond the existence of a variety of specialisation patterns within Latin America, all initiatives are based on static comparative advantages, whether they be South American natural resources or cheap labour in Central America and the Caribbean—an area also important for natural resources, but most of these are linked with tourism in most of these states.

The reality is that analysis of the export baskets as a whole in the region in terms of some of the criteria conventionally used to judge their “quality”—such as relative productivity, technological progress and end market growth rates—reveals the region is at a great disadvantage in comparison to those states making up the dynamic core of Eastern Asia, which has been experiencing very high growth rates for decades now. Even for those cases that appear to be the exception to the rule—fundamentally Mexico and Costa Rica—, export of goods with a high tech content has little to do with local integration, and the centres of real innovation are almost invariably located beyond these states. Such factors strongly handicap the positive impact of this type of export activity on the rest of the economy (Cimoli, 2005; Haussman et al, 2005).

There are also differences to be found within the region itself when it comes to the level of insertion of GVCs, most notably in Central America and the Caribbean. Participation in GVCs could, on the surface, act as a positive force for growth among developing nations. On the one hand, global production networks are an important channel for getting a foot through the door of international markets more “easily”—in relation to a company having to launch its own solo operation and compete with overseas markets. Furthermore, participation also allows for the indirect internationalisation of local companies, which directly relate to firms involved in GVCs. From a microeconomic

perspective on the other hand, participation of local firms in GVCs helps strengthen their competitive character, as they must gear themselves for a more demanding client (the process of learning by exporting), and in addition they can nurture the development of new learning processes derived from relations forged with other agents which are involved in the chain, known as learning by interacting. Despite this reality, these potential advantages have not been seen to materialise in the case of Latin America, as the predominant types of GVCs, based on assembly plants, free processing areas etc., have given rise to situations where the countries of the region have specialised in labour intensive stages of the value chain, based essentially on cost advantages—instead of being based on the development of local skills. This has meant that such export activities work almost as enclave models, whose benefits do not filter down to the rest of the economy. Indeed, such operations are also permanently under threat of being transferred to other countries with even lower labour costs, and are therefore highly dependent on the existence of relatively high transport costs for certain goods and/or beneficial tariffs and duties. The fact is that it has been observed that firms with national capital have more problems breaking into GVCs, and once on board, they are subjected to high pressures in terms of costs, time and quality, etc., in order to keep in the race. Meanwhile, subsidiaries of TNCs have fewer difficulties, but are generally less linked to the rest of the economy of their host country (Bair and Dussel Peters, 2006; Giuliani *et al*, 2005).

All in all, to put it bluntly, Latin America participation in GVCs could at best be described as “limited and poor”: only a few states are involved and furthermore, take part in the lower added value end, which compounded with a low level of national integration and a lack of internalisation of a dynamic innovative core, weakens the possible awakening of potential spillover effects in the bosom of national economies. The causes behind these trends are various, and range from factors stemming from the international environment itself (trade restrictions in end markets, strategies of the TNCs themselves, rules prevailing over the GVCs), among such others, to those which are probably more relevant at local/regional level, namely: limited number of “multilatinas”, with limited techno-

logical thrust, weak institutions, heterogeneous productive and social structures, shortage of human capital and poorly focused towards skills associated with the work of production and technology, national systems of innovation poorly linked, and a lack of public policy to give a boost to competition and technological improvement.

In general, it is clear that a more robust macro-economic policy and the maintaining of high or “competitive” exchange rates, cannot in themselves be considered as conditions which are going to be enough (although maybe necessary) in order to improve the pattern of bringing Latin America into the world economy in such a way as that it becomes an asset for the aspirations for economic and social development of the region. Today, Latin America is facing a greater challenge than ever before to attain the goal of insertion, as it has looks to find “its” place on a world economy in which China has already marked its ground. In particular, countries of the region must try and lay the groundwork to create conditions which will make them become attractive locations for the development of activities which belong to GVCs, at the same time as they have to seek out the spillover effects that can arise out of such activities and try simultaneously to avoid ending up as simple cost driven cogs in the production chain (namely in the form of cheap labour). Static advantages, particularly based on cheap labour, are not a sound base to build on for any nation wishing to get into the mainstream of worldwide trade and investment.

There are, fortunately a number of success stories, although few and far apart, but which lead to show that integration strategies based on highly qualified human resources or innovative skills on a par with leading economies worldwide is indeed possible for Latin America. Following on from this, microeconomic study programs that are able to both to broaden knowledge into already firm, successful ventures, as well as discovering those that have the potential to become new regional rising “stars”, go to make up a basic input for designing policies aimed at consolidating such successful cases. At the same time, it is also necessary to increase externalities in the countries of origin, and to undertake the fundamental task of creating the conditions required so that many more such examples may arise, which

will gradually lead to a radical change in the way the region inserts into the world economy.

In order to achieve this aim, several conditions must be in place. Firstly, it is essential that “shared visions” arise on what desirable development strategies are to be. In other words, the government, the business community and the academic sector must arrive at a consensus as to the need to transform productive structures and patterns of specialisation in the countries of the region. Furthermore, it must be taken into account that current success stories of integration in the region are the result of long term evolutionary processes in which a blend of public policies have played a part, according to each case, side by side with private business initiatives. This means that the changes required will not come overnight, nor spring solely from market forces or technocratic policies sponsored by “enlightened” bureaucrats. Lastly, among the tasks still outstanding to tackle, we must include those such as the advance of international negotiations on trade and investment—seeking both to remove protectionist barriers that may exist in other countries, as well as extending room to manoeuvre to implement a number of policies within the WTO framework that have until now been stalled, but which could prove important when it comes to achieving the development goals under discussion in this paper—as well as in the transformation required at local level to spark off the conditions that will allow changes in the patterns of specialisation, and facilitate the processes of hierarchy within the GVCs for local enterprise. As stated earlier, the existence of success stories of integration into the world economy in the region, lead to suggest that the weaknesses of the current pattern of specialisation are by no means a *fait accompli*. We therefore believe that positive change is possible and that the factors cited in the above paragraphs, along with other parallel initiatives, will be able to contribute making sure integration into the world economy generates better results for the countries of Latin America than those harvested until today.

References:

BAIR, J. and E. DUSSEL PETERS, “Global Commodity Chains and Endogenous Growth: Export

Dynamism and Development in Honduras and Mexico”, *World Development*, Vol. 34, No. 2, 2006.

CIMOLI, M. (ed.), *Heterogeneidad Estructural, Asimetrías Tecnológicas y Crecimiento en América Latina*, CEPAL/BID, Santiago de Chile, 2005.

GEREFFI, G., J. HUMPHREY, R. KAPLINSKY and T. STURGEON, “Globalisation, Value Chains and Development” in G. Gereffi y R. Kaplinsky (eds.), “The Value of Value Chains”, *IDS Bulletin Special Issue*, University of Sussex, 2001.

GIULIANI, E., C. PIETROBELLI and R. RABELLOTTI, “Upgrading in Global Value Chains: Lessons from Latin American Clusters”, *World Development*, Vol. 33, No. 4, 2005.

HAUSMANN, R., J. HWANG and D. RODRIK, “What you export matters”, NBER Working Paper No. 11905, 2005.

UNCTAD, *World Investment Report 2002: Transnational Corporations and Export Competitiveness*, New York: United Nations, 2002.

European Investment in the Mediterranean

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The Mediterranean members of the Euromediterranean¹ *partenariat* represent an important market totalling some 250 million consumers. It is Europe's closest market and, lest it be forgotten, historically Europe's and perhaps the World's oldest trading arena. The Euromediterranean Partnership is largely based on free trade agreements between the European Union and the Southern Mediterranean partner countries. The sole reference date found for this organisation: the 1995 Declaration of Barcelona, sets out a single objective with a target date, namely: the creation of a free trade area for the Euromediterranean region by 2010.

The above free trade area has two goals: to open up the South economically, which means pushing reforms and modernising the industrial and productive fabric and secondly, the creation of a zone in which Europeans can invest with confidence.

From a simplified viewpoint, it can be surmised that in the Conference of Barcelona, the first of these aims was essentially a European objective. Europe has and still maintains that without in depth institutional and legal reforms, the economies of the South will not be able to move forward. On the other hand, the second objective is one clearly sought after by our Mediterranean partners. They believed and indeed still do, that

without foreign investment, they will not be able to cope with the exponential rise in young people seeking their first job. From the angle of our Mediterranean partners, investment is the foundation stone on which economic growth is to be built. Without investment, there can be no quality employment. Without investment there will be no innovative technology and lastly, without investment there will be no competitive trade and export movement.

Twelve years on from the creation of the Euromediterranean Partnership, how do things stand? What goals have been achieved? What has been done and what has it not been able to do? The current economic balance for the Euromediterranean Partnership is more encouraging than could be led to expect: There are association agreements signed and still in force with all partners except Syria, which for political reasons has still not been able sign. There is also the Agadir Agreement for the establishment of a free trade zone, initially among four states on the Southern flank of the region (Morocco, Tunisia, Egypt and Jordan), which came into effect in July 2006. Further to these, the new Euromediterranean Protocol will in essence apply to most states in the region, allowing for industrial cooperation and re-export of industrial produce, although it remains as part of the preferential regime for imports to Europe. In addition to such legal and institutional

1. Morocco, Algeria, Tunisia, Egypt, Jordan, Palestine, Israel, Lebanon, Syria and Turkey.

advances, the region of the South Mediterranean as a whole returned some highly optimistic macroeconomic figures for 2006, with growth of 4.8%, in spite of the conflict that affected Israel and particularly Lebanon. It also stabilised its public spending deficit (to a regional average of 4.9%) and inflation was kept to 4.1%. Furthermore, unemployment fell to reach a regional average of 12.6%. Such figures are indeed encouraging, above all if we take into account the ongoing conflict in the Middle East which inevitably drags in major economic players of the zone, and the fact it should not be forgotten that the outlook for the region's non-oil or gas producing economies back in the nineties was very grim indeed.

Nonetheless, it is also true that in one area, the results were below those expected, namely in the field of investment. Except for some states, such as Morocco, European enterprise continues to invest only moderately in the South of the Mediterranean. Expected growth as a consequence of the entry into force of the association agreements has just not materialised. Europe continues to be the region's major trading partner, but other states from further afield are increasing their activities there. From a total €40 billion of foreign direct investment registered for the ten partner countries of the Mediterranean in 2005, 42% came from Europe. Indeed, at this rate, the Gulf States are called to be the largest investors in the Southern Mediterranean. They now account for some 15% of direct investment projects, but these go to make up some 28% of the total value. China is also beginning to make its presence felt all around the Mediterranean basin, most notably in construction, but also more and more in industry. Hence, it is becoming increasingly clear that globalisation is also affecting the Mediterranean, and that Europe is coming up against important competitors in a region that was, for a long time, considered a privileged zone of influence for the European Union. For the period 2003 - 2005, the last for which there are reliable and definitive figures, it could be seen that Asia was already the major investor in Algeria, Egypt and Turkey. Europe was still the largest investor in Morocco and Tunisia, whilst The US topped investment tables in Israel. Turkey and Israel together receive some 50% of the total of foreign investment, whereas the other half is shared out among the remaining eight Mediter-

anean partners, whose combined population tops 175 million. This is too little to kick start development in large states such as Egypt and Morocco. The top two states in terms of inward investment: Turkey and Israel remain the most modern economies in the region, a reality which goes to suggest that the main factors for attracting inward investment are those of markets and competitiveness and not, as widely thought, low labour costs or natural resources.

The European Commission, whose responsibility it is to give shape to the Euromediterranean Partnership, has established a policy based on two major lines of action: the improvement of the attraction and promotion of investment. Improvement of attraction means, among other things, improving the regulatory framework, authorisation formalities, legal guarantees, resolution of conflicts that may arise, administrative transparency and in effect giving a boost to the rule of democracy and management of public affairs as required by any modern economy. This is to be undertaken through a policy of collaboration among the governments of the Mediterranean states and the Commission. It is one of the tasks uppermost on the agenda of the European Neighbourhood Policy. The ENP is the vehicle that will allow for common objectives to be set, to discuss and even negotiate reforms, drive them through and sometimes negotiate them. The European Union has wound up National Action Plans within the ENP framework with all Mediterranean states except Algeria and Syria. The ENP carries out its work on a bilateral level: within the multilateral scope of the Barcelona process, the work of regulatory harmonisation and modernisation is undertaken through the working group on Industrial Cooperation, also financed by The Commission, and through the Investment ad hoc group, set up in 2007, from the mandate given at the Euromediterranean Conference for Foreign Affairs Ministers.

In terms of the promotion of investment, for many years now the Commission has been financing the ANIMA cooperation program, which is the Euromediterranean network of investment promotion agencies. The ANIMA program, which is due to conclude this year, will be superseded by the launch of a new program of cooperation backed by 9 million euros, which will include not only maintaining the current network of agencies,

but will also aim to provide a thrust to specific investment promotion activities in a similar vein to that of the previous Med-Invest program.

Nevertheless, it remains obvious that the major investment support program of the European Commission is still represented by the 32 million euros given out annually to the FEMIP or Facility for Euromediterranean Investment and Partnership that in the bosom of the European Investment Bank is responsible for European public investment in the Mediterranean. This sum of €32 million will help allow the bank to contribute to capital risk funds and to go ahead with the technical assistance linked to major investment projects. Furthermore, the Commission contributes the funds required for interest allowances on some of the Bank's loans. Due to all this, the Bank is able to earmark some €2 billion annually to investments in the countries of our Mediterranean partners. Today, the FEMIP is the region's premier investment bank.

Investment is the driving force behind all economies. Investment is also the means to creating long-term productive and social bonds. It represents a vehicle for transmitting know-how in both industry and services. The countries of the South of the Mediterranean need European investment, although dependence is mutual, because Europe cannot turn its back on such a nearby growth market that has many opportunities to offer in the future. It is also an essential market in terms of our energy supply and represents a land for both the transit and origin of immigration. Furthermore, it is a destination for tourism, an area of Mediterranean fruit and vegetable production, and the great transoceanic shipping routes have to pass through the region. If investment is put in and the future is taken as a joint project, then the challenges can be dealt with together. Investment, shared physical and human capital form the best guarantee to establishing a more open region and one more deeply linked to Europe, Spain and Catalonia.

Investment Perspectives in Sub-Saharan Africa in SME/SMI sector and position of the Centre for the Development of Enterprise (CDE) within the Framework of the Cotonou Agreement

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If there is a real willingness to attain one of the main development aims of the millennium, i.e. that of reducing poverty in Africa by half by 2015, a deep-seated shift of both national and international policies is needed in order to boost growth.

A new “architecture” for providing aid to Africa is required, but this aid should, above all, be expressed in the form of developing output capacity.

It is considered that EPAs (economic partnership agreements) should give impetus to pre-existing regional integration projects in the ACP (Africa, Caribbean and Pacific) states. These in turn should boost and be a cohesive force for regional integration, and as a result, expand the markets of ACP nations. This process ought then to foment the emergence of scale economies, instrumental in raising skill levels, reducing production and business costs, and thus improving the competitiveness of ACP states, which will ultimately attract more investment to member nations. This new shift is designed so that EPAs themselves set the trade policies that should blend with development policies.

That said, EPA negotiations have to be flexibly managed, as the implementation of these agreements will no doubt lead to a major restructuring of the economies involved. This is considered at

very least a necessity in order to improve trade results. Nevertheless, this process of restructuring has to be carried out with due consideration of the economic and social problems experienced by ACP nations involved, as well as their ability to adapt to this new trade environment. The parameters of these processes will have to be set down on a case-by-case basis, according to WTO regulations. It is worth remembering that European integration itself has always been based on agriculture and community preferences among others. Further to this, current EPA agreements appear to be firmly based on the premise of “free” exchange thereby opening the door for a disarming of tariffs and non-tariff measures alike, which may risk proving fatal for those economies already severely weakened by the exponential growth of (mainly Asian) imports in recent years.

In order for African states to become competitive in the international arena, they should reinforce ties among export sectors and the rest of the economy, creating and developing the necessary local capacity, be it in material infrastructure, output potential or organisations supporting private investment.

This policy of enterprise development must be based on a strategy of regional integration, in order to make the transition from the meagre internal markets to wider ones, thereby forcing

1. The Centre for the Development of Enterprise, which (CDE) has been created within framework of the Cotonou Agreement within the Centre for Industrial Development (CID), has been running for thirty years. A European Commission study is currently underway in order to establish the exact position of the CDE's status within the framework of the major EU policy lines on cooperation; namely regional integration and the Economic Partnership Agreements.
2. The points of view expressed in this article are those of the author and do not necessarily reflect those of the Centre for the Development of Enterprise in any way.

the removal of customs barriers, which have previously led intra-community trade to dwindle to negligible values.

Regional development organisations give priority to implementing the guidelines of structuring communication at regional level so that the improvement in infrastructure—a pre-condition for fomenting national and international investment—may be able to back the vision of economic integration and rise to the challenges laid down by the markets.

The new industrial policies of the continent have to be focused on subsidiaries that generate sustainable jobs. They have to be aimed at the variety of sectors which are based on endogenous resources and which possess a strong enough potential to be able to satisfy both local and export demand both regionally as well as internationally.

European Development Fund incentives for the private sector

The mechanisms of the Agreement provide for separate instruments of aid according to the type of action to be carried out at a macro, meso or micro economic level, although they all underline the need for an integrated approach. In this framework, the CDE (Centre for the Development of Enterprise), as a founder institution behind the Agreement, will be fully involved in the development strategy of the private sector, for which its key role will, above all, be that of providing non-financial services to enterprises in ACP nations in support of projects undertaken by ACP and EU economic agents.

The case for direct assistance to enterprise

Although the creation of macroeconomic and regulatory reforms are essential in order to create the most ideal structures to ensure economic growth, they will be of little use in the face of such handicaps as the lack of a real core of local companies, a prospering private sector and enough senior and junior management personnel who are adequately trained and experienced. All these

constitute clear barriers to economic development and are still in place both at the industrial level as well as for enterprise throughout many ACP states.

For SMEs, the main hurdles are listed below:

- local markets of a limited size,
- cost of factors relatively high (labour costs in ACP states can be very high due to the low productivity levels);
- shortage of financial resources;
- Foreign exchange shortage;
- lack of information and commercial and technical know how;
- limited number of skilled manual workers;

In order to overcome the above obstacles, SMEs will need the following:

- Information on technologies, products, markets and supply sources
- investment studies and management plans;
- Capital and loan financing;
- access to foreign markets or trade ties with firms more experienced in other regions of the world;
- industrial experience and power to decide on management questions and even in the commercial and marketing plans;
- training;
- technical assistance;
- technical and diagnostic audits;
- Valid partners, ideally able to provide management staff, finance and access to foreign markets.

When it comes to direct assistance to SMEs/SMLs within ACP states, it has been observed that there are a limited amount of mechanisms providing either direct or collective assistance on an ad hoc basis for beneficiaries with shared costs. Numerous institutions exist, which offer assistance to intermediary organisations, but are highly limited in their mechanisms of proportioning direct aid to the target group of SMEs/SMLs.

The status of the CDE according to its mandate

The position of the CDE, expressed via its direct assistance to enterprise, is quite clear in terms of the aid it provides to the private sector, shaping policies and strategies from those supplying funds

and other international cooperation and development institutions. Whereas most of these official organisations focus on more macro or meso-economic level activities, the CDE concentrates its efforts into backing firms aiming to put down strategic roots, expanding its assistance to those local service providers and intermediary organisations in the private sector (above all professional associations, business leaders' groups and chambers of commerce).

An additional aim of the CDE is to build up capacity among private sector intermediary organisations in order to improve their ability to as service providers to support enterprise (services in general), and assist them in preparing and developing their plans of action for public/private sector dialogue, linked to the improvement of the climate for investment and lobbying of the powers that be, both nationally and especially regionally, within the framework of the EPAs.

This integrated approach will be operating in an international economic and commercial climate that has changed beyond recognition since the centre was set up. The major guidelines around which the Centre aims to run its activities are namely: the sector approach, the regional approach, decentralisation and closer collaboration with public and private financial institutions. The sector approach should aim to select the most economically, socially and technically viable common sectors or activities present within the regions or groups of countries. For this reason, regions and sectors are in effect two complementary elements when it comes to defining the CDE's programs.

Once analysis of the major traits of a given sector has been completed, the objective of the sector program will be that of creating a strategy to "contribute" to the development of a sector in tune with the overall goals of the CDE and subsequently applied to the given sector in conjunction with both beneficiaries and others participating with the aim of achieving the same core objective.

The main idea is, namely to bring specific private backing of enterprise and intermediary organisations of the ACP private sector into the fold of a pluri-national vision and coherent development program.

As far as possible, this approach will have to be integrated into programs run regionally and with those nationally based initiatives for improving the competitiveness of enterprise within the framework of the EPAs. Given the fact that the opening up of their markets is just round the corner, the challenge for ACP nations is to keep hold of their own business communities and both develop and diversify them, branching out into national, regional and international markets. The de facto public powers in these states must put the private sector at the heart of this policy. A development plan for the private sector has to be drawn up in order to bolster both the economy and the modernisation of enterprises, along with that of professional organisations and partners in development. Action must also be taken in the area of adapting regulations to improve the business climate, and funds made available to ensure the financing of investments. In terms of the CDE, the relevant areas are essentially those of making a blueprint for modernising the more advanced enterprises and following up on firms within lower development bands. For sectors considered a priority and generators of growth, the CDE will put its own experience to work in order to contribute to improving the competitiveness of enterprise, most notably in the technical and management areas, human resources training and market access.

Regionalisation

Within the domain of the ACP states it is important to make sure flexible supporting structures are provided to SMEs/SMIs, which are near at hand, fast and direct. The CDE has, once again to deploy on the ground decentralised services at regional level and dedicated to working directly with ACP regional organisations in the public sector and private sector intermediary organisations called to take on a key role in the implementation of the EPAs. In addition, these regional branches will ensure the networked management of the CDE *Antennae* at national or sub-regional level to the entire region. It should be furnished with adequate human and financial resources to be able to attain the goal, having been handed wide-ranging powers to do so.

The CDE: the interface between the ACP and EU networks

The CDE can best be defined as an interface between enterprises of the ACP and the industrial and business community of the EU. In this role, the CDE is to mobilise or tap into existing EU financial and technical resources (experience, technologies, know how) and identify the right EU markets for finished and semi-finished goods coming from the ACP nations. In order to ensure optimal results for its mission of efficiently mobilising these resources within Europe, the Centre will work along the lines of a network to be firstly technical (enterprise associations, technical and training centres, economic poles of competition, specialised fairs, experience), financial (including financial institutions for development, commercial banks, capital risk funds) and last but not least, institutional (development cooperation agencies, institutions specialised in the promotion of the private sector in ACP nations). Acting as an interface will set the CDE apart from programs and initiatives which back the private sector through funds and expenses shared with the SFI of the World Bank.

Procedural Framework for CDE assistance

It is impossible to talk about supporting the private sector without stressing the need to establish procedures adapted to enterprise.

The CDE must be equipped with financial regulations and procedures compatible with the demands of its beneficiaries, i.e. SMEs and intermediary organisations. These demands must be met both in terms of the time it takes for dossiers to be processed as well those of contracting, for documenting or for providing information required to compile request dossiers. The Executive Board of the Centre must ensure the fit of CDE procedures remains compatible with its mandate, and maintains the specific aim it was created for in order to respond better to the needs of enterprise.

Institutional statute of the CDE and budget

Within the framework of the current changes, where EPAs are defining the trade policies which are to go hand in hand with development policies, the CDE will require enough funds to be able to fully organise its international activities on a technical, neutral and ongoing basis, with a range of activities centred on promoting and supporting the ACP private sector within the framework of the ACP/EU partnership. Its lasting impact will essentially be in function of the funds it receives and those it can generate. The EDF and bilateral cooperation agencies are especially interested in using the CDE as a means of running their own programs of promoting SMEs in ACP states at a lower cost.

Trends in the emerging markets of Eastern Europe

Bertrand Deprez

The Centre

Introduction

The countries of Eastern Europe have experienced considerable economic growth in 2006 and this trend is sure to continue during 2007. Favorable economic prospects worldwide (especially in the emerging markets) as well as the sustained growth of the Eurozone countries are a cause for optimism. According to the International Monetary Fund, growth in the Eastern Europe zone (including the Member States of the European Union, the countries of South-eastern Europe and Turkey) will approach 5.5% in 2007.¹ In 2006, the average GDP per inhabitant of the countries of Eastern Europe was similar to that of Korea, Malaysia, Russia, Thailand and South Africa.

The economic growth of the emerging markets in Eastern Europe is catching up with the countries of Western Europe at an accelerating rate. The state of economic reforms in some of the new member states of the European Union is so advanced that some of their social and economic standards are similar to those of advanced industrial economies. Nevertheless, there are continued risks because of public deficits, inflation, halts to the reforms and imbalances which may have developed. These economic imbalances go hand in hand with a weakening of political power in some of the region's countries, as we saw most clearly during the disturbances in Hungary and Slovakia in 2006.

It is very probable that these emergent markets will continue to enjoy strong growth in the coming years if there is still the green light in Europe and in the world. All the same, the situation shall be more contrasted than it has been during the past decade. The markets which will come out of it best are those which shall have taken advantage of the years of strong growth to undertake far-reaching market reforms with a view to complete integration in the single European market.

Growth of emergent countries of Eastern Europe

A favorable economic context in 2006

The growth of the emergent markets of Eastern Europe accelerated and attained 6% in 2006. Exports continued strong, thanks to accelerating growth in Western Europe, in particular in Germany. On the other hand, domestic demand accelerated: investment continue to do well thanks to massive entries of direct foreign investments (5% of the GDP in each East European country). Consumption was stimulated by the increase in new jobs and real salaries, as well as loans linked to the ongoing massive entries of capital, capital transfers within EU zone and tax incentives (mainly in the Czech Republic, Bulgaria and Romania). Current trade deficits were quite considerable but

1. This document follows the classification used by the International Monetary Fund (IMF) to rate the emergent economies of Eastern Europe and does not take into account the Republics of the Former Yugoslavia or Albania. In 2006, growth in those countries was similar to the rest of the region (5.3% in 2006 according to the European Reconstruction Bank); the process of privatisation and the development of tourism are two important factors in the growth of those countries.

Table 1. Emergent European countries: real GDP				
	2005	2006	2007	2008
Emergent countries of Eastern Europe	5.5	6.0	5.5	5.3
Turkey	7.4	5.5	5.0	6.0
Turkey not included	4.7	6.2	5.7	4.9
Baltic Countries	9.0	9.7	8.7	7.0
Estonia	10.5	11.4	9.9	7.9
Latvia	10.2	11.9	10.5	7.0
Lithuania	7.6	7.5	7.0	6.5
Central Europe	4.4	5.7	5.2	4.7
Hungary	4.2	3.9	2.8	3.0
Poland	3.5	5.8	5.8	5.0
Slovak Republic	6.0	8.2	8.2	7.5
Czech Republic	6.1	6.1	4.8	4.3
South-east Europe	4.4	6.7	6.0	4.9
Bulgaria	5.5	6.2	6.0	6.0
Croatia	4.3	4.6	4.7	4.5
Malta	2.2	2.5	2.3	2.3
Romania	4.1	7.7	6.5	4.8
<i>For comparison</i> Slovenia	4.0	5.2	4.5	4.0

Source: "World economic prospects", April 2007, International Monetary Fund (IMF)

were largely underwritten in the majority of countries. Inflation is under control. Prices of raw materials are high and have not stopped rising, but there are signs of a let-up.

This sustained growth has been accompanied by a positive balance of job creation in all the countries (0.7% in Hungary and 6.7% in Estonia). The diminution of the active population, as well as the aging of the age pyramid has contributed to lowering unemployment rates in the countries of Eastern Europe.

But some clouds have darkened the promising trends of the emergent markets in Eastern Europe. Growth has been negatively impacted in Hungary because of the reduction in investment following the introduction of an austerity program to reduce public deficits in 2006. Turkey has experienced strong growth rates since 2002 (7.4% in 2005 and 6.1% in 2006), which could fall as a result of its recent hardening of monetary policy and uncertainties about joining the European Union. We have also seen other outputs gaps, in 2006 in Romania, Bulgaria and the Baltic countries.

Specialisation in the emergent markets of Eastern Europe

One of the important tendencies of the emergent markets in Eastern Europe is the changes of some of their fundamental variables. In the past, growth in the zone was linked to raw materials prices whereas today, it depends increasingly on consumption and investment, which will without a doubt be the main factors of GDP rises in the forthcoming years. Investment growth in 2006 was marked by a very strong expansion in the construction industry (in particular in Romania and Lithuania) and in the equipment industry (in particular, the Czech Republic, Poland and Slovakia).

The structure of the markets is also evolving, with industrial activity and services assuming greater weight. The economies of the Baltic countries, Slovakia, Bulgaria and Romania, are increasingly dominated by service sector. The industrial sector has a predominant position in the Czech Republic and a growing importance in Hungary, Poland, Slovenia, Bulgaria and Romania, with the recent opening of new automobile factories, for exam-

ple. These tendencies are expected to continue, according to the firm PriceWaterhouseCoopers. For example, part of world automobile production will migrate to Central Europe and will arrive at the level of 6 billion dollars in the course of the next five years.

Specialisation in the service sectors is an indicator of increasing maturity of some of the emergent markets of Eastern Europe, as is seen in the example of Slovakia or some urban areas of Poland. Slovakia, the most dynamic economy of the countries of Central Europe, has experienced strong growth of service sector added value in 2006, accelerated by strong production and real estate income. The retailing and distribution sectors, motor vehicle repair as well as property rents have taken up a larger share of that country's economy. Another example is the specialisation of the large urban centers of Eastern Europe, such as that formed by Warsaw, which are seeking to specialise in the service sector and take advantage of still cheap labour costs, of tax incentives linked to special economic zones and above all of an abundant, hard-working and qualified labour pool. From 50 to 60 large groups (IBM, HP, Shell, Fiat, Motorola...) have installed an internal or external service in Poland since the late nineties and the Polish Information and Foreign Investment Agency (PAIIZ) are trying to attract businesses in the research and development sectors, including biotechnology and pharmaceuticals.

The fruits of structural reforms

Rapid adaptation

The good performance of the emergent markets of Eastern Europe (especially of the member states of the EU) can be in large part explained by the speed of their structural transformation. The reform of the planned economies of these countries took place rapidly thanks to extensive privatisation and restructuring, alongside the dismantling of trade barriers and a growing flow of foreign investments. These countries also benefit from a highly qualified workforce significantly cheaper than in Western Europe (the differential between a Hungarian salary and a French salary is 1 to 5).

A study carried out by the International Monetary Fund between 1994 and 2004, has shown that the countries of Eastern Europe, henceforth members of the European Union, have made full use of their capacity of recovery since the nineties; the correlation of structural transformation in these countries with improved technology and production quality has engendered a very rapid increase in their market share worldwide. For example, a country like Estonia chose to undertake thorough reform in the nineties and open up radically to trade, with low taxes and a largely unprotected labour market since the mid-nineties. Estonia then recorded uninterrupted growth approaching 7% from the beginning of the 2000s and concurrently succeeded in reforming its public expenditure while the unemployment rate went down from 10% in 1997 to 4.2% in 2006.

A suitable framework

Another example of radical structural reform is the introduction of the "flat tax", a tax which applies the same rate to all taxable income. Slovakia has implemented a "flat tax" with a tax rate of 19% covering income tax, company tax and capital gains tax. According to a study by researchers from the Harvard Business School, this has helped improve competitiveness and has brought a halt to the distorting effect of a tax structure which penalises foreign investment. This tax has been introduced in other countries of Eastern Europe (Lithuania, Latvia, Estonia, Romania) and symbolises the structural transformation of the emergent European markets and their attractiveness for European and world businesses: in this region, the average company tax burden is a third less than in Western Europe.

The emergent markets of Eastern Europe have other advantages. The proximity of reliable infrastructures, the still low level of salaries and the geographical and cultural proximity of Western Europe are other factors which contribute to the success of these markets. If we accept the opinion of the American consultancy firm McKinsey, investments and the process of delocalisation of the emergent markets of Eastern Europe is not set to decrease. A study by this firm forecasts that the jobs created in Eastern Europe in the context of delocalisations, could triple between

2005 and 2008. Business process outsourcing (BPO) by Western European companies will have generated 130,000 job positions in the countries of this region by 2008.

The new cycle of the European Structural Fund and of the Instrument for Pre-Accession Assistance (307.9 billion euros between 2007 and 2013) will also encourage investment in infrastructures and finance a policy of innovation in the markets. The new member states are to receive 51.3% of the total resources of the cohesion policy over the period 2007-2013, representing around 3.5% of their GDP (even though the majority of these states will surely not have the capacity to absorb all the money). While such factors taken together suggest that these countries wish to repeat the Irish success story by coming up to scratch in quick time, the situation remains contrasted and the adjustment of these markets to the standards of the Eurozone and the single market could slow down their growth.

Exposure to crisis

The Risks of Overheating

The future of the emergent markets of Eastern Europe is a cause of some worry today. The "Baltic Tigers" have recently shown worrying signs of overheating with an inflation rate of 8.9% in Estonia in April 2007. Some commentators raise the spectre of a useless repetition of the Asian crisis in Eastern Europe. Moreover this risk of overheating is compounded by the bogged down wave of reforms in the countries of the East and by the risk represented by convergence of the economies of Eastern and Western Europe.

Inflationary pressure is on the rise in many markets of Eastern Europe. These pressures are sustained by the migration of millions of workers to Western Europe (even though this movement seems to be slowing down) and the rapid increase in borrowing. In 2006, Latvia's balance of payments deficit was equivalent to 20% of GDP, because of the real estate bubble which has taken place in the Baltic countries and which could have a negative effect on growth in these countries. Inflationary risks exist in Poland, the

Czech Republic, Romania and Slovakia, according to the World Bank.

"Reform fatigue"

This danger has been reinforced by the syndrome of "reform fatigue" which has been felt in all the countries of the region. Many of the countries have not taken advantage of the last few years' opportunities for economic growth to improve the state of public finances. Adhesion to the euro was delayed in the majority of the new member states except Slovenia, and only Slovakia seems likely to be up to meeting the convergence criteria in 2009. Hungary is going through a difficult economic situation because of the worrying state of public finances. The desires for reform are considerable in these countries: reform of tax policies (especially in Latvia, Bulgaria and Romania), reform of the labour markets (to bring down the very high rate of unemployment); reform of the agricultural system; the health systems which still bear the stigmas of the former centralised system; legal systems and transparency (according to a report of the NGO *Transparency International*, published in 2006, the Czech Republic, Lithuania, Latvia, Slovakia and Poland have "serious problems of corruption"). The aging of the population in this region is also another cause for worry in the medium term (the average age of a Slovenian in 2025 will be 47.4 years, the oldest in the world). These countries need a new series of macro reforms.

The difficulties of integration into the European market

The situation is again complicated because of the convergence criteria for the introduction of the euro, which some countries of Eastern Europe are aiming to achieve and which are a source of considerable vulnerability in case of unexpected external perturbations or of a weakening of the national economic policy framework. Adopting the euro demands carrying out policies which are too restrictive for the countries of Eastern Europe (2% inflation, public deficit 3% of GDP, etc.). The introduction of the euro in these countries poses a real dilemma, for while the maintenance of external competitiveness in a fixed exchange rate context

could require costly demand adjustments, the entry into the Eurozone offers the surest means of protection from the imbalances between currencies for these emergent markets. The future of the emergent markets also depends on the political evolution of the European Union; the debates between member states at the moment of political accord over the European Treaty in Brussels in June 2007 showed that some countries would like to lead the European Union towards a more protectionist form which would certainly have an influence on the economies of Eastern Europe.

Conclusion

Although the balance of these six years is decidedly positive, the situation today seems to be becoming more contrasted. The growth of the European markets of Eastern Europe should continue in 2007, but the level of performance is expected to vary from one country to another. The emergent markets of Eastern Europe must face their first real difficulties since the beginning of the 2000's while the markets continue their evolution towards increased specialisation in industrial production and the service sector. Many of these difficulties are structural in origin and demand the continuation of reforms which were slowed by accession to the European Union.

The adaptation of the emergent markets to integration in a large European market is without doubt crucial to the future of these countries but also to the future of the whole European continent.

References:

Perspectives de économie mondiale, April 2007, International Monetary Fund.

EU8+2 Regular Economic Report, May 2007, World Bank.

Sale temps pour le nouvelle Europe, Mars 2006, Charles Wyplosz.

The Dynamics of Product Quality and International Competitiveness, 2007, Philip R. Lane and Gian Maria Milesi-Ferrett, IMF Working Paper.

CCEQ - Candidate and Pre-Accession Countries' Economies Quarterly, 2007, European Commission.

Europe de l'Est: croissance soutenue en 2007, 2007, Dorothee Enskog, Telos.

Le système de santé dans les PECO, 2004, Euractiv

Sept Etats membres ont 'de sérieux problèmes de corruption, 2006, Euractiv

Hot and bothered, 2007, The Economist

Diverse region is an investment magnet, 2006, Stefan Wagstyl, The Financial Times

Eastern Europe hit by shortage of workers, 2007, Christopher Codon and Jan Ciensky, The Financial Times

Il était une fois dans l'Est... la sur-specialisation des travailleurs, 2006, Etienne Wasmer, Telos

La Pologne se rêve en capitale européenne pour les activités de services, 2007, Antoine Herve, Le Figaro, 2007

Rovna Dan: The Flat Tax in Slovakia, Harvard Business on Line

Price Water House Coopers, <www.pwc.com>

McKinsey, <www.mckinsey.com>

Banque Mondiale, <www.banquemondiale.org/>

European Bank for Reconstruction and Development (EBRD), <www.ebrd.com/fr/index.htm>

Opportunities and Challenges in Latin American Markets

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Outlook

Resurgence of growth in Latin America. There have been some promising trends in recent years. There have been strong recoveries in growth rates in almost all countries in the region since 2003. The last three years have witnessed the highest growth rates since the late seventies. Through that period, the Latin America and the Caribbean (LAC) region has shown signs of significant economic improvement, experiencing the highest growth rates since the late seventies. Growth in the region averaged around 5% from 2003 to 2006—better than the OECD, although somewhat lower than growth in East Asia. Between the end of 2003 and the end of 2006 Chile, the Dominican Republic, Ecuador and Peru reached per capita growth rates above 3.5 percent whereas Argentina, Uruguay and Venezuela grew at annual per capita growth rates above 7 percent. Median per capita growth in the region in the last three years has averaged 2.7 percent and would now be at a level not seen since the mid 1970s, when the region experienced growth rates of around 3 percent. Taking into account that over the last 30 years median per capita growth in the region has been about 1.13 percent and has rarely averaged more than 2.5 percent over a 3 year period, this achievement is nothing short of remarkable and could probably be interpreted as the

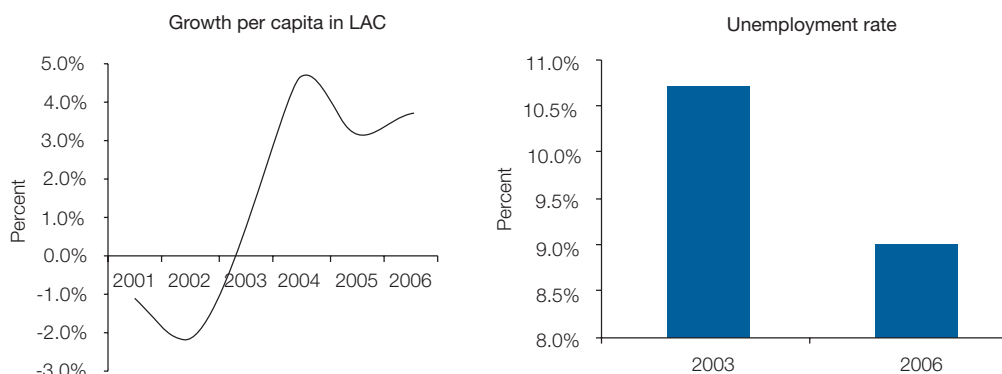
result of an acceleration in structural growth rates, perhaps due to the significant reforms implemented by a large number of countries in the region over the decade of the 1990s. Moreover, this growth has been accompanied by strong job creation in contrast with previous growth spells (Figure 1). It is beginning to reverse previous trends towards increased unemployment and informality rates—largely as a consequence of the slowdown and crisis that took place at the turn of the millennium.

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Quick Facts about Latin America and the Caribbean

Population	542.9 million
GNI per capita (Atlas method) (current US\$)	US\$450 (Haiti) to US\$7,310 (Mexico)
Population living on less than US\$1 a day (%)	8.5
Population living on less than US\$2 a day (%)	20.6
Share of income held by richest 10 percent (%)	41.2
Share of income held by poorest 10 percent (%)	1.1
School enrollment, secondary (% net)	67.5
Gini index of income inequality	53.3
Under 5 mortality rate (per 1,000)	31.4
Starting a business (duration in days)	73.3
Starting a business (cost as % of GNI)	48.1

Figure 1. GDP per capita growth and unemployment in Latin America



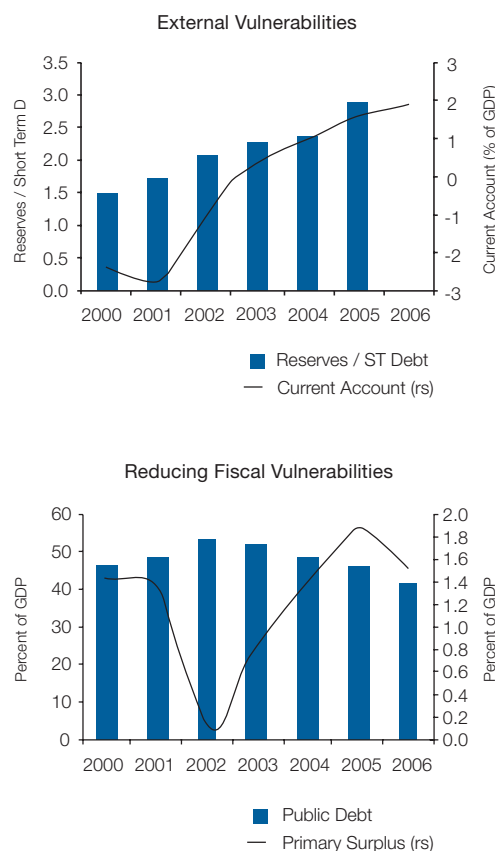
Source: World Bank 2007

Strong macroeconomic management. On the macro front, Latin America has made significant progress over the past few years. Comparing the situation today with that in the early and mid 1990s, Latin American countries have better macroeconomic frameworks, are more open to trade, have more developed financial sectors, and in virtually all countries public spending in health has increased and education coverage has expanded. Although this should not be understood as indicating that there is not progress still to be made in these areas (e.g. openness to trade in Latin America is still low and financial markets while improving are relatively shallow), those significant improvements in the macroeconomic framework have in all likelihood contributed positively to GDP growth. Most countries have used this period of high growth and improvements in external factors (e.g., commodity prices, low interest rates) to reduce significantly their vulnerability to external and internal shocks. They have accumulated international reserves, reduced debt/GDP ratios, and improved substantially the currency and maturity composition of debt. In addition, they have maintained current account and primary fiscal surpluses (Figure 2).

For example, as shown in Figure 3, the average primary fiscal balance in the region has increased from 0.1 percent of GDP in 2002 to 1.5 percent of GDP in 2006. Similarly, public debt has been declining since 2002 and would now be around 40 percent of GDP. On the external front, reserves have increased from 35 percent to 40 percent of M2 whereas the current account balance has

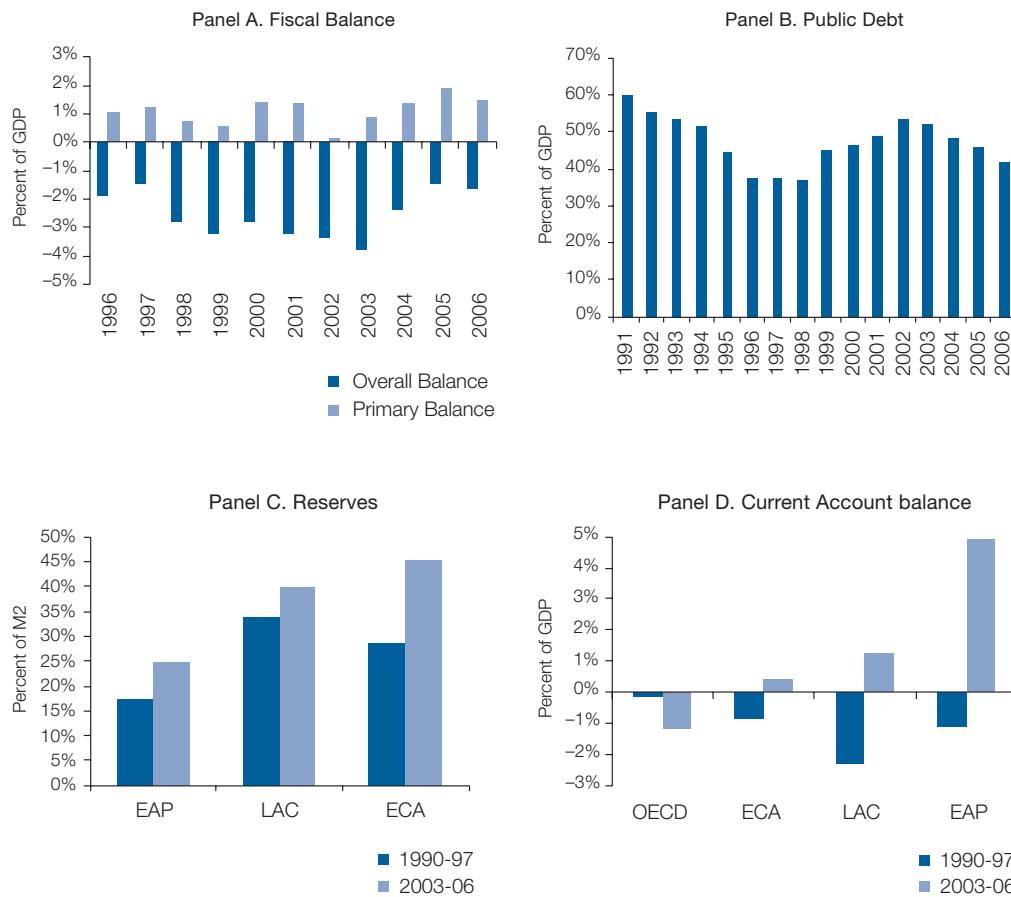
moved from a 2 percent deficit over 1990-97 to a 1 percent surplus over 2003-06. As a result, the region is today much less vulnerable than what it used to be a few years back.

Figure 2. Taking advantage of good times to reduce vulnerabilities



Source: World Bank 2007

Figure 3. Vulnerabilities have decreased dramatically



Source: Bank Staff Calculations

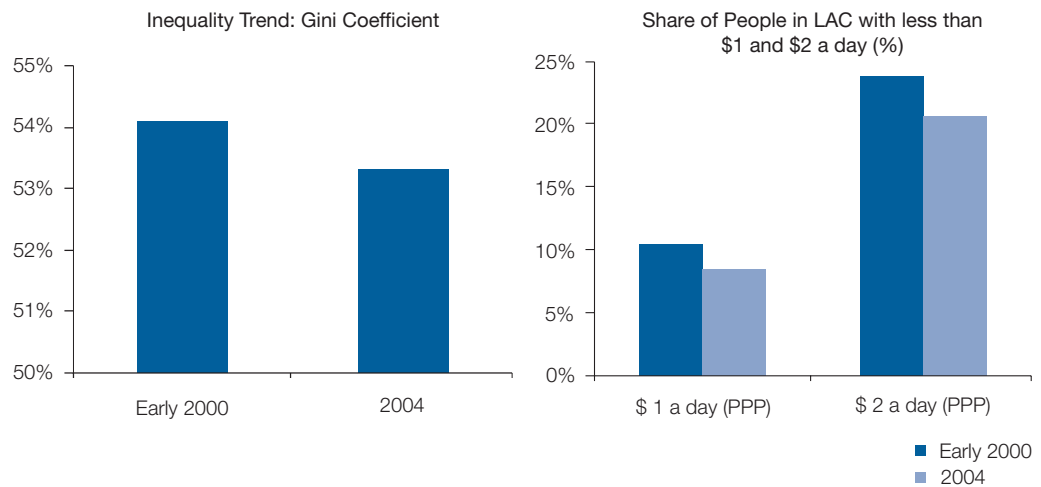
Progress in equity and poverty reduction. There has also been modest progress in equity and poverty reduction, although income inequality continues to be among the highest in the world (Figure 4). While most LAC countries are on track to meet the Human Development Millenium Development Goals (MDGs), a number of them are lagging behind on the extreme poverty targets. It seems unlikely that the LAC region as a whole will meet the extreme poverty targets for 2015.

Progress and Commitment on Improving the Investment Climate. While most Latin American countries are ranked in the lower half of the standard Investment Climate rankings (WEF, WB), significant progress has been made in recent years. Most countries appear committed to improve their investment climates, an area in which the region has been lagging behind relative to other

middle income countries particularly on structure and complexity of tax system and on contract enforcement. As evidenced in Table 1, three of the top reformers were Latin American countries and their efforts are on-going.

Exports Growth. The LAC region has also experienced in the last five years an export boom, albeit concentrated in the primary sector, with annual growth rates of exports over 25 percent in many countries such as Peru, Chile, Argentina, Brazil etc. However growth in non-traditional exports is exploding in volume and in number of new products. In addition, a most interesting and welcoming factor is developing which is the significant growth on internal demand, in the last three years in most countries around 10 percent, largely driven by economic growth, earnings and private investment.

Figure 4. Poverty Reduction and Equity



Source: World Bank 2007

Table 1. The top 10 reformers in 2005 - 2006

Economy	Starting a business	Dealing with licences	Employing workers	Registering property	Getting credit	Protecting investors	Paying taxes	Trading across borders	Enforcing contracts	Closing a business
Georgia	■	■	■		■			■	■	
Romania		■	■	■	■	■	■	■		■
Mexico	■					■	■			
China	■				■	■		■		
Peru	■				■	■			■	x
France		■			■			■	■	■
Croatia	■			■					■	
Guatemala	■	■		■						
Ghana				■			■	■		
Tanzania	■			■		■		■		

Source: Doing Business database, 2007

Challenges

However, a strong macroeconomic framework is not sufficient to predict sustained high growth. While the region's recent performance is quite impressive by historical standards, so far it has been a three year run, and it has been driven, to a large extent, by a number of external factors, such as a favorable global environment, high commodity prices, a voracious appetite for raw materials and intermediate goods from countries

such as China and India, and so on. To secure that sustained high growth, countries need to complement their strong macroeconomic framework with a good microeconomic environment driven by reforms in the broad investment climate regime. Those themes have not received the attention devoted to macroeconomic stability issues, and the corresponding policy agenda has developed very unevenly in the Region. It is only recently that countries have begun to focus on microeconomic reforms and the improvement of

the investment climate, in the pursuit of that elusive sustained growth. All of the usual estimations and rankings show the Latin America region lagging in microeconomic reforms and well below the average (WEF 2006, DBR 2006). Given the large development impact of those reforms it can be argued that the poor investment climate in Latin America could be responsible for its relatively low rates of investment and total factor productivity growth.

Clearly, in principle there are a wide range of microeconomic factors that may affect productivity and investment, in particular key factors are: (i) the quality of governance, institutions and regulations, (ii) the availability and quality of physical infrastructure, (iii) the development of the financial sector and firms' access to financial services, and (iv) education, training and the national innovation system. Investments in infrastructure are recovering but there are still too low in many countries. There has been continuous progress in education and health service coverage, but the quality of education remains a concern. There have also been many improvements in productivity and formal employment but innovation by firms still remains low and informality levels remain high. Access to basic services (education, health, infrastructure, financial services) is increasing, but differences in access across income and ethnic groups still remain huge. In some countries, lack of competition in some key sectors (e.g., telecommunications, energy, and finance) keeps access to these sectors and quality low while keeping prices high, discouraging competitiveness and growth. Likewise progress has been made in the trade regimes and in strengthening the financial sectors-aggressive financial liberalization, intense capital markets reform and banking and pension supervision- yet more is needed to further increasing the region's integration into the global economy while at the same time deepening LAC's relatively shallow financial markets. Below there are the key challenges already embraced by the Latin American countries.

On Infrastructure. Improving the delivery and efficiency of infrastructure services and modernizing the corresponding legal and regulatory frameworks are thus key priorities for Latin America. In particular, in order to secure universal coverage and support moderate to high growth, investment

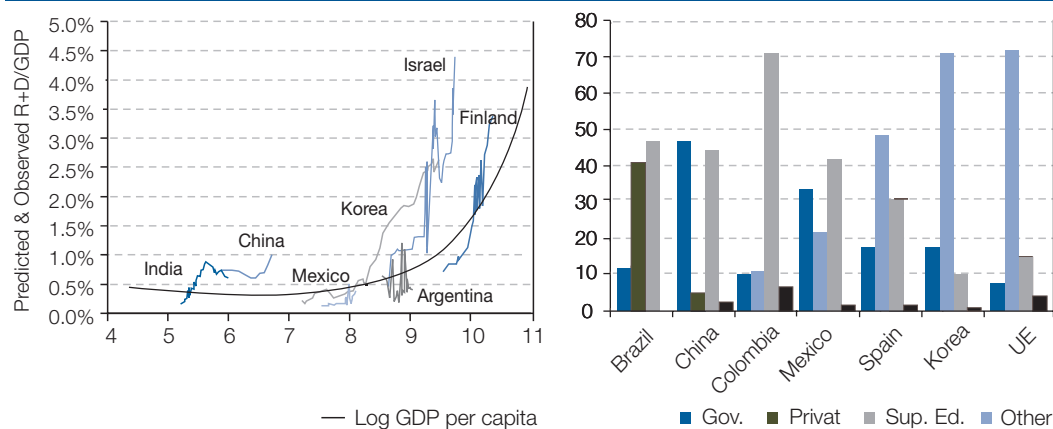
levels need to increase considerably from the current 2 percent to levels of about 4 to 6 percent of GDP. Moreover Latin America needs to increase the efficiency of its expenditures in the area of infrastructure and in this regard improved governance and modern regulatory frameworks play a critical role, so as to ensure the right selection of projects, proper evaluation and oversight, and transparent procurement processes. Most countries-such as Peru, Mexico, Brazil, Chile-are advancing in this area with an aggressive pipeline of infrastructure projects-roads, ports, airports, water and sanitation, gas, electricity-to be concessioned or granted under public-private partnerships (PPP).

On Access to Credit. A second key challenge is that of expanding access to credit. A well functioning financial system is an important component of the investment climate and in fact, firms with access to credit tend to have significantly higher productivity, are more likely to innovate and less likely to engage in corruption. Moreover, the region seems to have significant room to improve on this front as it is well behind high income countries—and some other developing regions of the world—both in terms of financial deepening and in terms of access to financial services. Access problems seem to be particularly important for small and medium firms who have consistently lower usage of financial products than large firms.

On Innovation, Technological Development and Human Capital. A third key challenge is that of fostering innovation, technological development and human capital aimed at moving up in the value chain and securing the elusive goal of higher sustained growth. All of the relevant indicators show Latin American countries lagging significantly in this area. Figure 5 shows the relatively low R&D investments even when controlled for GDP per capita. The good news is that countries are making innovation and technological development and human capital top priorities for support and reform.

On Governance. Lastly, the governance agenda, encompassing the strengthening of the rule of the law and the improvement of institutions and regulatory frameworks, emerges as a key policy priority for improving economic performance in the Region. This is reflected in robust links between, on one hand, low levels of corruption and crime and

Figure 5. Successful countries in R+D: R+D investment/GDP per capita, and shares of public and private investment



Source: World Bank 2007

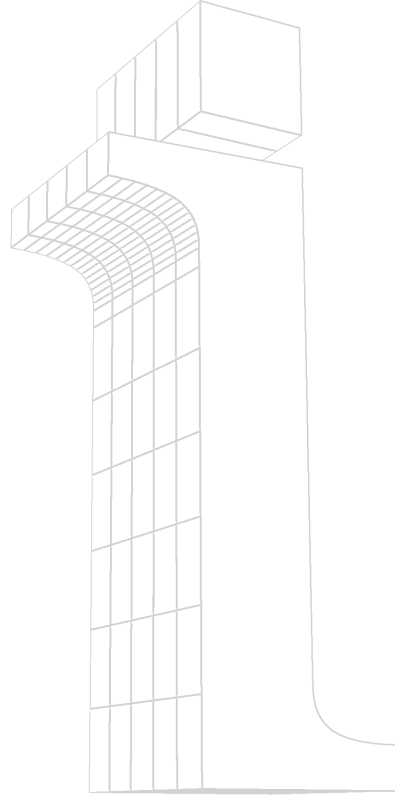
increased regulatory compliance and, on the other hand, higher levels of firm productivity and wages

Opportunities

Overall there is ample reason for cautious optimism about longer-term growth prospects and for Latin America to live up to its potential in terms of economic growth and matching the development achievements of other regions, such as East Asia, which has managed to halve poverty rates in the last decade. Macroeconomic issues appear to be under good control. The focus now is on the micro agenda and there appears to be a credible commitment and on-going initiatives to address these microeconomic issues to improve overall competitiveness.

In this context a number of Latin American countries appear as a very attractive fit for exports or

for foreign direct investment (FDI) from both large and SMEs Catalanian firms. A number of those countries, Mexico through NAFTA, Central America through CAFTA and Chile and Peru (to be ratified this year) through FTAs, have non-tariff access to the US market. In addition internal demand is significantly growing and there is high demand for internal consumption and for the production for exports of high value added products in practically all sectors. The boom in the production and exports in the primary sector-natural resources and agriculture still needs to be complemented by related value-added products. There is ample scope and interest on joining efforts with foreign firms bringing know-how and expertise. On infrastructure, as mentioned countries such as Peru, Brazil, Chile, Mexico, Colombia have an aggressive pipeline of infrastructure projects to be awarded as concessions or PPPs. In summary, the current situation and the positive prospects for sustainable growth, makes that Region quite attractive for targeted exports and investments.



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