

ANNUAL REPORT | 2006 **OBSERVATORY**

OF INTERNATIONAL MARKETS

Future Trends and New Realities

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In a world undergoing an ever increasing rate of transformation, knowledge, anticipation, rapid detection of changes in trends, in other words, new opportunities in international markets, in economic sectors, in new technologies and all within a political, legal and social framework worldwide are essential requirements for any competitive economy.

With the final aim of forging a research tool envisaged to perform the following tasks; plans for businesses, definition of proactive policies, collaboration to make Catalonia a pioneer in its ability to anticipate change, and consequently to improve our response to the challenges which the process of internationalisation has thrown up, in September of 2005, COPCA created the Observatory for International Markets or (OIM), based primarily on its international network present in 50 markets worldwide.

The creation of this Observatory of International Markets was one of the initiatives laid down in the application of the "Plan for internationalisation of the Catalan Economy 2005-2008", run by COPCA – a priority initiative of the "Strategic Accord for internationalisation, quality employment and competitiveness of the Catalan economy," signed by The Catalan Government and representatives of its society on 16th February 2005.

This tool, which was created with a clear vocation to provide a service to the business community and especially to SMEs, has been designed within the framework of a project of collaboration, which allows the participation of a variety of experts, analysts, think-tanks and institutions, all with a common brief; the analysis of the future.

Although this may be a project in its infancy, risky, complex and ambitious, we are convinced that the analysis of the future can be an important tool in aiding regional development, and in this context, three basic reasons stand out; 1) the analysis of the future is integrative, 2) it is accompanied by a focus on society, 3) it can act as a neutral agent, helping to bring a variety of different players together. From the angle of enterprise, we consider that **sound management of a business requires the management of its futu-**

re, and nowadays management of the future means knowledge management.

Despite the fact we live under a permanent bombardment of information, it is precisely for this reason that we should avoid imitating what there is too much of – snapshots of the present that in reality - once they have been taken begin to represent the past. The Observatory must therefore act as a distillery to collect relevant knowledge, which improves the decision making of business. Therefore the question is not to add more information, but to join and share analytical and anticipative abilities.

It is precisely for the reason that because the work of the Observatory is the analysis of the future, a complex and imprecise field with few precedents in our country, where there are still no courses to study this or any specific training, that the Observatory has set in motion a whole series of activities.

One of the first activities of the Observatory was **to set up a worldwide research team for global analysis**, of a multidisciplinary profile, whose main job is that of **building an intelligent information network**, which will help analyse the way global, applied and sectorial trends are moving for the future. The information will be gathered in a database, which will be permanently updated. In the initial phase, a research methodology will be applied in order to gather the relevant information from every item to carry out the necessary analyses applied to Catalonia's economic sectors, single subject reports and different cross-themes, according to the interest an analyst may have. All in all, the identification of change with the corresponding impact in the sectors of the economy also obliges the project to collaborate with international think-tanks and the undertaking of specific tasks.

The building of this intelligent information network required a back up tool in order to take advantage of all the potential for knowledge and capacity of the country at the same time, notably in the case of the universities, and the streamlining of their talents to the needs of enterprise. The instrument created with this aim in mind is that of a permanent forum with knowledge centres in Catalonia.

In order for the Observatory of International Markets to work well, it also needs to count on the existence of a transversal tool in which an important number of specialists and senior members of international and business organisations will take part and collaborate, with the aim of making a successful contribution the goals of the Observatory. This tool, called the "International Trends Forum" and to take place on an annual basis, was first held last November. All in all, some 74 analysts took part in the event, held in the framework of Internationalisation Week organised by COPCA, which made a major contribution to the definition of contents and areas of study for the brief of the Observatory of International Markets.

As a result of the advances made in this first annual forum of the Observatory, and indeed other processes, the research areas for global, market, sector and applied trends took shape, being structured into the following areas of study, which are now in progress.

Global trends

In this area, mention must be made of the work being done on future trends in world trade general and in particular the **mapping of markets** for Catalan SMEs, along with the **analysis of sectors with the best opportunities** in terms of trade and investment and work on **the future of the regulatory framework for international trade.** All the above make up part of the Collection of future studies of the OIM. Another project worthy of comment here is the design of the **Barometer of International relations**, to be set up in the framework of the agreement with the Chair of WTO/ Regional Integration at the Universitat de Barcelona. Last but not least, this area also includes **work on consumption, TICs and health,** which go to make up part of the OIM's Prospective and Strategy Papers, managed by the research unit itself.

Market trends

In this area it is worth commenting on is the work underway on different contexts within the evolution of **emerging markets**, mid and long term opportunities for Catalan SMEs on the **southern shore of the Mediterranean**, as well as the analysis of opportunities arising from the **forthcoming expansion of the EU:** Romania, Bulgaria and Croatia. These tasks also make up part of the Collection of Future Studies of the OIM.

Sector trends

Research sector trends have put the **fashion industry** in the US, Europe and Japan under the spotlight, along with the **food and beverage** industry in developed markets, the refined chemicals sector, **car components** in Eastern Europe and China, the **aeronautical sector**, and the **environmental sector**. All the aforementioned make up part of the Collection of Future Studies of the OIM. It is also important to include here the work on **quinary services**, included in the Future and Strategy Papers of the OIM, also part of the work of its research unit.

Applied trends

There are five major tasks underway in this category: **comparative analysis of Catalan exports**, the study of **export and competition applied at company and sector level**, the work on **confluence and/or divergence of international trends of foreign trade and FDI with Catalonia**, the international comparative study on **strategies**, **organisational structures and key factors for success**, analysis of new ways of internationalisation: **born global and reborn global companies**, as well as the **management of innovation in the processes of internationalisation**. All the above will contribute to start the collection of the book collection of the OIM.

Lastly, one of the tasks recently taken on by the Observatory is that of **the drafting of** an Annual Report on the trends of international markets. This presentation introduces the first such report of the series.

Both in Catalonia as well as at international level there will certainly be studies and reports on the evolution of the international economic environment and the new global framework of economic and business activity. At local, national and international levels, academic institutions, study services, enterprises and social players will all be

able to provide valuable analyses. In fact, a major part of the Observatory's work is to make available analytical, prospective and research, work which can provide operative terms of reference to be used in the successful processes of internationalisation of the Catalan economy, its enterprise and society.

The outstanding features, which we have aimed to bring to the fore in this first edition of the Annual Report of the Observatory of International Markets, are listed below:

A really global perspective, based on a set of new realities and "rules of the game" at international level to pass on possible strategies and action from Catalonia, and the exploitation - including the overcoming of risks —of these new environments. This is not just about studying the role or the insertion of Catalonia in the processes of globalisation and integration, but a broader way of making available to the productive, business and social fabric as a whole, the analysis of these new realities and proposals on the most appropriate formulas for suitability, anticipation or relocation.

Use of the most powerful analysis and research tools. Despite their complexity – or indeed it may just because of these – and even despite the perplexity that these new "global" realities bring up, new and rigorous analytical approaches are emerging as well as new and original research studies that should be drawn to the attention of the social and economic players in Catalonia. Overall an outstanding feature here ought to be the research for a workable balance between analytical and research formulae with components often of an essentially mid and long term nature on the one hand, and on the other, meeting the demands of the productive community to achieve a suitable location of new international business activities.

The Annual Report *Future Trends and New Realities*, which comprises of three sections, makes use of work undertaken both by the team of the Observatory of International markets and includes its own Research and Analysis Unit, as well as the first research studies started in the current year, 2006, in addition to the analyses that

go to make up the Annals of the OIM, which are managed from within the Framework of the Permanent Forum with knowledge centres.

The abridged English version includes the Executive Summary, which offers a comprehensive synopsis of the main ideas and lines of thought presented in the Annual Report.* It also includes 17 articles written by recognised experts in their respective fields, which look into some of the most relevant trends at a global level, as well as discussing the current situation and future challenges faced by the Catalan economy.

Although this translation does not represent the entire original work, it does however provide a detailed account of the three parts that go to make up the annual Report, therefore allowing readers to gain a more thorough understanding of its scope and dimensions.

The first part aims to present an overview of the main trends, which the world will experience in the coming years in the field of economics and business.

The second part runs through some of the major trends, which illustrate the new environment of international markets. On the one hand, there is analysis of trends in terms of preferences, demand and the needs of some societies experiencing important changes. Some of these changes have to do with demographic factors, such as ageing populations, migratory movements, the emergence of the *next generation* which is already adapted to a global environment, or the role of women (*womenomics*) with the all the consequences that these factors imply on distribution, change in the habits of international and intergenerational spending power. Another question that deserves special attention is that of the changes in innovation trends in general and with technology in particular, with resurgence of the role of creativity and entrepreneurial spirit. Lastly, this section looks at the foreseeable evolution of energy and environmental matters, which require special attention.

^{*} The index of the full version of the Annual Report can be consulted in the annex.

The third part of the report deals with real trends in a more specific economic-business context in areas interrelated with production, (location of activities, multinationalisation strategies, new formulas for international distribution etc), trade, (new realities and trends in international trade, (vertical specialisation, multi-lateral and regional rules of the game, the role of emerging economies, etc.). and finance, (international equilibria and disequilibria between savings and investment, implications and explanations of trade imbalances and financial flows, future scenarios, redistribution of economic power at international level, etc.), with corollaries on the problems of world governability, at the same time bringing debate to the competitive position of Catalonia and some of the implications on the trends and features analysed herein.

This work is the result of teamwork undertaken by the entire unit of the OIM, which has used the latest available sources of information of international renown along with the collaboration of recognised experts that have contributed their own applied vision. Given the complexity, the breadth of variables and disciplines in the study and their interconnectivity, all the material, which makes up this first report, despite its size, is by no means an exhaustive study into all fields. That said, this first Annual Report of the Observatory of International Markets has endeavoured ensure that the most relevant, recent and up to date approaches and trends are included.

Maite Ardèvol

Director of the Observatory of international Markets

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OBSERVATORY OF INTERNATIONAL MARKETS

Future Trends and New Realities

EXECUTIVE SUMMARY

The major aim of the Observatory of International Markets (OIM) is to provide information and knowledge on future trends in international markets in a systematic way and from it, analyse the implications for the process of internationalisation of Catalonia and of its enterprise.

This first report has drawn on work undertaken both by the team of the Observatory of International Markets, including studies from its very own Research and Analysis Unit, as well as from work carried out in the first phase of research of the OIM, set up this year, which looks into eleven issues selected as a result of the work and discussions held during the International Forum in November 2005 within the framework of Internationalisation Week run by COPCA. In addition, it also has also used material from other processes, such as the analyses, which have made up the Annals of the OIM, organised within the auspices of a permanent forum with knowledge centres.

This work is the result of an effort made by the entire team of the OIM unit, which has used the latest reliable and internationally recognised sources for the compilation and creation of this work, moreover relying on the collaboration of renowned experts that have furnished it with their own applied vision.

This executive summary has condensed the main ideas, approaches and thoughts given from a global angle and with a prospective aim in mind, providing a series of implications for Catalonia of the most relevant international trends.

Prospects for the World by 2020

Asianisaton of globalisation. Still an unipolar world. The US continues to be a major economic magnet, (but with some weak points). Europe will have lost economic influence. Latin America will have remained the same distance behind and Sub-Saharan Africa, despite major growth, will still be lagging behind the rest.

Globalisation has spread in recent years due to greater economic liberalisation and the worldwide information technology revolution. The coming fifteen years will see sustained economic growth, an increase in living standards and a greater and more extensive interdependence. Forecasts suggest the world economy by 2020 (in terms of GDP growth), will be 2/3^{rds} larger than in 2005. Free, crossborder movement of people will still be prone to political and social obstacles, despite the pressure exerted by the need for migrant labour.

In the future however, globalisation will no longer be so Western: the emergence of new players such as China or India has forced new rules to be applied. Economic power is undergoing redistribution. Many areas of the world will enjoy a hitherto unknown prosperity, and in terms of pure numbers, there will, for the first time, be an important middle-class element in low-income nations. Forecasts suggest annual growth of developing nations will outstrip that of the rich states. Countries such as India and China will carry on growing above the rate of Europe and Japan, weighed down by ageing workforces. The major flows of direct investment in China will represent a long-term commitment of international enterprise with this state, which, with its eventual entry into the WTO, will see its market open up. The growing integration of India into the world economy and its favourable demography guarantee its continued growth. Although much has been written on the importance of information technology in India, until now it has only made up a fraction of its GDP, not enough to become a force for growth in the long term. This will depend a lot on the modernisation of agriculture and industry there. Certain economies in Asia will attain levels similar to those of the US (Singapore, Hong Kong, Taiwan), but the remaining states will lag behind. The US will stand out among the developed economies.

As for US dollar spending power, the US market will continue to be much greater than others, but a major rise in consumption will be seen in emerging markets worldwide. Nevertheless, in China and India the process of approaching the standards of the more developed nations will still be a long time in coming. By 2020, China's GDP per capita will be close to that of Poland's. Growth of the US will be pulled on by productivity rises, in which information and communication technologies will be at the fore, along with the growth of the workforce. The other side of the coin is the EU where, despite immigration, it is envisaged that the working population will shrink in the next 15 years, unless its demographic trend is changed by further expansion.

Other emerging markets, although they may end up overtaking developed ones, - in terms of growth potential – will still be comparatively below those of Asian markets. This will be the case of states like Russia, Mexico or Brazil, followed on a lower level the Middle East, North Africa and Sub-Saharan Africa. In Latin America, GDP growth, although still positive, will not prove enough to shorten the gap with developed nations.

Realities confirmed in 2006

Since the beginning of the nineties, a clearly defined trend towards greater trade, financial and productive liberalisation in both the developed and emerging countries has become more accentuated and generalised, (IMF, April 2006). Nowadays, production, supply lines and sales to international markets are all within easier reach of enterprise than ever, but this also means that they are experiencing competition from other overseas companies.

Despite important ongoing controversy over the effects of globalisation, the trends in volume of output — and per capita GDP— as well as world trade have shown increases of late (IMF, April 2006).

This process of growth of the world economy is made up of a variety of differential components according to a given region or country. Recent data illustrate the already familiar pattern of growth being enjoyed by Eastern Asia and the Pacific rim, along with advances made by Southern Europe and strides made by other areas of the world, almost all returning growth rates above those of industrialised or more advanced nations, (WB, World Development Indicators 2006). Most up to date information also shows how emerging and developing states are getting close to half the world average GDP (UNCTAD, Trade and Development Report 2005).

In recent times trade deficits with international repercussions have been emerging, notably in the case of the US —with a trade deficit that reached 1.5% of world GDP in 2005— being the main example, but not the only, (in fact Spain is currently in second position of nations with trade deficits according to the 2006 ranking of the WDI of the World Bank and the Global Financial Security Report of the IMF). These changes in positions of savings/investment and creditor/debtor represent another side of the shift in economic power on a world scale, with all the potential strategic and political implications this presents.

The increased mobility of people, despite the associated migratory problems is also attaining a volume and therefore presenting important economic considerations. Recent data show the major role that FDI has achieved in financing emerging economies since the beginning of the nineties, as well as the sustained growth of remittances as a form of financing (WB, WDI, 2006).

Such advances in the spheres of commercial and financial transactions along with economic growth are not exempt from tension, uncertainties and difficulties. There are, on a worldwide scale, a number of well-known "geo-strategic" uncertainties, and their influence on the development of oil supply is just one way in which the world economy can be affected. Furthermore, on a regional scale there are problems, from coordinating EU policy to that of establishing a "climate for investment" in developing or emerging nations with problems of governance or "quality of institutions" in order to ensure the smooth running of business operations.

The World is not so flat and neither will it be "flat" in the next 15 years¹

Financial and commercial transactions are experiencing difficulties, some of which are due to real distance and transport costs – despite having experienced a downturn – whilst others, which are also important, stem from a wide variety of protectionist barrier or hurdles, ranging from: practices found in retail sales distribution to bureaucratic problems encountered in certain overseas dealings, legal problems and/or legal guarantees, (not forgetting corruption) as well as communication difficulties, (not just in terms of language, but also in people's differing "world views"), and last but not least, cultural and formal or informal problems that are not always easy to find out about "beforehand".

The main great forces, which will outline the prospects for the economy and business in the future

We are currently witnessing a redistribution of economic power with associated political implications of the highest order, and now especially relevant given that the present and future role of our society and of our country relies heavily on the position or ranking we are capable of achieving —at the level of enterprise, sector or society as a whole - within this new and complex global reality.

The fact that the "rules of the game" are also changing in many important ways also complicates things even further; with unprecedented advances in technology, new, more open rules for competition, capacity to move production resources, investments, (FDI and others), ability to relocate activities and services, migratory flows, greater interconnectivity between people, urban growth, mobility and communications, changes in consumer habits, new demands on the authorities to improve the productive base of nations, at the same time keeping political and social impacts to a minimum, etc.

The Technological revolution

At the end of the 20th century an important change took place in our society and economy, when a new technological paradigm was brought into it. The epicentre of this technological revolution is made up of information and communication technologies, biotechnology and nano-technology. The importance of these is based on the fact that they are convergent technologies and represent a new technological paradigm, which now affects all walks of life; social, economic, political and personal. Companies, which are able to efficiently manage these technologies, will achieve a major competitive edge in the future.

1. Thomas Friedman (2005) coined the expression "the world is flat".

Convergence between computers and networks has led to a hitherto unimaginable technological advance. Biotechnology has furnished us with the tools to fight disease, treat mental and physical disorders, and create new drugs and foodstuffs. Nano technology is an emerging sector, that despite being confined as of yet to a few select sectors, (Pharmaceuticals, medical and electronic equipment), is growing rapidly into other sectors.

Beyond technological change, far reaching changes in behaviours are taking place due to use of these technologies. Being globally connected or on-line, means having access to information in real time. Whether it be children, lorries or packages, technologies such as GPS, LBS and RFID permit us to either/both track, label or follow anything at any time and anywhere. This is just the start of a transformation towards a "real time" economy. At the level of enterprise, productivity is increasingly concentrated on brainwork and services. A vital part of economic activity today is focused on creating, handling and distributing information, and there is an important flow of economic activity moving away from the physical to the virtual world, to interactive networks. Furthermore, technology is being used in every activity along the value chain, and therefore technological change affects the competitive edge of a company, whether it is used in changing activities or making possible new adjustments in the value chain.

That said, ICTs equip enterprise with the ability to use the world itself as an operations base. Companies, processes supply chains and consumers are split up as companies expand into international markets. Work is spread out and information digitalised. As a result, effective collaboration becomes all the more important. The boundaries between different functions, organisations and even sectors will disappear finally. What we have to talk about now are global value chains.

In this area, well worth a mention is the contribution to this report of the lecturers Manuel Castells and Jordi Vilaseca, from the Universitat Oberta de Catalunya. Their article on **the implications for Catalonia concerning the tandem of Globalisation and ICTs** concludes with the observation that there are few firms using ICTs, which makes it difficult to reach critical mass, which has been seen in the US and other countries due to the multiplying effects and therefore increase in productivity. Insufficient use of these technologies, organisational weaknesses and a lack of quality human resources are just some of the main weak points of our model of economic growth. The reservoir of productivity and competitiveness, which the new technological and organisational system contains, can be glimpsed at least partially through companies in some determined sectors. This area is still a real challenge for the immediate future.

Connectivity mobility and urban growth

Although by no means a new trend, we wish to draw attention to urban growth, mobility and connectivity, which also have major social, economic and business repercussions, for example in terms of international growth of the environmental sector, or the growing debate on corporative social responsibility.

Urban areas worldwide are experiencing regular growth due to a rise in the population of cities, migration from the country, ecological deterioration of rural areas and a change in employment from agriculture to industry along with better services and public spending allocated preferentially to metropolitan areas.

Many cities have grown into meglopoli; metropolitan areas housing more than 10 million people. Most of these are situated in developing nations in Asia, Africa and Latin America. (In 2010 more than 50% of the world population will be urban. Each year 60 million people become city dwellers).

The current change and scale of urban growth greatly limits the ability of many local and national administrations to provide basic services to residents. With suitable development strategies and investment in infrastructures, urban areas in developing markets could turn into important and accessible markets. Nevertheless, without needed investment, cities may see themselves affected by the build up of toxic residues, crime, water pollution and disease, which threatens people's health, productivity and the base of natural resources.

Population mobility has shown a sharp rise in the last few decades. Mobility has permitted the division of work, faster growth of cities and trade and at a lower cost. The global movement of people broadens labour supply and consumer markets boost both formal and informal channels of knowledge and information. Growing mobility means a greater demand for energy and infrastructures.

Access to telecommunications and therefore Internet is growing fast, and although it is limited in many parts of the world, if present, it can unite markets and communities facilitating the exchange of knowledge and services. In the last five years the number of Internet users has doubled to reach 885 million, whereas just 10 years before only 20 million people were on-line. Today, all countries in the world are connected to Internet, while in 1993 there were just 60 and only 8 back in 1988.

Gravitational changes in the world population, ageing and migrations, the "next generation" and "womenomics"

In the last century **Asia** underlined its position as the dominant continent in demographic terms. This trend will continue, but a major expansion is predicted for **Africa**, which will place these **two continents as the demographic centres of gravity worldwide.** Further to this change in the relative distribution of world population, there will be a substantial overall growth in the population of the planet. **Europe for its part will see its demographic weight notably shrink**. However, **a rising trend is forecast for the US**. The main causes for these differences between each region are, in order of diminishing importance; the fact that Europe has a lower fertility rate, a higher life expectancy and a lower migrational flow dynamic.

In Catalonia, as for Spain, the fertility rate is below the European average. One way of compensating this effect and reducing the rate of dependence would be to continuously maintain the rate of immigration above that of the European average.

On this subject it is important to mention here the contribution of Professor Muriel Casals, of the Universitat Autònoma de Barcelona, to this report. Her article on challenges in the areas of immigration and productivity for Catalonia conclude that the Catalan economy has another chance to tap into the abundant labour coming in through immigration, without turning its back on the experience of the existing workforce. A correct training of the entire labour force will be an essential component to ensure a quality future for Catalonia.

The world is in the process of demographic change, which is leading us towards unprecedented ageing of the population. Migratory flows forecast from developing nations to developed ones can mitigate, but not solve the problem of an ageing population. The number of over 60s will triple, reaching the figure of 1.9 billion. In Asia in the year 2000 there were 322 million people over the age of 60. By 2025 it is estimated there will be 705 million, meaning this segment of the population, which now accounts for 9% of the total population of Asia, will then represent 15% of the total. In developed countries the current 20% of over 60s will, by 2050, represent some 32% of the total.

In developed nations, the impact of demographic change and ageing population could prove to be considerable. This is why a reduction in the rise of per capita GDP and a low capacity for savings and investment is forecast for the region.

In developing nations, the impact of growth will vary depending on the region, being greater in Africa and the Middle East than in other regions.

Also worth a special mention at this juncture is the contribution to this report of Max Halvarsson, from the Institute of Future Studies with his article on ageing of the population, which takes an unorthodox tack with respect to majority opinion on the repercussions of this trend. He criticises the beliefs of many economists, who state that an ageing population will have adverse effects on per capita production growth. However the abovementioned author states that; **it is questionable whether older workers are really less productive.** At the same time, a major part of the potential profit and effectiveness of the global economy depends on intellectual capital, and it can be adduced that older workers can take advantage of the growing demand for knowledge labour, given that their principal edge is intellect and experience.

Although it is indeed true that the ageing of the population will be high up on the agenda of many economic and social policies, what cannot be forgotten is the **vital importance of the next** *generation* in terms of development and reducing poverty. This is especially true for **developing nations**, where the youth element, (between 12 - 24) has grown to 1.3 billion, which amounts to 86,7% of the world's youth.

The next generation is creating a higher demand for new services and public facilities to satisfy the demands of youth and teenagers, especially in terms of education – both secondary and tertiary – as well as in healthcare.

In an increasingly globalised world there are two areas where youth will play a leading role: in international migration and in the movement of ideas and information through usage of global communications media and information and communications technologies.

It has already been stated that an ageing population represents a serious problem for the economy of many states, notably in the cases of Europe and Japan. A rise in working population could help mitigate part of this demographic malaise and increase the tendency of the economy to grow in the long term. The solution may also be that of encouraging a rise in the rate of women joining the labour market, in other words, to call on *womenomics*. Indeed, the reality is that worldwide, the female workforce is making ground. Whereas in 1990 some 67% of women between 20 – 54 were involved in economic activity, it is estimated that by 2010, some 70% will be involved. Recently it has been pointed out that the gap of one third in per capita GDP between the 15 state EU and the US could be down to a lower involvement in the labour market, mostly down to the lower rate of female involvement.

Womenomics is also on the rise in Eastern Asia. Moreover, women have played a major role in the Asia export success story (given that between 60 - 80% of the export workforce is female).

It is also known that there is a clear correlation between equality of the sexes and per capita GDP, therefore implying that inequality can hold back growth in the long term. It is also proven that it is the younger women that are leading the way towards a change in trends to a greater "female use" of the internet and technology in general. Some sources indicate that the youth segment (16-24), together with young professional women and mothers are at the vanguard of this change.

According to these self same sources we could even be looking at female domination of Internet as early as next year; the so-called *women's webnomics*.

Work worldwide

Forecasts on demographic trends and the evolution of economic activity lead us to suggest there will be **a fall in the rate of the growth of labour on a worldwide scale in the next 15 years.** Growth will be concentrated in Asian developing nations. India alone is expected to make up 30% of the net world rise with the creation of 140 million jobs. The gradual deceleration in the growth of work will be a global phenomenon, although real work growth indices will vary markedly from one region to another.

In terms of changes in regional/sector involvement in work, here necessary to mention that labour intensive jobs in developed countries will continue to migrate to emerging economies. Most net increases in jobs in the EU and the US will be in the service sector, especially those of high added value, such as education, healthcare and professional and business services. In the US the new information and communications technologies, biotechnology and pharmaceutical sectors will be the driving forces behind new job creation.

The effects of globalisation will continue to cause great changes in terms of capital and labour. China's entry onto the world economic stage along with India and the East European states has practically doubled labour supply. This has led to pressure to reduce salaries favouring returns on capital outlay. That said, overall gross nominal salaries expressed in US dollars are expected to double worldwide on average between 2005 – 2020. This figure does cover up a considerable interregional variation. Strong growth of productivity and the increase in real exchange rates will shore up a growth rate much higher than that to be enjoyed by salary rates (in US dollars) in many emerging markets, notably Asia and Eastern Europe. An example of this is to be found in China where average salaries are forecast to rise by a factor of 4.5 between 2005 – 2020, compared to India, where forecasts suggest salaries will triple over the same period.

In Latin America, the trend is the opposite. In fact it is expected that the gap between salaries in developed nations and Latin America will grow between now and 2020. As an example, the average salary in Brazil is double that of China and India today, but according to the "most probable scenario", even before 2020 it will have dropped to some 30% below the average Chinese salaries.

Qualified workers will need to learn new skills. Interpersonal relations, management, creativity and personal skills will be crucial in order to develop a sustainable competitive edge in the next 15 years. On the other hand, transformations in working conditions produced by the interaction of new technologies and new patterns of organisation will lead to greater psychological tension in the workplace. To this we have to add; a higher work rate, multitasking in the same work place, more responsibilities, a greater number of quality checks etc. In the future companies will make it a priority to hang on to their human assets, as the relative cost of this capital will continue to grow and the outstanding talents will demand better conditions, if companies are to keep them in their jobs.

Realities of work worldwide confirmed in 2006

In recent years the job situation worldwide has not improved in line with growth. At the same time, a downturn in demand for labour has led to **a growth in the informal sector** in some developing regions.

Major growth in unemployment has been recorded in Latin America and the Caribbean. Non EU Central and Eastern Europe along with the CEI states experienced a rise in jobless figures too. In developed nations and the EU, unemployment has dropped in the last two years, whilst North Africa and the Middle East still register the highest unemployment figures worldwide, followed by Sub-Saharan Africa, whose major barrier to growth and development is the large number of poor labourers it has.

Worldwide unemployment affects youth more than adults. Furthermore, youths are three times more likely to lose their jobs than adults. Young people work intermittently in temporary jobs, part time and short term employment, which explains why youth employment is more vulnerable and engenders risks of social exclusion.

Regions with a greater proportion of youth among the population of working age (South Asia, the Middle East, North and Sub-Saharan Africa) are those that are worst off. The future of young people in these regions will depend on economic growth and the type of work—number of jobs and quality of work—this growth is to produce. In the industrialised economies the problem is less acute, (due to demographic change); nevertheless, evidence points to the fact that if specific measures are not taken; youth unemployment will not go down by itself.

In 2015, 660 millions youths will be looking for work (nothing similar to a phenomena on this scale will ever have been witnessed). Work opportunities will have to grow considerably, especially in Sub-Saharan Africa, (where there will be 30 million more young people by this time) and in South Asia (21 million more), if this segment is to stay in their own countries of origin without losing hope or being without work.

Changes in consumer markets

Consumption will change and expand fast and nearly a billion new consumers will enter the global market within the decade as a consequence of economic growth in emerging markets. In ten years, consumption in emerging economies will have grown from 4 to 9 trillion US dollars, with buying power not far below that of western economies.

Population growth in developing countries will lead to the creation of large, youth-dominated markets. On the other hand, longevity in industrial nations will open up new consumer segments. Emerging markets, especially China and India, will offer high growth opportunities. In 2020 China will be on level terms with the US, the world's main consumer market. In terms of equal spending power, many key segments in China will equal or even overtake the US. Today, 12 million Chinese households have an income of over 7,500 US dollars. This figure is set to rise to 80 million by 2020.

Although China could have a middle class of around 40% of its population by 2020, (double the current figure), it will continue below that of the US with 60%. Per capita income of the middle class will also remain firmly below that of Western middle classes.

The breadth of the middle class in India is due, to a lesser extent, (but nevertheless making up an important ratio for an emerging economy), to growth in information and technology services, which are forecast to employ some 9 million in the next five years, nearly triple that of current levels. It is foreseen that both factors; namely the number of middle income earners, as well as their level income are set to rise quickly, although comparatively these levels will remain below averages in the US and other developed economies.

In the most developed markets the scenarios are radically different: moving towards a new social logic

In the most developed markets, the situation is vastly different: sales will be hard to increase as these are mature markets and consumers are already heavily in debt. Competition from low cost markets will become more acute and rise at the same time too.

Nevertheless, there will be new growth segments, such as those springing from demographic changes, and these will be seen as an opportunity, in the same way as that of the ageing population, which could provide openings for products with a greater profit margin, due to a higher level of sophistication. The growth of ethnic sub-populations as a consequence of immigration or above average birth rates also opens the door to new opportunities for expansion. Therefore consumption in developed markets is moving towards a new social logic.

Worth mentioning here are consumer trends in the most developed markets as observed by some international research centres as having a different social logic to that of the industrial ones, and can be referred to as the society of emotions or experimentation,² based on:

- A speeding up of change due to the information society and other factors that ensure ideas are distributed far quicker and which in turn spark off other new ideas.
- The fact that in the economies of rich countries, immaterial consumption is growing much faster that that of material consumption, because the material part is either totally saturated or amply covered.
- Technological development, which means that almost everything can be made automatically.
- The rise in the importance of emotionally based purchase choices.

In this social logic, consumers that know a product is guaranteed to work need other criteria to follow in the selection process. Just as consumption takes time, and time is a valuable asset, consumers take the easy route: that of following feelings and emotions, which are related to the story the product tells. There is nothing new in this phenomenon. What is new however, is the importance these stories has taken on, as we now live in a society where consumers, rather than products are in short supply and in the marketplace, the story that sells best is the one that strikes an emotional chord, meaning that the tangible product becomes a purely transitional object.

It is also necessary to point out the existence of a new social logic based on creativity and innovation just starting up, but which is gradually expanding³ and which springs from the need for greater personal growth. It is the ICTs that have given voice to this greater form of self-expression and provide more space for creation and innovation.

As technology advances, we can expect more automated machines to take up more roles in the service sector. Recent technological developments are being currently focused on freeing people from mundane tasks. Moreover, markets in developing nations are entering the era of industrialisation and labour in the West is increasingly moving away and transforming. Therefore, the West has to tend towards being more creative and innovative. Companies can no longer compete with mass production and routine jobs and furthermore, natural resources are no longer as valuable as ideas that can be patented.

The next change in the West will be that of a transformation in the service sector into creative activities or those related to innovation; work will be increasingly related to ideas, product development or cultural products.

- **2.** The so-called *Dream Society*, Rolf Jensen, CIFS.
- **3.** the logic of the *Creative Man*, CIFS, 2005.

Technology will allow mass production of products, but at the same time personalised by the client, therefore permitting the consumer to influence the product type. Modern production systems are much more versatile and it is increasingly cheaper to individualise a product. The result is that in the future companies will not produce material goods, but focus on developing digital information that their automated production requires. An article, which expresses this angle concisely, is that of Josep Aguilà, of IOR Consulting on the growth of the quinary sector.

At present, most existential and relational needs have been covered, but needs for growth are still relatively uncatered for. And both industrial logic as well as that of the *Dream Society* take into account passive consumers of mass produced goods. These do not provide an avenue for the individual to create, innovate or personalise the goods they consume. There is a wide range of opportunities to practice self-realisation through the individual experiences of the *Dream Society*, though opportunities to probe one's own limits and actively contribute to a large enterprise are few and far between. Therefore, the need for personal growth is still unanswered. The following two forms of **technological and social advances sow a fertile base for creativity and innovation**:

- **Technology frees time and energy,** and increasingly accounts for the time spent by tedious work at home and in the workplace.
- Our multicultural society of today provides more inspirational resources than the former monocultural one.

The three logics —the industrial, the emotional and that of creativity and innovation – coexist and in fact it is just on the cusp between the three where most business opportunities arise.

How can the products of industrial logic relate to those of this new social logic? One possibility, that is already becoming a reality, is the development of *prosumer* products (a term coined from joining the words producer and consumer), and applied to situations where the consumer is involved in the production process of consumer goods with an aim of creating personalised products, something which requires a certain degree of flexibility in the process of manufacturing, something which can be supplied by the ICTs.

As pointed out above, consumption acquires a new and integral meaning with this emotional dimension, which involves a change in its context. The ability to understand is important when creating products with meaning and entrepreneurial success. The following trends reflect what is called emotional consumption in a variety of ways.

The consumer of the future is a searcher, a worker, an artist and the **motivational priorities and emotional rewards on each side** – **in work and in one's personal life** – **are becoming very important**. It is becoming clear that a new segment is coming into being, that of the **yeppies** (**Young Experimenting Perfection Seekers**), who, as opposed to the yuppies, whose aim in life was to amass material goods, is to collect as many experiences as possible. **In terms of food there is a renewal of the need for ritual, liturgy and tradition.** Traceability is important in every way when preparing and enjoying a meal, which takes in every aspect; flavours, aromas, textures the origin of ingredients the cultural significance and above all the emotional value. Meals with a meaning is the buzzword of the new **slow food** movement.

Growing concerns for global warming have meant that eco-conscious consumption has risen. **Ecological and fair trade supply** is the first building block of creating a new and sustainable world based on ecological principals and standards. The first signs are already visible. Finally, in a society characterised by over consumption, the luxury of having **an empty space to relax the mind in is a concept**

close to the heart of those who wish to experiment. The need for having a space to meditate and think in our own homes is one, which is being expressed more and more.

Special mention must be reserved for a phenomenon termed *homing*, one of the most prevalent consumer trends of the moment. We are now home-making like never before. But away from home too, when the boundaries between public and private space are crumbling, here we are creating private spaces too. This trend is related to a common dream of what is good and what is right in life, of what there is not enough of in daily routines, that are too busy and over based on results. This is about having the energy to do what you like, to enjoy free time, being with the family, revive traditions and going back to our roots and the homestead is the embodiment of these values. Our home has now become our greatest status symbol. This is somewhat paradoxical considering that globalisation surrounds us more than ever, precisely because the home as private refuge has become a rare commodity, and is thus idealised. We look after house and home, whilst globalisation exerts the contrary centripetal force. This is essentially because the boundaries between private and public life have disappeared, because even when at home, people still remain on-line.

On the other hand *homing* also takes place away from home, and is now a major consumer trend. Products and styles, which emanate calm, closeness, roots, anchorage and privacy, are flavour of the month, enjoying success. Consumers are demanding products and experiences that are close to them, that remind them of good times and that provide them with a feeling of having roots.

Globalisation, consumption and territory; increasingly linked in the future

As globalisation, along with new information and communications technologies, gain pace, territory is becoming much more important when it comes to information exchange, when defining oneself and when selling and distributing products. Territory is the way we experience the world that most affects us. All globalisation has done is to create new means of connecting these territories. Globalisation does not only make it possible, but also necessary to relate a product to a local territory. Globalisation and anchorage in a given territory are by no means opposing trends; both of them will be stronger in the future, because they support each other mutually.

Consumers want products associated to a territory. Every day we consume meanings and these meanings are undergoing constant change. For consumers this has two consequences; firstly, being able to live in a globalised world without having to be always changing or reinventing yourself. In other words this means products, which are associated with specific territories, symbolise two things: authenticity and stability in a changing world. The second is the need of consumers in a globalised, changing world to find somewhere they can be different, have some special signals which can also last, and which at the same time which can be deciphered globally. Therefore products associated with a territory can also bring success to enterprise because they satisfy two major consumer needs.

The transformation of services; innovation, creativity, the boom in leisure for consumers

As mentioned above, this new social logic, which indicates transformation of the service sector towards creative activities or those associated with innovation involves a clear exponent in new trends, related to leisure. A greater increase in the complexity of lifestyles of those in modern society has led to the search for forms

of leisure and entertainment which are capable of restoring physical and mental energies, so that individuals can better deal with the pressures of every day life. The rise in the cult of the body beautiful, aesthetics and healthy living are all fashioning trends for the future. This is why in coming years there will be a demand for a wider range of choices, and moreover, we will be prepared to travel to get it, indulging in **wellness tourism**.

There is a growth in the trend of healthcare and wellness tourism. Within the sector itself an important rise is being noted in ecotourism, wellness centres, spas and cultural and leisure activities etc. Over the last few decades, industrialised societies have been taking part in what has been coined "the culture consumption boom" and which is directly linked to an increase in leisure time. Growth areas do not only include visits to museums and exhibitions, but also visiting wine routes, and business tourism.

Convergence between leisure, R&R and wellness has given rise to specialised welfare resorts and **types of tourism**, **which combine leisure and medicine**. Some markets are coming to the fore in this area, such as: Singapore, Thailand or India. **There is also a trend developing to combine trips with cosmetic surgery**. Such is the case of the Brazilian and Argentinian markets.

The outstanding features mentioned here can contribute to help trace some of the characteristics of the consumer of the future. This consumer is also partial to indulging in the realms of escapism, entering in fantasy worlds to enjoy fictitious or virtual experiences, not only based on technological foundations, but also places to enjoy with all their senses and in the company of their families, in other words "a la carte paradises" which are capable of transporting consumers to different places and ages.

Virtual and theme parks represent precisely the embodiment of this type of need and **far from losing force, they appear to be gaining ground in terms of what they can offer in recreational terms.** As an illustration, it is forecast that Asia will become the sector's major growth region due to the expected increase in people with enough spending power, aimed at rising from 236 million in 2004 to 276 million by 2009, some 21%. **Europe, the Middle East and Africa** are also expected to see a rise in personal wealth of 12% in the same period.

As the number of those working with ICT grows, the initial, instrumental and more technological aspect of the phenomenon has grown into that of an increasingly user and content centred tool, which people employ to consume and generate material. Users focus their connection to the web for leisure purposes rather than for exclusive use as an information search tool. A type of "digital lifestyle" has evolved where at the same time uses and habits of this digital consumption are complemented with convergence between applications and technological gadgets. We are now faced with a new situation, which requires a rethink of business models, based on technologies to manage and control digital content, (as it is costly to produce and cheap to copy). This entire transformation has revolved mostly around internet and will take on more force in the coming years as wireless broadband continues to expand. As more homes connect, the digital business will continue to grow, offering more services, and where users themselves will call the tune on demanding greater efficiency and speed and the need for a fulfilment that more closely meets their desires.

The e-generation is the dominant segment in the downloading and creation of digital material. This group comprises of under-18s who have grown up with and made ICTs and internet part of their daily life both for leisure as well as learning.

In recent years a deep and complex debate has opened up on the subject of copyright. The digital environment has lead to creation and transfer of copies free of charge meaning large and globalised companies have seen profits dwindle in a short time, whilst the **protection of digital material itself has become a growth market**, with a current turnover of 928 million US dollars, estimated to hit 2 billion by 2009.

Another relevant aspect of change in leisure is that of homes of the future, which we will expect to contribute to improving our quality of life. They will be expected to save energy, respect the environment and be totally connected, (so we can telework and enjoy a greater consumption of leisure services). These aims will be achieved by greater use of domotics, ICTs and active and passive bioclimatics.

The house itself will be a place of convergent technology, where family members can interact, not only physically but virtually. The complexity and breadth of needs to be covered will lead to the creation of multidisciplinary groups in the building sector which will be responsible for mastering a great deal of specialities and which will have to maintain an integral logic, so that they can be in charge of attending to a whole varieties of matters in turnkey projects.

Restrictions: energy and natural resources

The restrictions inherent to all the above considerations are well known by now; energy resources, (with oil at the fore) and natural resources, (bioclimatic change, health, agriculture, water and raw materials), and therefore some further thought on this area is required.

Rapid development of emerging economies is leading to increased demand for oil worldwide, which has produced a considerable rise in consumption. The major consumer in this category is China whose world consumption is due to rise from 7.6% to 11%. Although OECD nations are still the major consumers, their relative consumption quota will drop significantly over the next 15 years. It is generally agreed that it is increasingly hard to find new hydrocarbon reserves, although possible to find new smaller fields in The Middle East and Latin America. The rise in oil prices will make it profitable to invest more resources in pumping further supplies from existing fields.

In terms of energy issues, worth mentioning here is the significant contribution made to this report by Mariano Marzo. This summary wishes to highlight two points from this work: What can we expect in the coming years from oil prices? A new cycle where the current trend will be followed by a sudden fall, or a break with former trends? The author is inclined to think that there are motives to believe there will be a break with past trends. The second point concerns that of the future of oil supply, hanging by a thread, which does not in any case rely on the matter of the availability of oil in the ground, but more on how to mobilise this resource in time in an increasingly turbulent world of financial, technological and humans needs.

Despite the above concerns, a rapid growth in alternative energy sources is envisaged due to technological breakthroughs, new environmental legislation and the rise in oil prices. Nevertheless, some sources suggest that these energies will only be supplying a fraction of global energy demand by 2020.

Faced with this situation, natural gas is fast becoming a priority energy choice for many developed nations, (such as Japan and the EU), as it is environmentally less aggressive and offers a greater stability as an energy source. It is therefore one type of energy that is destined to gain most ground in the sector in coming years.

That said, the debate on nuclear energy as an alternative to fossil fuels is picking up pace again. Several states are now developing ambitious nuclear energy programs, such as the US, China, Brazil, Finland, the United Kingdom and France. China has the most important program of all, aiming to build 32 power stations in the next 15 years. On the other hand, countries like Belgium, Germany, Sweden and the Netherlands have all opted to gradually close down their nuclear facilities.

The world market situation has led the major world economies, (EU, US and Japan) to define an economic policy which is strictly interlinked and with a number of common identifying features, such as; guaranteeing energy safeguards, economic efficiency and environmental protection. At this juncture a brief mention should be given to bioclimatic change, which has major social and economic implications-despite being highly disputed – which are due to both natural and human factors, the latter of which have had a major influence in change over recent years, as pointed out by a number of reports. Nevertheless, the repercussions for health, ecosystems, agriculture and water could be devastating. On a regional scale there is a large variation in the effects of change, as many areas lack funds to adapt and are therefore highly vulnerable – such as Africa and Asia, (although less exposed than Africa) or Latin America – in contrast to others which have more resources to make them less prone, (North America and Europe for instance).

Further thought is given here to the geopolitical repercussions, which will have a marked effect on international trade. Following the acts of 9-11, the current occupation of Iraq and situation with Iran, oil has once again been thrown into the spotlight on worldwide. These current predicaments are causing diplomatic tensions and increasing uncertainties concerning guarantees of supply.

It is therefore predictable that the diplomatic, strategic and commercial attention of some Asian countries will change with the growing need to import energy resources and this will lead to a strengthening of economic and political links between Asian nations and the main oil producers of The Middle East and Africa. These links may pose new challenges to the West. For example they may find it increasingly difficult to arbitrate in regional conflicts and encounter greater rivalry when trying to find stable supply sources. On the other hand, the constant rise in US oil imports is a decisive factor in the world oil market, responsible for tensions on an international scale.

Iran has the second largest reserves of oil in the world – after Saudi Arabia – and is also in the same position with respect to natural gas reserves – only topped by Russia.

Another area worth attention is that related to the limit that natural resources exert and therefore the geopolitical consequences of this combined, for example with the growth of China and the price of raw materials, in addition to the current geopolitical balance in Latin America.

The commodities market has seen the price of raw materials grow noticeably in recent years. This upward movement is due largely to the demand caused by the growth of the Asian economies, and most notably China and India.

Worldwide, China has become the world's largest importer of coal and a variety of metals, such as iron, steel and copper. The growth of China, which in recent decades has been both high and sustained, has been embodied by an avid demand for raw materials that has had an effect on areas where Beijing had previously limited influence, namely in Africa and Latin America. China now controls 4% of Sudanese oil, and is currently investing 2 billion dollars in Nigeria's "black gold". Along the same lines, it has increased trade with Venezuela, Chile, Peru and The Mercosur, which supply it with raw materials and receive both investment and manufactured goods in return.

China has been making a continuous series of investments connected with the extraction and mining of natural resources. Latin America is one such source of these and due to the demand from China, states which produce these raw materials – many among them from Latin America – will find themselves with bigger margins, if in the future prices of these raw materials maintain their constant rise in price levels.

Although the Chinese are investing all round the globe, some studies have pinpointed Latin America as a vital area for investments designed to ensure China's supply of raw materials. Historically, Latin America has been the largest supplier of raw materials to the US, and due to the size of the gap in development between the two blocks, this situation led to an excessive reliance of Latin American states on American economic growth. As China continues to increase its demand for raw materials, the price of these will continue to grow and will bring about a change in the destination and origin of trade and investment flows at the same time raising US production costs, the effects of which are yet to be clearly seen, although they will no doubt have a significant impact.

New economic and business realities Productive globalisation

In recent decades multinational or transnational companies have acquired an undisputed relevance within the international economy, which has only become more acute in the last few years. The gradual removal of boundaries to the ambitions and mobility of the capital factor, (both financial and physical), as well as advances in transportation and communications, has led to new formulas for organising production, facilitating the coordination between a range of factors – in different countries -producing therefore "multinationalisation" of productive activity of a growing number of companies. These companies have it easier than ever before to "organise production on a global scale" or to apply global sharing production. In this process, also called vertical specialisation, each country ends up receiving a process of the production process, with intermediate inputs and/or outputs—in addition to basic inputs and finished goods. This increases the figures for international trade transactions and contributes a growing importance to trade in intermediate inputs —apart from traditional trade in finished goods which to a large extent can lead to so called intrafirm trade or "transactions among subsidiaries of the same group or group of companies" —which, according to some calculations may represent nearly a third of international trade flows, (indeed some recent estimates put intrafirm trade in The US at close to 50%).

This phenomenon has wide ranging consequences that have a decisive effect on the territorial distribution of production activities or "international work". In itself it increases inter-relations and interdependences within the world economy. It is also considered to play a major part in the being able to influence public authorities in so much as that there a few companies capable of "changing jurisdiction" with greater ease than ever. Such arguments demonstrate the need to deal integrally with commercial, investment and organisational aspects of enterprise in a simpler way than before in order to "multinationalise" their activities. This in turn has given rise to the "separation of the value chain", "disintegration of production" or "vertical specialisation", thereby converting the *supply chain* in an essential tool of company strategy.

A growing volume of FDI is one of the main ways of articulating the world economy, distributing the "value chain" around the world. In the last 15 years of the 20th century, while real GDP growth worldwide grew on average by 2.5% per year, exports rose by 5.6% and FDI at 17.7%.

In the last few years this trend has, if anything, become more pronounced. UNC-TAD estimates that in 2005 the figure for FDI volumes to be have reached the figure of nearly 897 billion dollars, a marked increase of nearly 30% on the previous year. Developed nations received close to 70% of this FDI largely in the form of mergers and acquisitions or M&As, brought about by the high level of cash flowing in the world economy and the restructuring of enterprise worldwide.

Under the heading of factor mobility we must also include migrations and the provision of services by foreign companies or professionals which have not only taken on a significant economic role, but which are also the object of socio-political debate. The common key point of these "concerns" is that of the new competition in labour services —carried out at a distance thanks to ICTs in the case of outsourcing of services and practiced in situ in the case of migrant labour— by companies, professionals and individual nationals that can offer the same or similar services.

Basic features of world trade

As concerns the basic features of international trade, historically the trend has been one of constant increases in the volume of world trade, multiplying by a factor of 25 between 1950 – 2005, whilst world GDP has risen over the same period "only" 7.5 times. That said, in recent years the repeated phenomenon of the "fragmentation or break up of the value chain" has led to a rise in trade levels due to "intrafirm" and "intra company group" exchanges (even though they may be legally different entities), in addition to trade from intermediate inputs, thus all going to make up a "world trade network" which supplies the entire planet with a set of increasingly deeper interrelationships.

A very clear feature of trade today is the growing importance of emerging economies, most noticeably in East Asia and the Pacific. In the last thirty years Asia has doubled its share of world exports from 14% to nearly 27%, with China and the other Asian "tigers and dragons" in the foreground. It should also be noted that Europe has held its own, largely due to the reshaping of the EU's home market.

Also of note is the growing weight of the so-called intermediate products—intermediate inputs or semi finished goods — in international trade. The "disintegration of production", which means that each part of the production process takes place in different countries —in subsidiaries of multinationals, via outsourcing in legally different companies— which send components reciprocally, is taking on a high profile.

Trade in services is also playing a major role, making up some 25% of all trading in goods. Apart from traditional categories such as "transport" and "travel" (for tourism or on business), more and more services of a wide variety are joining this sector, (such as financial, insurance, consulting, business services, professional services, ICT related services etc.) Outsourcing or offshoring of services is closely followed —and sometimes with concern. A quantitative and especially qualitative exchange in trade in services is probably one of the most foreseeable features for the future of trade and the world economy.

In this context it is therefore interesting to preview some of the preliminary results from one of the *research and strategy articles* being prepared for the OIM on **the confluence and/or divergence of Catalonia** with respect to the above mentioned trends in international trade and investment, in terms of sectors and end markets. To take one example, China has now become the faster growing importer, but Japan is the economy which has seen the fastest growth in Catalan imports over the last few years, bringing it close to levels registered by China. As for the CEI

Block, Catalan exports have remained stable; meanwhile internationally there has been a considerable rise in imports to the area. The opposite is true for Turkey. A glance at the analysis by sectors shows Catalan farm products recording substantial growth, against the grain of a downward international trend. In terms of business services—banking, communications and IT—, while international figures betray a major growth in imports, no rise in exports from Catalonia has been recorded, which is highly logical when taking into account the composition of its enterprise structure.

Regional trade agreements have multiplied in recent times; this has led to problems of "coexistence" with the theoretically multilateral rules of the WTO system, leading to repercussions such as the complications experienced in the regulations governing market origins.

The role of international trade as avenue to growth

One of the most traditional debates in the world economy is that of the role of international trade as an avenue towards progress. Studies tend to come out in favour of a positive appraisal of this. Although statistical correlation does not necessarily imply causality, strong empirical evidence does exist to suggest gains in efficiency and dynamic benefits—associated with greater competition, more entrepreneurial drive, more creativity, etc.— which spring from the challenge of international competition, despite acknowledgement of the existence of socio-political problems and of redistribution and/or equity that come associated with it.

Recent explanations behind the workings of trade have led to looking into the subject by examining individual enterprises or production plants and within each industry provide a number of explanations behind some of the empirical truths that; within each industry only a certain, (sometimes a small) number of companies actually export, that the companies exporting tend to be larger and with higher productivity, and once they reach a certain size, companies consider "fragmenting production" via FDI or international outsourcing, or indeed using new, non-sequential models of internationalisation. Such is the case of the "born globals" or "reborn globals" as reported in the article produced by ESADE for the Observatory of International Markets. These developments make up the so-called new theory of international trade or explanations behind trade based on the heterogeneous nature of companies in the same sector. The potential for explaining the degree of these new approaches is making a marked contribution to communicating this information. Its basic formulations highlight the positive effects for firms with a higher productivity, whose competitiveness is multiplied, to the chagrin of less efficient firms, which may soon find themselves in trouble or may even disappear. Once again, internationalisation or globalisation may have the effect of a type of "natural selection" which favours the most efficient, and by the same token, jeopardises the survival of other firms.

The leading role of heterogeneousness in internationally focused production has spawned several additional analyses and interpretations with respect to cost and technology differences. Some approaches underline the role of *self-selection* of the most efficient companies in terms of international markets. Others draw out the role of *learning by exporting* referring to improvements that the demands and competition from international markets can bring about. Existing literature also discusses the role of a suitable selection of human capital and the role of not (easily) copied strategic-specific assets. The part innovation plays is decisive, as taken in the broadest meaning of the word, putting special emphasis on the response —or anticipation— on the preferences, likes and needs of consumers or indeed other companies. A common thread in the second chapter of the report

has been that of aiming to help identify the parameters and trends of some of these changes that are generating new requirements from goods and services.

Intensive and extensive margins, quality of export growth

The difference between "the intensive margin" (rise in exports attributed to the same companies and/or activities) and "the extensive margin" (involvement of new companies or sectors in the process) is of special interest.

According to Hummels-Klenow, nearly two thirds of exports come from the "extensive margin". This underlines the importance of the fact that a country attains a critical mass of companies and activities that take up the challenge of international markets and indirectly, due to actions and public policy to generate the most suitable incentive and thereby overcome problems derived from an SME based enterprise structure, often lacking enough of their own resources to be able to shoulder the costs of breaking into international markets. European countries of a similar size to Catalonia tend to have a sizeable extensive margin (in addition to that of export quality). One study made within the set of tasks of the Observatory of International Markets started by the ESCI —from which an article has been presented — backs the assertion of the importance of this extensive margin for Catalonia according to initial results.

Another fundamental point of discussion is the role of quality. The ability of a country to export high quality goods will allow it to maintain high salaries and other substantial incomes, in the face of increasingly stiff competition. Quality is a differential factor and gives "shelter" from the pressures of competition arising from globalisation, with its role clearly brought out in the empirical studies made.

The role of export type —and of the entrepreneurs that create them— within the dynamics of growth, has been appraised in the analysis of Hausmann-Hwang-Rodrik. Therein they present an index of the "level of productivity associated with the direct of specialisation" of a country, which is a weighted average, which measures the level of the income/productivity ratio associated with a basket of exports from the country. Therefore, what this index measures is the "quality" of exports as a whole. When comparing the correlation of this indicator with the (per capita GDP) income of different countries, the ability of the basket of exports to exert an influence on the economic growth of a given country then comes out. So, countries that make a strategic gamble on opting for putting a greater quality going into their exports show a notable ability to "drag" up their economic growth.

The competitive position of Catalonia

Special attention should be given to the application of a number of analyses to measure the Catalan economy's competitive position. On the one hand analysis is made of problems stemming from inflation differentials based on a dual performance of sectors exposed to international competition and those non-tradeds "sheltered" from it. This problem is especially important in regions with more export involvement and presence of traded sectors, mainly those of manufacturing. In Catalonia both scenarios are present, that is why problems of inflation differentials and subsequent problems of competition are so well known. On the other hand, a major part of the impact of inflation on sectors has to do with its correlation regarding factors like the degree of "technological intensity" (measured by the proportion of R+D activity) or that of the skill level of workers (measured by the average length time in education). One study examined showed trends in prices are "stricter"(less inflationist) in sectors using higher technology levels and more skilled labour. This result may be surprising to those with a vision of glo-

balisation limited to competition over costs in low skill and/or technology sectors, but the pattern of China's exports has already been seen to have overcome this phase. Now the main explanation of the result is probably more closely linked to improvements in productivity—via innovation, technology, suitability of processes, etc.—, which are especially important in these sectors.

Another consideration that comes out here is that of the role of productivity and innovation as a way to "reconcile" salaries and quality employment with a price evolution that maintains competitiveness, as mentioned above. Altogether, these considerations infer the importance of improving parameters such as inflation differentials based on the duality of inflation between sectors with different export and competitive challenges on one side, and on the other, the evolution of productivity in a broad sense, including technology and skills, but also a quality response to new trends and preferences of a fast changing society.

International financial problems

International financial problems form the main thread of the discussions on the causes and consequences of external imbalances due to differences between savings and investment, the current economic role and future. The selected explanations have been chosen to highlight the major ingredients for financial and economic growth from foreseeable scenarios to the role of intangible assets in the way these balances themselves are conceived.

These current concerns mirror deep-seated structural aspects that will determine the future of the world economy. These range from the changes in the cycle of oil prices, mentioned earlier—as a series of factors of growing demand and not only to geopolitically linked supply problems —, and the fact that as the world prepares itself to make tough decisions on the future of energy supply. As for "external disequilibria" —also mentioned at the beginning of this summary, along with the growth of net external positions of assets and liabilities—it is obvious that changes are taking place in saving and investment patterns worldwide, (where it is demonstrated on the whole that poor countries are financing rich ones). It remains to be seen these changes will prove sustainable, although in any case it will be necessary to analyse the implications of these alternative movements in the coming years.

The analysis of international financial mechanisms, equilibria and disequilibria does not just have an overall interpretation, but is also decisive for outlining the future of economic and business capabilities linked to being in possession of and/or tapping into savings and investment currents. To a large extent, the distribution of economic power in the mid-term crucially relies on the following factors: savings, ability to finance investment and invest with suitable productivity. Financial mechanisms are in part symptoms, but also co-adjuvant causes behind the redistribution of underlying wealth and power of globalisation.

It should be mentioned that so-called financial globalisation is demonstrating great ease and ability to finance major, historically important divergences. This all goes to highlight the importance of being able to rely on an efficient finance system —nationally and internationally— to channels savings or attain finance from the investment capabilities of domestic enterprise and activities.

Financial set-ups based on the concept of "shared risk" between two partners have been seen to gain ground of late, both via FDI as well as through share portfolio investment. This has caused a drop in other vehicles such as debt bonds or bank loans in which —insolvency aside— upon which the vagaries of economies receiving resources had a basic impact, with the rights favouring the side part

which provide the savings, at least being legally protected. This lopsidedness led to the obligation to make difficult adjustments in the past—according to some, more difficult than should have been necessary and/or desirable to make—, and that is why shared risk via direct participation in the results of activities is seen as a more solid formula nowadays.

The wide-ranging opinions on the possible or foreseeable evolution of disequilibria take a many sided view of this complex situation and possible future developments. In fact, each of the explanations selected brings out a strategic aspect that, in combination, may provide an understanding of these current interrelated complex issues. Indeed the IMF has stressed its concern about disequilibria, criticising "benign" interpretations and proposing "joint action" or "shared responsibility"—terms used rather than *coordination*— which implies "fiscal consolidation" (reduction of the US budget deficit), more flexibility to change in parts of Asia and ever pending structural reforms in The EU and Japan. In any case, the messages of the inexorable ingredients of adjustment are clear enough for the IMF. On the one hand there is a need to recover investment on a worldwide scale, not to reduce savings, and on the other to "reorientate" demand towards countries with a surplus and reducing it for countries with a deficit.

Many specialists have insisted that historically a debt the size of that accumulated by the US has no precedents in terms of sustainability, and despite acknowledging the "singularities" of the situation —from a rise in production of the US to the role of the ICTs, and to reasons for keeping dollars, etc.— an adjustment may "not be far off" and empirical studies are suggesting a fall in GDP of between 2 and 4%.

Among those interpretations considered more "benign" is that often referred to as the *Bretton Woods II*, which states the existence of a strategic complement of interests between the US and nations like China and other emerging states whose main problem is that of finishing the transition from agricultural to modern market economies. In the case of China this transition has already meant the migration of hundreds of millions of peasants from the country to the city, but movements on a similar scale are still needed if the country as a whole is to achieve that modernisation. According to the authors, this transition requires an environment of financial stability and greater export capacity to expand employment, attained by stability of the local currency —renminbi or yuan in the case of China— with respect to the dollar and a certain undervaluing of the local currency in order to ensure competitiveness, similar to what Europe and Japan achieved in the fifties. The other effect would be the build up of dollar reserves by the Chinese authorities and therefore provide easy financing of US foreign debt.

Another "benign" interpretation infers making major adjustments to official figures, thereby including "intangibles", or the so-called dark matter. Hausmann and Sturzenneger explain that the greater profitability of US overseas investments as opposed to those made in the country from abroad is a basic result of greater know how —technology, organisation, management, etc.— as expressed and exploited through FDI. This discussion also brings out the role of "income subequilibriums" in the balance of payments as a whole. The paper also examines the performance of foreign investment that may be a factor of deficit, such as in the case of technology "dependence" and other foreign investments, but which can also be made into a source to compensate trade deficits, such as in the case of the United states, (to a moderate degree according to official data and to a decisive degree according a dark matter interpretation of the situation). For states like Spain, such forms of investment could prove to be important. Indeed, as a consequence of the ease of financing trade disequilibria via the entry of capital, there are a number of national companies—some of which are based in Catalonia or which have executive decisions taken there.

All in all, the review of some of these interpretations of foreign disequilibria —from the most alarmists to the most "benign"— allows us to introduce important elements to analyse a complex international financial situation, which is both a consequence and co-adjuvant cause of the important changes in economic power and its political repercussions. Controls on savings to finance investment is very important and this control is "split" between the ownership given by the fact of being origin and the solvency provided by the fact of being the definitive receiver of these invested resources. But in the future, just as in the past, this mutual complement of interests between savers and investors may contain elements of adjustment and discontinuity, whose deep-seated causes have been partially covered in the interpretations presented herein.

New realities and governance

There are a number of deep-seated consequences of all these new realities for governance. Worldwide, international organisations—from the United Nations to the IMF— are considering institutional reforms to gear them up to the new realities and to reflect the new distribution of world economic and political power. In terms of trade, emerging nations have now formed a G-20 that has become an interlocutor with developed nations, while those less developed nations look for ways of being heard. On a national scale, issues of governance are associated with the "quality of institutions" in terms of legal guarantees, the fight against corruption and the supplying of incentive mechanisms and conflict solving — including those that lead to being able to adapt to global realities — which are most suitable in terms of efficiency and equity.

10 key trends

1. Acceleration of globalisation with new central actors

The globalisation process is irreversible. However the appearance of new actors, such as China or India, will introduce new rules of the game, making the process more plural and less "Western-oriented". Economic power is redistributed. Markets that are not part of the OECD shall increase their share in revenue growth between today and 2020 much more than those in the OECD. Nevertheless, many express the opinion that the differences between rich and poor will increase. Predictably the markets with the best future perspectives, including fastest growth, will be in Asia. Today the total GNP of Asia (excluding Japan) is 13% of world GNP, while that of Western Europe is over 30%. In the next 15 years these figures will converge. The USA will continue to be the big world economic power.

2. Profile of the world's inhabitant in 2030: urban and born in a developing country

The 21st century will be the "century of cities", as Kofi Annan, General Secretary of the United Nations, has declared. The number of *mega-cities* in Asia, Africa and Latin America shall increase and create new emerging-country urban lifestyles. The fast growth of these cities will present new challenges such as in relation to waste management, water provision and transport. The world population in 2030 will be 8,200 million people, with a net population increase of 1,720 million. Just Asia and Sub-Saharan Africa shall account for 75% of this growth. The proportion of the population between 0 and 19 years will fall progressively but, on the other hand, there will be a substantial rise in the proportion of adults. Increased life expectancy and slower population growth will mean that we will have to be in the job market for longer. These facts will lead to a growth in migratory movement, both from south-south and south-north.

3. Growing pressure on natural resources

The acceleration of economic growth in the world —especially in the emerging economies- will put added pressure on the use of natural resources. It is forecast that oil consumption shall rise by 50% over the next two decades. If radical changes are not made, the energy demand will not fall and the impact on climate change may worsen. Scarcity of water is going to become one of the main restrictions to growth in many countries. In order to preserve the atmosphere, one of our most scarce natural resources, it will be necessary to make substantial changes to human behaviour and values. It will also be necessary to produce innovations in technology —especially to generate and trade in alternative energies-, regulations and the use of resources to create a model that can combine economic growth with the conservation of our natural capital.

4. More attention to the role and behaviour of large corporations

As companies become more global and pressure increases on natural resources, society will become more distrustful of the activity of the large corporations and place it under greater scrutiny. The large number of financial, social and environmental scandals in recent years has created greater social awareness, which has led to significant regulatory and political reforms being carried out.

The social responsibility of businesses will be an increasingly strategic factor for companies and have a large impact on their profitability. The large corporations will never be loved but they might be appreciated. Business leaders will need to increase and be able to better prove companies' contribution to social well-being.

5. Personalisation conjugated with greater plurality of values and lifestyles

Price and quality will continue to be important, but consumers in developed markets shall especially value the personalisation of good and services. There will be a greater presence of the "prosumer" (producer + consumer) -a trend in which the consumer plays an ever-increasing role in product design and creation. One of the best-known examples is the project by a brand of sports shoes which allows the client to design on the internet their own sport shoe through choosing a certain combination of models, colours and materials. Thus products and services will be personalised and the leading firms shall design modular products and, in the case of industry, assemble products in response to the specific demands of consumers. This tendency may go even further as a result of an already-possible process called "personalised manufacturing", which consists of making domestic and household products in de-centralised production facilities. It may seem like science fiction but one of the most emblematic companies in the computers sector has already started developing a 3-dimensional printer. So tomorrow the nearby photocopy shop may become our "shop-factory".

6. Polarisation of markets

Markets are determined by the segment of the population that the company wishes to attract. Demographic trends will lead to a greater polarisation between the highest and lowest earning segments. The number of consumers willing to acquire high-range products is growing. The personalisation and expansion of the product to a "world of experiences" will be key in this segment. Additionally, companies will encounter 1,000 million new consumers who will integrate into the global market. From now until 2015, the emerging economies' spending capacity will increase from 4 trillion dollars to over 9 trillion dollars –practically the same amount as Europe's current spending capacity. In both cases, gathering information from the client on the use of the product or service and knowledge of their needs and desires become critical tasks for the company.

7. New methods of organising and interacting: being connected or atomised

The technological revolution still has not reached its peak. New developments in biotechnology, laser technology and nano-technology will take us into a new sphere of products and services. But beyond the technological changes, there will be big changes in behaviour as a result of the use of such technology. As well as being connected globally, we will also have access to information in real time. Whether this is to locate adults, children, lorries or packages, technologies such as GPS (Global Positioning System), LBS (Location Based Services) and RFID (Radio Frequency IDentification) will enable us to monitor anything, at any time and place. This is the beginning of a shift to a "real-time" economy. On the other hand, information and communication technologies will allow companies to use the world as an operations base. Companies, processes, supply lines and consumers shall fragment as companies expand in international markets, labour is dispersed and information is digitalised. As a result effective collaboration will be very important. The boundaries between different functions, organisations and even sectors will disappear. We will be talking about global value chains.

8. Abundance of everything? There will be a lack of big ideas and talent

With improved standards of living we will have a massive offer of goods and products. However good ideas and talent will be valued more and more. Companies will need more creative and innovative people that can bring good ideas into the organisation. At present the big investment funds do no more than buy companies instead of directing them towards new ideas. The present shift to knowledge-intensive industries shows the increasing importance of having talented and well-trained people. Nevertheless, the gradual integration of job markets provides access to new sources of talent from developing countries. For many governments and companies, strategies regarding labour and talent recruitment and retention become as important as global supply strategies and production. In short, human capital will be, once again, one of the most valuable assets of the 21st century.

9. Innovation, yes, but with business sense

Innovative ideas are important but of little value is they are not backed by a good business model –this was one of the main lessons of the "dot.com" era. Business models will be increasingly complex due to fragmentation of production lines, a more service-based orientation, and participation by a greater number of agents and companies. Thus innovations will take the form of new business models and ways of collaborating, leading, managing and the processing of knowledge. To sum up, creativity will have to manifest itself on two levels: by putting on the market pioneering and innovative products; and by pioneering business models that make new ideas profitable and give them added value.

10. Ubiquity of information and knowledge as a basic element of competitiveness

A company's capacity to understand the key trends that will shape the future of technology, social and consumer behaviour and markets shall determine its survival. According to McKinsey, greater accessibility to information and obtaining knowledge will be the aspect that will have most importance to a company's profitability. And it will be the second most important factor –after innovation in products, services and business models- that contributes to accelerate the rhythms of change in the global business space. New spaces and models of creation, access, distribution and knowledge ownership are emerging. We can see the growth of open and free systems to develop knowledge in communities and produce innovations. A new challenge for companies will be to learn to benefit from this new knowledge universe in order to strengthen their competitiveness.

In relation to this latter tendency we would like to highlight the opinion of Juha Kaskinen from the *Finland Future Research Centre*, who believes that this prospective must be applied more widely as a tool for regional development.

ANNUAL REPORT | 2006

OBSERVATORY OF INTERNATIONAL MARKETS

Future Trends and New Realities

ANNEX

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Juha Kaskinen Marko Ahvenainen Ben Rodehäuser Pascal Van Doren Gervaise Ropars

Finland Future Research Centre

Foresight as a Tool for European Regions

Today we can consider that, as much for territories as for enterprises, the competitive edge no longer lies solely in having information at one's disposal — given its abundance — but in the capacity to use, process, interpret and assimilate it.

Along with those of other bodies, the studies of the Directorate-General for Enterprises of the European Commission and more especially those of the high level Working Party on the Intangible Economy had highlighted the inadequacy of traditional economic concepts in the field of finance and management, to deal with intangible values.

The main objective of this recommendation relies on the investigation into the development of new rationales, new forms of competitiveness as regards the Regions of Knowedge.

Examination in depth the meaning of regional competitiveness and its measure as a series of new issues is casting doubt on current indicators;

Update the principles, instruments and indicators guided by the measure of the intangible factors henceforth permeating all the domains of territorial development (talents, expertise, know-how, cognitive heritage, notoriety, ethics, sustainable development, and so on); in association with other territories or international based approaches like the SOFI (State of the Future Index), deepen the concept of competitiveness in the Knowledge Society;

Identification of the real indicators for measuring the development growing from a specialists' affair

towards a more sustainable development and citizenbased approach.

Foresight

In our opinion the SPIDER project has shown that foresight has the potential to function as a kind of meta tool for regional development in the future. There are three main reasons why we think this is the case. First of all, foresight is integrative. Foresight processes are flexible, and may comprise the gathering of information, the evaluation of competitiveness, reflection on possible steps and the development of possible plans of account within one framework. Secondly, foresight comes with a social approach – something which is definitely needed in today's intellectual landscape, taking into account the shift towards the emergent perspective on knowledge regions highlighted above. Thirdly, foresight may function as a neutral networking agent, bringing together a variety of actors and resolving tension by generating an orientation towards the future. For these three reasons, we think that foresight should be applied more widely in regional development. In doing so, the following three issues deserve special attention:

1.) Combine foresight with other approaches! There are many instruments for regional policy making and there are more being developed each year. This diversification has to be managed by complementary efforts of integration. We think that it is worth exploring the integration of foresight techniques with other approaches used in regional development. An ins-

tance of a method akin in spirit to foresight is the strategic planning approach used in the context of the IBA project in the Ruhr region (part of which belongs to the Regierungsbezirk Düsseldorf) in the 90s. An example of a project that tries to push the integration of foresight with other methods is the RegStrat project funded by the European Union aiming at a combination of technology forecasting, foresight and benchmarking techniques and other tools in a regional context.

2.) Employ foresight continously and with a clear purpose in mind. Foresight techniques are really useful only when applied in a longer-lasting, continous process. Foresight practice should not be a one-shot event, but a part of on-going, systematic change processes within regions. At the same time, there should be a clear purpose to any foresight exercise. We think that it is crucially important that foresight is tightly linked to decision-making processes within regions and to decision regions have to take today.

3.) Use foresight to map and possibly change regional mindsets. One feature of knowledge regions is that regional mindsets become all the more important. This is further explained above/ below in our recommendation on cultural change. We think that foresight techniques can be helpful in this context: Use foresight to map and understand dominant mindsets within the regions! And employ foresight techniques in a social process of changing mindsets where this seems necessary.

Cultural change and behavior

SPIDER¹ project has been focused on a new understanding of regional competitiveness within Knowledge Society. Nevertheless, the study stressed the importance to go further and to analyze how far all categories of regional actors, individuals, companies, administrations, universities, decision makers, etc are concerned by the Knowledge Society and concretely adapt their day-to-day and long term behaviours according to the new issues raised at a macro-level (the regional level in the case of SPIDER).

1. The basic aim of SPI-DER, Increasing regional competitiveness through futures research methods, was to increase potential of intrinsic regional strengths. The project focused on exploring future potentials of emerging fields of economic activity in the three regions which participate in the project. The regions to be evaluated and compared were selected among three EU countries: Southwest Finland (Finland), Wallonia (Belgium) and Regierungsbezirk Düsseldorf (Germany).

Globalisation, technological change and the competitiveness of business: The road to network companies

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Universitat Oberta de Catalunya

In this day and age, economic activity is conditioned by two major forces for change; globalisation and the explosion of information and communication technologies (ICTs) in the area of production. Increasing growth of markets in space and time is altering production, distribution, exchange and consumption habits of the Catalan economy, which is entering into a process of transition, moving towards a global and knowledge based economy, which uses ICTs as its basic infrastructure.

Without doubt, one of the economic agents, which has undergone most transformations in recent years, is enterprise itself. These transformations can be summed up from the starting point of an established concept, the Network Company. The network company is a strategic, organisational and productive model, which is based on a networked decentralisation of its total business units. This model, taking over from the established organisation models of the eighties and based on a network of companies, represents a transformation in the way a company works, as it moves towards a variable altered set up, in which work is done over a network and in which the integrated value chain is significantly watered down. However, this new company model would not be possible, were it not for the existence of a powerful technology. The ICTs make e-business a reality, i.e. they are the necessary condition behind creating a company in another way; via IT networks and telecommunications. Thus, e-business does not only take in the whole range of productive activities that have sprung up from the productive use of the ICTs or so-called dotcoms, but traditional productive activities also add value in this case,

albeit with different levels of intensity, via use of digital technology.

Thus, it is important to point out that the relationship between the major changes in demand and supply arising from a growth in world economic integration and the use of digital technology as a way of adding value to a product to which an ever increasing dose of technology is required, is by no means a one-way affair. Globalisation would not make sense without its mainstay; the ICTs. That said, it is also impossible to understand the use business makes of digital technologies without considering its main goals: increased production, greater market share and basically optimisation of profit margins. Hence, this is a relationship far more complex than that of a simple one-way flow. It can therefore be stateed that the transformations in business activity linked to use of ICTs can not be separated either from the most deep-seated processes with which they overlap nor from the structure and the shape of business activity.

It is precisely within this sphere of interactions where we have to locate the process of change being experienced by Catalan enterprise today. As observed by several works of international research, there is no direct link between investment and use of digital technology and company results, especially in terms of productivity and competitiveness. In fact, in recent times a major academic controversy has arisen concerning the involvement that investment in technology was to have on a company results. In effect, if the outstanding amount of investment and the efforts to

improve business use of ICTs are not matched by greater efficiency and market share, then why waste resources and disorganise the management? Or, on the other hand, if we are now in a period of major links between investment and use of digital technology and the productivity and competitiveness of our enterprise, is it then necessary to put our weight firmly behind adapting human resources and company organisation to the demands of new technologies and globalisation.

All in all, it seems we have arrived at a consensus, given the fact that the conditions for organisation and production in enterprise and the training and skills level of human resources complement technological investment in terms of a company's productivity and competitiveness. For example, it is known that the ICTs base their working on networked communication, therefore, those companies which do not orientate their activities towards flexibility and decentralisation, both in terms of their internal activities as well as relationships with their nearest external agents (suppliers, clients and distributors), will find it difficult to benefit from all the advantages digitalisation processes offer. Likewise, those companies, which fail to adapt their organisational structure to one designed on training and working autonomy, will also not fully gain the competitive edge that investment and use of digital media could provide them with. Indeed, an information communication technology, when applied and organised inflexibly and vertically may just lead to greater bureaucratic and linear trends in the internal workings of a company.

What is the situation of Catalan enterprise relative to the new scenario created by the tandem of globalisation-ICT? As illustrated by some results of the research project on the network company in Catalonia in (http://www.uoc.edu/in3/pic/cat/pic21.html), the structure of the productive fabric of the Catalan economy, characterised by the decisive importance of small and micro enterprise, tempers the process of transition towards the global knowledge economy. Results of the research bring out a positive correlation between investment in digital technology and productivity of capital goods, just as a positive relationship is observed between investment in technology and quality of work. Thus, the productivity of capital and work is linked via clear synergic effects, illustrated by a sizeable importance in investment and use of ICTs. The work also bears out that although there may be no direct relationship between greater size and productivity, nevertheless, as a result of a growing relative importance of flexibility as an instrument of competition, it was seen that growth rates in productivity are markedly higher in smaller firms. Also of note is that smaller firms perceive neither the need nor have adequate resources to invest and productively incorporate ICTs into their operations.

To sum up, although ICTs have begun to play an important role in several indices of productivity growth, under use of such technologies, weak organisational faculties and lack of human capital come through as the main weak points of our economic growth model. Given that 88% of Catalan companies are micro-enterprises with less than 5 workers and with a participation of over 50% of all private gross added value, it can be appreciated that the reservoir of productivity and competitiveness within the new technological and organisational system as characterised by the network company, is only observed to a limited extent in a small part of enterprise and in certain sectors. This represents a major challenge for the near future.

The Environmental Market Sector

Rafael Sagarduy

IDOM

According to an OECD report, in 2003 the environmental market worldwide achieved a turnover of 330 billion Euros. Sector growth forecasts are put at 30% until 2010, with special interest focused on the Chinese markets with 12% annual growth, along with South East Asia with 14%, Latin America and Eastern Europe with 10% annual rates. More locally, turnover from the Spanish environmental market is, according to ICEX figures, generating a turnover of 10.82 billion Euros per year, some 3.2% of the world total.

Classification of the environmental market is usually made by taking into account the classic environmental cornerstones such as; water, waste, air, energy and the natural world. One major feature is that in less developed markets, activities related to the water cycle are of a greater importance relatively speaking, whilst with increasing development, pollution prevention and waste management are taking on a greater role.

Within the European market, the main body of business is focused on the former EU 15 states, (led by Germany, France and The UK) in terms of investment in this area. Indeed, the volume of business generated in this sector by the new 10 member states is a mere 5% of the existing total.

Origin of the environmental market

When it comes to finding out what the "driving force" behind the creation of an economic activity associated with solving environmental problems is, almost all players in the field agree, (i.e. both producers and even those not directly producing, such as household economies), that environmental attitudes are fashioned by

the laws brought into force.

As enforceable environmental laws are introduced, along with a will of governmental forces to make sure they are complied with, then economic agents are able to take an active stance to generate an environmentally based activity.

Environmental supply is spread over a series of sectors, with differing levels of impact, in function of the demand of three types of agents present in the market: public administrations – both as a force of order, as well as a client for goods and services, (to the point they can be considered the real "driving force" behind the entire environmental market) and productive and non productive agents, who are those demanding production.

- It is thus clear that the creation and development of a variety of environmental laws is related to some specific factors, among which the following are given:
- Existence of real pollution problems derived from productive activity undertaken in a given area, whether due to the intensity of the activity or the time over which it takes place.
- Social movements, which are well aware of environmental issues, with strong grassroots support within the local population.
- Availability of suitable technologies to solve environmental problems, at a reasonable cost, in line with economic limits of a determined area.
- Setting up of economic or fiscal subsidies and incentives to develop the market, especially in the beginning.

- Creation of monitoring and vigilance mechanisms, which work to ensure both checks and compliance with the evolution of problems.
- International pressure with an aim to achieving competition in equal conditions among different economies.

Future trends in the environmental sector:

Economic evolution is a variable that will determine future forecasts for the environmental market, which tend to be cyclic in nature, (audits, applications, R + D...), but not so much when it comes to providing services (water or SUW management), which in general do not recede in line with a decline in the economy, nor do they suffer directly from inflation. Hence in this respect we can consider this to be a stable market.

As for the geographical development of environmental markets, a distinction is made between:

- Mature markets: these share the environmental legal responsibility and have a type of market, (albeit mostly public and linked to the integral water cycle, waste management and natural world). Estimates suggest they may show moderate growth in coming years, once initial investment has been consolidated. This group includes the most advanced nations, such as the 15-state EU, North America, Japan, Australia, etc.

Thus, as a short term development forecast, commitment to sustainability leads to consideration of other priority sectors in which environmental goals have to be set: transport, industry, energy, and construction, both at primary and domestic level. Policies and directives for these sectors already provide a glimpse into commitments to integrate environmental and sustainability criteria. Likewise, newly created products which have sprung up as sub-sectors of the main vectors will be further developed, such as; waste reduction, water usage, landfill for tips, recycling, noise and odour reduction, optimisation of processes via use of Best Available Techniques, etc.

- Emerging markets: These are beginning to get involved with environmental issues. Two phases can be observed: firstly, that which is supply driven, (and which is closely linked to the investment phase) and a second, which focuses on development and spread of environmental markets. The growth potential of these markets relies on programs backed by entities such as The World Bank, IDB, EC, etc.

This group comprises of four main geographical blocks: the 10 new member states of the EU, along with Rumania, Bulgaria and Turkey, some Latin American States, China and India.

In the foreseeable future it is possible that these states will, in relation with European companies, be able to create their own operating space to put their own know how and experiments into practice at local level, most notably in areas such as the integrated water cycle and waste processing.

Workforce ageing and productivity

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complementarities and experience

Populations all over Europe are ageing at a rapid pace and in some of the EU25 countries the number of inhabitants have already started to decline. Low fertility rates in recent decades have led to smaller cohorts entering the labour market today, at the same time as the large post-WWII cohorts are starting to enter into retirement. The average exit age from the labour market today is around 61 years for men as well as for female, varying from around 56 years for Polish women to almost 63.5 for Irish men (Eurostat, figure for 2004). This fact, combined with the notion of a more and more prolonged education period, have led to a society where the years spent in the workforce has decreased substantially, and probably will continue to decrease in the years to come. Especially if employers continue their policy of buying older workers out of the workforce, giving incentives for early retirement and therefore reducing the decreasing workforce even further.

On the upside, the employment rate of workers, aged 55-64, in EU25 has increased quite rapidly in recent years from less that 36 % in the mid-90s to around 41 % in 2004 (Eurostat). But the cross-country variation is extensive, in Sweden almost 70 % of the older workers were employed in that year, while in Poland, only 26 % were still in employment and the rate has also been decreasing in recent years, contrary to the aggregate measure. For most European countries the trend is up and quite substantially so, this might of course reflect that people today do not have the luxury to retire as early as in the mid-90s, but on the other hand it might reflect an increased interest in what the older part of the labour force has to offer. If so, Europe might be on a path to realise the competitive edge that comes with experience and job-related smartness, a positive trend indeed and a way to keep our advantage in comparison to low-cost producers elsewhere. But the EU25 member states are still a

long way from the Icelandic employment rate, in 2004 more than 80 % of older workers in Iceland was employed, a figure showing the vast labour potential that actually exists among the older workers.

According to the view of many economists, an ageing population leads to negative consequences in terms of growth of output per capita. Both because a decreasing workforce ratio to the total population increases the ratio of consumers to producers and because that there might exist negative effects of an ageing on productivity, measured as output per worker. This second effect, however, can be highly debated and can also be expected to change over the coming decades, both due to decreasing ageism and due to the older-workers of the future having a much higher level of education than the elderly workforce of today. Therefore, it is questionable if older workers really are less productive, as so many people seem to believe, than the so called prime-aged individuals, the prime-age of tomorrow might instead be the persons you see as aged and are thinking of getting rid of today.

The competitiveness of older workers – stereotypes and misbelieves

I will try to give you the reasons why the most competitive companies of tomorrow might be the ones daring to keep their grey-haired employees on board. Sure, younger workers have fresh knowledge, they are flexible, their ability to adapt is believed to be superior, they demand less salary, they do not require as much healthcare, they can stay with your company for decades, and spending vast amounts of money on training them to achieve full productivity will pay of immensely. Well, and here is the downside to this story, fresh knowledge also means lack of experience, flexibility

implies mobility and restlessness, skiing/surfing/ diving/parachuting causes lots of work-impairing injuries among young individuals, adaptability comes with experience and work-related smartness achieved with age, lifetime employments are a thing of the ancient past even in Japan, and spending money on a restless spirit only makes it more attractable for competitors reaping the benefits of your investments.

Your greying employees, on the other hand, are probably seen more as a burden than as a competitive advantage, but in my opinion you are actually giving away the best advantage you got in comparison to the foreign low-cost producers of your fears. Your aging workforce can also be equipped with fresh knowledge, as long as you dare spending money on training them. Your greying employees have experience and job-related smartness (not provided fresh out of college) and are therefore adaptable as few others, healthcare costs are postponed with increasing life-expectancy and a 60 year-old of today (even less of tomorrow) are not nearly as fragile as his grandfather was at the same age, and older worker are less mobile giving you a much higher return on training spent on them. Of course, by now you probably think I am crazy telling you what to do with your company, after all, I am just a simple economist and not nearly a businessman of you calibre. Well, let me tell you this than, to keep your profitability you must be able to look ahead and seize opportunity as it comes along, keeping your ageing workers today might actually mean increased profits tomorrow.

An ageing workforce seems to raise questions about productivity and sustainability in the highly competitive and increasingly global economy of today, requiring rapid adaptability, creativity and innovation. At the same time, a substantial part of profit potential and effectiveness in the global economy depends on intellectual capital, and it can be argued that older workers should be able to take advantage of the growing demand for knowledge work, given that intellectual capacity and experience are their prime advantage. Unfortunately for older workers, negative stereotypes about their characteristics are influencing employers, leading them to take devastating decisions. Required abilities such as creativity, adaptability, innovativeness, and flexibility are usually associated with youth. Mistaken beliefs about that older workers are less useful in the modern workplace of today underlie much of the ageism in the labour markets.

This is of course obvious to most employers being able to see past the ageism corrupting the eye-sight of so many decision-makers, the intellectual capacity keeps building over the active part of a persons life-cycle,

retirement probably is the greatest cause of mental degeneration created by mankind. Leaving active life for many individuals is a shocking experience that they never recover from, after a long and productive career you are suddenly expected to stop contributing to society, more or less leaving individuals in a position where they must rebuild their personality completely.

Discrimination, stereotypes and false perceptions are the cause for devastating decisions, not for forwardlooking business practices. Therefore, attitudes have to change for employers to be able to see past the short-sighted practises of today, older workers are definitely the competitive advantage of the future and the managers that accept this notion first will be the ones leading competitive corporations tomorrow. Parttime and more flexible types of employment are definitely the practise of the future, giving older workers the possibility to more freely choose the amount of time they want and can spend working. A more flexible approach will most certainly be a good deal for all parts of the equations, leading to prolonged work-life, decreased health-related absence, increased productivity and motivation, and higher profitability.

A somewhat academic perspective

About the main issue of this paper, namely that of ageing and productivity, are older workers less productive (which employers in many cases seems to believe) or equally or even more productive, but maybe in another way (which is my point in this article). It is not an easy task to estimate the impact of workforce ageing and changing age composition on aggregate productivity. However, declining health might be a concern, especially in countries where the employers are hit with costs of absence from work. On the other hand, increased life expectancy has been accompanied by significant health improvements and a vast increase in job performance possibilities for older workers. An important aspect concerning the effects of ageing on productivity is to what degree workers ability to learn and re-learn decreases with age. Even if ageing generally does not reduce the ability to perform most tasks, a declining adaptive ability might have a tendency to lower productivity over time. There is, however, also the argument that a mature population implies a superior stock of human capital and experience, measured both as employment-specific acquired skills and general work-life experience.

In competitive markets, workers would receive a real wage that equals their marginal product, but the senio-

rity wage system does not live up to this standard. Therefore, older workers sometimes do not live up to the same marginal productivity as their younger colleagues, but the problem is not of older workers being less productive, but the present wage system giving employers the incorrect incentives. Most studies on age-productivity differences are based on cross-sectional evidence. A problem with this approach is that the samples do not takes into account that seniority leads to occupational changes, meaning that productive workers get promoted while inefficient workers are not. Employer-employee datasets have the same problem, since success may increase the number of new employees and lead to a younger age-structure, rather than a young age-structure causing firm success.

Lindh, Halvarsson and Malmberg (2005) describe that the productivity in a separate firm might, among other factors, depend on the composition of workers and not only on some simple aggregate measure of age. If, for example, the prime-aged workers are deemed the most productive and the learning-by-doing argument holds, then there might exist some kind of optimal mix of employees according to age. For instance, a certain share of prime-aged workers might have to be combined with certain shares of both young and older workers for a firm to achieve its potential productivity. A certain share of older workers might influence and enhance the ability to learn by both young and prime-aged workers.

Skirbekk (2003) point out that employers tend to doubt the ability of older workers to learn new skills, despite abundant evidence that these prejudices are unfounded. This in general leads to limited access to job-related training and therefore undermines the ability of older workers to remain productive as the work requirements change. The problem, apparently, is more one of incorrect beliefs than one of actual decline in the potential productivity of older worker, the problem is that employers seldom let them live up their potential.

Prskawetz and Fent (2004) show that the degree of substitutability between workers of different ages is a potentially important factor affecting aggregate labour productivity. The idea is that there is an optimum age mix of the workforce which depends on the degree of substitutability of workers and their relative productivity levels. An implication is that demographic change could move the actual age mix either closer to or further from the optimum mix and therefore affect aggregate labour productivity. The magnitude of this age distribution effect depends on how substitutable workers are by age for given relative productivity levels.

Macroeconomic models of population ageing have typically assumed that once workers of different ages are adjusted for their productivity differences they are infinitely substitutable, an unrealistic assumption from a microeconomic perspective. The assumption does not account for complementarities between workers of different ages, such as highly experienced workers with lower physical abilities interacting with young inexperienced workers with peak physical productivity and fresh academic knowledge. Underestimating the importance of the mentoring abilities of older workers can result in severe disadvantages for businesses not focusing on the importance of complementarities between different age groups.

As a businessman or businesswoman you might not care too much about the effects of an ageing population. As long as your business stays profitable you feel safe and as long as your employees are productive your company stays competitive. But competitiveness in the present globalized economy is in many cases due to creativity, maybe your main weapon in the small arsenal available to fight of low-cost competitors from other parts of the world. Creativity, of course, builds on innovative capacity, fresh knowledge, and experience. The first two ingredients you can more or less get directly out of college, and as we all know, with the present education system and the focus on the "knowledge society", freshly baked college-graduates are not that hard to find. Experience, on the other hand, is an ability build up through years of hard work and practical action and has no real substitute, at least not a young substitute. With pre-retirement plans and focus on higher education, European companies of today is getting rid of the one ability that you cannot get in developing market economies. Preretirement plans based on decisions made in order to earn more profit over the short term, might be eroding the base for long-run competitiveness.

Profit-making complementarities come from obtaining the right mix of workers of different ages for your company. Older workers provide experience and network contacts, among other things, prime-aged workers are the group combining most of the beneficially worker-characteristics but without excellence in any particular field, and young freshly-baked workers have up-to-date knowledge that can be incorporated in the operations of the company and thereby increase productivity. Implementation, however, requires job-related smartness, experience, team-spirit and other factors achieved by the workforce as time goes by to be successful, otherwise the trial-and-error process must start from the beginning every time an innovation are to be taken into use. If only inexperienced workers are

expected to manage this change, the learning process will become a valuable lesson hitting your profit margins. If you, on the other hand, have experienced coworkers to consult and to help manage the process then you will most likely have a less disruptive implementation of new practises and your company can run smoother and more profitable even in times of constant change.

References:

Lindh, T., Halvarsson, M., and Malmberg, B., "Productivity Consequences of Workforce Ageing – Stagnation or a Horndal Effect", Working Paper 2005:17, Institute for Futures Studies, Sweden, 2005.

Prskawetz, A. and Fent, T., "Workforce Ageing and Economic Productivity: The Role of Supply and Demand of Labour. An Application to Austria", Vienna Institute of Demography, Austrian Academy of Sciences, November 24, 2004.

Skirbekk, V., "Age and Individual Productivity: A Literature Survey", MPIDR Working Paper WP 2003-028, Max Planck Institute for Demographic Research, August 2003.

Immigration and productivity

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Since the beginning of its industrialisation, the Catalan economy has shown a clear vocation towards opening out into international markets. This vocation can be explained by a simple need.

As a small nation without a reasonable level of basic resources and raw materials essential for the running of its factories, it was obliged to import manufactured goods. Furthermore, if we look at the situation from the point of view of demand, the population of Catalonia represents a market, which is too small to absorb all goods being produced by local manufacturers. Therefore, it was necessary to sell abroad too. The possibility to import and export is thus developed as a necessary condition to ensure that the process of modernising industry, the application of better technology, that in a nutshell raised productivity, does not lead to the ghost of overproduction raising its ugly head.

Nevertheless, throughout the 19th century and until the final years of the 20th, the inclusion of a Catalan economy competing globally was truncated by Spanish protectionism and, except for a few short periods, technical advancement and hence growth in output was met with the fear of overproduction. It is often heard that it was the Catalan industrialists themselves that were most interested in protectionism, thus reserving the Spanish market for their goods, but from the viewpoint of good economic practices, protectionism should be seen more as a hindrance then a help. Although it is true Catalan fabrics were sold to Spanish buyers at above international market prices, thus implying a higher profit margin going to certain entrepreneurs, it is even clearer that if the Spanish market had been open to international trade, everyone would have won out; on the one hand, Spanish and Catalan buyers would have had more choice at better prices, and on the other Catalan entrepreneurs, faced

with competition, would have had to adjust prices and act with the due diligence they would have been obliged to in order to lower production costs.

The crux of the argument is that instead of being *the* manufacturer for Spain, Catalunya could have been *a* manufacturer for Europe, with the Catalan economy not losing valuable time into the bargain.

Despite these limitations, the Catalan economy, which was essentially Spain's manufacturing base, functioned as a rich and developed node within the state. That meant that during the 19th century there was marked migration towards the Catalan industrial cities. This flow, which has marked our demography and our lifestyle in a decidedly positive way, has also had its effect on the model of Catalan development, which from today's standpoint throws up a number of interesting considerations.

The arrival en masse of workers had the effect of creating an abundant, cheap and readily available labour market, which did not require enterprise to be too concerned about production levels. Cheap labour would offset the high production costs caused by having to import materials in the manufacturing process. This is how Catalan industry became used to labour-intensive working practices, given that it had practically limitless human resources, which meant that ever less intensive production practices were applied in terms of capital in comparison to European rivals. Catalonia was losing ground in the race for international competitiveness.

It must be mentioned that this modus operandi i.e. that people coming to Catalonia, wishing to work, would most probably find a job, and despite hardships would achieve a better life for their families, has proved to be socially efficient. The kernel of the argu-

ment, however, is based on the question: up to what point has the loss of *economic* efficiency derived from the combination of protectionism and wealth of cheap labour been more than offset by the *social* efficiency of a model that has in effect allowed a community to enjoy a good standard of living?

It is of vital importance to address such questions as these today, as we once again find ourselves in a similar set of circumstances, albeit with different proportions and historical context apart.

The Catalan economy now has another opportunity to take advantage of abundant cheap labour from the new wave of immigrants. The easy answer here for our economic system would be to follow the old way and expand our degree of specialisation in cheap labour intensive sectors.

This however, is a risky business from a social perspective, because it is by no means certain that the mechanisms of social integration for newcomers would work as well in the 21st century as they did in the last. To follow a well-trodden path is also perilous from an economic angle. If we rely on cheap labour to build at low cost and to sell tourist services undemanding buyers, then we will be squandering the capacity to innovate of both established and new entrepreneurs alike, wasting the chance to enhance the skills of both older and younger workers and therefore compromising the quality of the future scheme of how our country is run in the future.

We should be grateful for the opportunity offered by the arrival of new workers, which mean avoiding the loss of certain traditional activities in Catalonia, which still have a place in the old industrialised society, such as certain types of textile production (both in yarn as well as in garment manufacture), but it is also necessary to look into fitting new workers in alongside veterans in new ventures which require prior investment in capital goods. Such tasks will clearly require the effort of training the workforce.

Indeed the challenge faced by immigration is above all knowing how to fit the working capacity into conditions of equality and respect alongside those educated locally. The success of demographic growth produced by the migratory flow will be measured by the capacity of being able to convert those that have come to work into educated citizens with all the rights and obligation this implies.

It is clear that a larger number of workers contributing to a greater production would lead to an output volume that could not be absorbed locally, despite the greater number domestic consumers. It will therefore be necessary to export and today this is possible. Indeed, the figures of many companies lead to certain optimism in this area.

Catalonia is fully integrated into the world market and will be able to rise to its former calling, provided that it is capable of drawing on attitudes that help it move up the field of world competition. It is necessary to be alert to change too; as it would be a shame if immigration were to become an element which put the brakes on the improvement of the Catalan economy's output, due to a "cut and run" mentality, because here the model of economic development and with it a model of society itself is in play.

The food and beverage industry.

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Keys for future competitiveness.

It is difficult to create a synthesis from the huge wealth of competition that exists in the food and beverage industry of industrialised nations, given the incessant amount of innovations and alternative strategies used in the name of rivalry among the different players in the segments of this industry. That is why some of the conclusions presented in this brief contribution may not fit in with the individual views of certain segments here, and in the same way will doubtless not be interpreted as such from the standpoint of specific companies in the sector.

The basic aspect which companies in the sector have to focus their strategies on, is that of identifying the series of major changes which are happening as a result of way consumers themselves are modifying their consumption habits, laying out new fields of competition for companies working in the sector.

If we pay attention to the most renowned works on this subject, we find ourselves in a situation which highlights the reality of groups of consumers with more spending power and less time to decide on what to buy, at the same time health conscious, and of a multicultural background, increasing the frequency of purchase throughout the day – especially in the afternoon and evening- and with a notable percentage who are mobile or prepared to travel in the quest for new experiences and flavours, etc. This is why one of the main concerns for companies in the sector is that of researching new ways to reach consumers, at the same time trying to increase their presence or profitability.

In contrast to the abovementioned global trends in consumption – strongly typified by the indus-

trialised world – there is also another type of consumer, (defined by Professor CK Prahalad as the "Base of the Pyramid"), which requires a distinct approach. For this group it is necessary to adapt quality products to offer at low cost in order to solve the very real economic problems of the less well-off sectors of society, moulding the characteristics of these products and services to a the defined set of needs of this group (such as single doses of soap, reduction in the number of products per packet – avoiding wastage – high energy products, modified promotions, etc.).

In terms of rivalry within the sector, a number of trends should be taken into account when it comes to defining individual strategies of companies in this sector:

Consumption habits in terms of food and drink in the home have been noticeably changing: there is now a segment of the population that are demanding an ever increasing sophistication in meals and beverages, but the demand from homes for ready-made meals is also showing considerable growth too.

There is a rise in the number of clients with a greater mobility, who are generating major changes in the way companies have to present their products: packaging, commercial distribution, etc. and this reality is showing an exponential growth.

Food and drink of an essentially functional nature is also undergoing a marked development, although it caters for a segment of consumers with a wide variety of habits, thereby setting up a new areas of specialisation for certain companies in the sector.

The sophistication and raising of the quality level of products, along with the way they are marketed and sold in developing nations, has shown important growth, which is leading to a shift in management mechanisms in the value chain of companies in the food and beverage industry on an international scale.

The influence of the phenomenon of immigration in the West has also had a major impact on the competitive dynamics of the sector. Marketing and selling activities have been adapted to take in this segment of the population. There are an increasing amount of "personalised" offers for these groups produced by companies in the sector.

Product innovation and adaptation to different moments of consumption is one of the keys to competitiveness in the sector. Products must be armed with enough versatility in order to fit in with the various requirements of consumers according to the occasions when they may be purchased.

There is a growing trend to give products, which have always been market staples, or difficult to set apart, a label of "exclusivity": lettuce (ready cut and at a clearly higher price), bread for daily consumption (highly competitive), coffee, (Starbucks is a well known example), salt etc.

A growing collaboration is being witnessed between the food and beverage industry and enterprise working in other sectors with an aim to make the products on offer more attractive to consumers.

Each and every aspect related to a given product is important when it comes to aiding processes of differentiation and sale: design, marketing, containers, material, packaging, logistics, attracting clients, unorthodox methods of selling etc.

All the trends in the abovementioned section can be summarised by the need to take the segmentation of clients to an extreme, at the same time taking into account new behavioural trends and habits, selecting the most suitable products at the right moment of consumption, providing enough information and making the goods attractive to consumers. Traditional practices of segmentation of the food and drink industry have to become more sophisticated in order to meet the constantly evolving demands of the market.

Food and beverage industry companies should be provided with a higher level of flexibility in the processes of developing new products; they should launch more products and focus on segments where they can find elements of differentiation that can be sustained over time. World brands continue to be strong, but it is still possible to compete in specific market niches when acting quickly, as adapting to clients and immediacy are two factors, which give a competitive edge.

Another critical element for the development of the food and beverage industry is the role of distribution, which has a huge influence on the competitive dynamic of the sector. For this reason it is also necessary to analyse certain relevant trends in this area:

There is a marked tendency towards the concentration of distributors in Europe, especially in the North, where three main groups account for 80% of markets in Sweden, Norway, Finland and The Netherlands. This is not the case in the United States given anti-trust regulations in force there.

Globalisation of the retail trade is a significant trend, although few chains have managed to establish profitable set ups in overseas markets.

Distribution chains focus their scope of activity to Format Development. Some of these formats, such as discount chains, convenience stores or local stores, are increasingly used by consumers. This means that major stores have to provide a variety of formats within a single floorspace, whilst small shops are moving towards specialisation in offering unique value propositions.

A major change is taking place in the concept of private or own brands. These had their beginnings in the battles to offer lower prices, but now, own brands have been transformed into product lines that are a commodity controlled, commercialised and sold in their own right by the chains,

competing with brands from other suppliers. Food and beverage manufacturers and distributors are also strengthening ties among themselves as it becomes necessary to fuse the aspirations of both parties concerned. Global manufacturers are looking for increased growth, whilst distributors focus on margins. There is a notable degree of collaboration between both sides in terms of information exchange on consumer behaviour, on forms of adapting the launch of new products to consumer needs, research into ways of in store commercialisation, packaging, logistics, etc.

The main challenges of retailing in relation to the aspirations of clients, (in other words; creating a store that offers a variety of purchasing choices which allow the client to satisfy particular needs, rather than a shop lacking in the ability to differentiate internally) can be met by; setting up ways of obtaining data on clients using multidimensional analytical methods in order to define client target groups, creation of specific offers for different client segments in local markets and in a variety of purchasing opportunities, offering to consumers a variety of purchasing formulae within the same store (from self-service to fully assisted sales), etc.

One of the most relevant aspects of cooperation among manufacturers and distributors is trade marketing, namely direct contact with consumers with the product within stores themselves. This is an area of the future where leading companies are concentrating major promotional efforts in order to win clients.

It would not be possible to discuss future trends for the food and beverage industry without taking into consideration the changes derived from the inclusion of new technologies in developing competition in the sector: sales over the internet, (experiencing growth, but without yet meeting expectations, envisaged or hoped for), use of new technology to provide a more accurate segmentation of client groups, (to the extreme of creating an individual client segment), use of the RFID system which allows goods to be traced throughout the entire logistic process, and mobile commerce, (generating new relationships with clients). In other words, for this sector, although there may be limits to imaginative ideas and commercialisation, technology has no bounds.

Catalan food and beverage firms should therefore orientate their activities bearing in mind the provisos mentioned here. Although size matters, it is not everything when it comes to designing business strategies. It is the author's opinion that these elements around us, (and those which are specific to a given market) should be taken into account when trying to develop action plans with a tendency to research into the creation of niches overlooked by other organisations (taking as a starting point the specific characteristics of a given group of clients). In addition, they should make sure that competition has less of an influence in these niches, look for emerging demands in them, break with the dynamic of choosing between value and cost, (both essential elements in strategic planning), and streamline all the activities of the company into looking to set apart its products from those of its main competitors at international level.

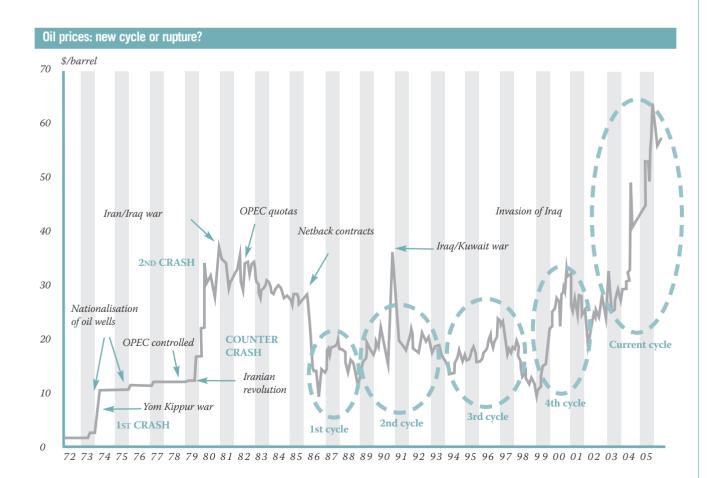
Oil prices: new cycle or rupture?

Mariano Marzo

Since the beginning of 2002 until now, the price of a barrel of oil has increased by 250%, going from around 20 dollars to 70. What will the coming years bring? A new cycle, which will see the present rising trend followed by a rapid fall, or a break with past tendencies?

One thing is clear; the NYMEX Futures Markets is putting its money on a price of between 55 - 60 dollars per barrel for delivery in five years, i.e. between 2010 and 2011. Since the creation of the futures market and to practically the end of 2003, the price of oil for

delivery in five years had, with a surprising consistency, been moving between some 18-20 dollars. This regularity reflected the cyclic nature of the market, which allowed us to work on the base of the hypothesis that successive price rises and falls would even out over time into a determined average price. That said, in the last two years, the market has turned its back on this convention, which had held true for nearly fifteen years, clearing backing a scenario where prices in the near future will no longer return to those of 18-20 dollars. Either the market considers that the up and down price cycles are a thing of the past, and are





Jan-98 Sept-98 May-99 Feb-00 Oct-00 Jul-01 Mar-02 Nov-02 Aug-03 Apr-04 Dec-04 Sept-04 May-06

Sources: NYMEX - IFP Panorama 2006, Paris, 2 February 2006

thus backing a progressive rise in value, to such an extent as that paying 55-60 dollars today will be seen as doing sound business by 2010-2011, or it has forecast a great volatility of prices with huge fluctuations within margins of between 35-40 dollars at the lower end and 75-80 dollars top end, (not ruling out peaks of over 100 dollars as a result of occasional supply drops due to geopolitical, meteorological or social turmoil).

From the author's viewpoint, the market has several good reasons for moving towards a break with past trends. In this line, the reference scenario provided in "World Energy Outlook, 2005" produced by the International Energy Agency (IEA) contains a variety of highly interesting forecasts, which aid understanding of the complicated set of circumstances influencing current prices and the scale of the challenge the world oil market has to face.

The IEA calculates that during the period 2003-2030, world crude oil consumption will grow by 1.4% per annum, going from 79 – 115 million barrels per day (mbd). From a forecast of 36 mbd, developing nations will account for over 70% and in this group, Asian nations will represent 14.6 mbd, of which about half will go to China alone. Consumption in North America will also grow strongly, especially in The USA and

Canada, which will go from consuming 24.1 in 2003 to 30.6 mbd by 2030. On the other hand, demand from other OECD nations will grow only slightly.

The IEA is confident that there will be sufficient reserves. and as of yet untapped resources to satisfy the foreseen demand. That said, the Agency recognises that there are a number of major uncertainties when it comes to defining the above-mentioned availability in terms of barrels of crude ready for release to consumers.

The first difficulty revolves around the reality that current extraction capacity is working flat out and will soon decline (if not already doing so) at a rate of 4-6% per year. This is a consequence of the fact that a major part of crude oil being pumped in the world comes from a reduced number of gigantic fields, which came into service some 40-50 years ago and that have been heavily exploited during the last decade. It is clear to see that there is a downward trend in current extraction capacity, whilst demand continues to grow, and there is a threatening vacuum on the horizon that needs to be filled urgently. Exxon Mobil believes that in the coming 15 years all current production capacity will have been replaced by a new one. But how is this to be achieved? The IEA proposes acting on four fronts at the same time.

Firstly, it is necessary to exploit reserves from existing

known fields and to succeed in reclassifying their possible, probable or proven reserves. The latter represent fossil fuel reserves for which there is at least a 90% chance that their extraction and commercialisation will yield a profit, whilst those classed as probable or possible include volumes with probabilities of 50% and 10% respectively. Another front open requires honing technical advances, which enhance the percentage of fossil fuels recovered from deposits, e.g. to rise from current recovery values of 30%-40% to 50%. Alongside this, crude production from non-conventional petroleum sources must be increased such as from deposits like the Canadian oil sands and heavy oil fractions in Venezuela. At the same time, the above three activities must be complemented by a top up of crude oil from new exploration, which would mean a turn around from the trend of the eighties, (the moment when recorded reserves registered in newly discovered fields no longer replaced volumes consumed).

If we consider this emergency action plan to be feasible that will then leave two important unknowns to be discovered: in which regions should the above measures be applied? And how much would it cost to implement? As for the first question, although the IEA has faith in the ability of non OPEC nations, such as Russia, Kazakhstan, Azerbaijan, Brazil, Angola, etc.) to deliver the goods, from 2010 onwards, the cartel nations of OPEC, especially those of the Middle East will have to take up the slack and satisfy the bulk of demand. Saudi Arabia, Iran, Iraq, Kuwait, The United Arab Emirates, Nigeria and Venezuela would have to hike up production from 32.3 mbd levels in 2004 to 36.9 mbd by 2010, in order to meet the forecast demand of 57.2 mbd by 2030; a goal considered highly unlikely by many analysts.

In terms of costs, the IEA calculates a need for some 3 trillion dollars (at 2000 rates) to be invested betwe-

en 2002-2030 in the oil sector in order to meet the rise in demand. Without doubt, development of the new extraction capacity required by these countries depends on them being able to raise sufficient capital. In principle, in the case of the Middle East, this may seem easy enough, especially if actual prices per barrel are offset alongside the fact that total cost of developing new reserves in the region is the lowest in the world, (around 4 dollars per barrel). Nevertheless, it is by no means clear that all states will be able to or indeed will decide to open up in time to foreign financial and technological investment. Such is the case for states as Russia and Venezuela, which are undergoing involution, added to the undermining of confidence by investors due to chronic geopolitical instability in keeping up crude supply areas worldwide like Iran, Iraq, Nigeria, Venezuela, the Caspian etc.), all factors which can delay or scare off investment.

The overriding impression is that future crude oil supply is hanging by a thread. In fact, the oil industry itself is beginning to doubt whether it can successfully fulfil its mission of meeting growing demand for oil in a globalised world. In a recent interview to The Times, Christophe de Margerie, Exploration Chief at Total, summed up the situation eloquently when he declared that the world lacked the means to extract all the oil required to cover forecast demand for the next decade. According to Margerie, the world has misread the discussion on how to approach the challenge it faces at present, wasting efforts arguing over available reserves, when in reality the problem is one of pumping capacity. Hence, the matter has less to do with the availability of reserves in the ground than how to mobilise and react in time to apply the required financial, technological and human resources required in an increasingly tumultuous world.

Growth in supply for the quinary or creative sector

José Aguilá

Partner, IOR CONSULTING

We are immersed in a new international distribution of labour forces. Globalisation, new technologies and knowledge management are the new forces that have arisen from the great mutation we are currently experiencing and will continue to experience. China, India and Eastern Europe are dominating the field due to low costs of an increasingly skilled workforce.

At present, Catalan enterprise has resorted to outsourcing and relocation to hold off outside attacks, but to cope with these pressures there are two very valuable and indeed sustainable resources; singularity, whether through design or technology, but most notably the growth of the quinary sector.

In the opinion of many experts, the quinary sector is great way of finding a solution.

Quinary services, is the expression used of late to denote services based on knowledge or creative industries; because their human teams are highly qualified and focused on continued knowledge development in order to carry out their professional, scientific or technical tasks related to information, design, communication etc.

The growth of the quinary sector, according to the reality of the market and the specific features of a given company can, for example in the case of Greer & Associates, Minneapolis, be observed in its purest definition. This multimedia company worked exclusively in the making of advertisements for television, until the underlying technologies involved became so common, that it was forced to concentrate its efforts and regroup around its main strength; its in-depth knowledge of the sector to sell "strategic perspicacity", creative instinct and artistic talent. It turned into a pure consultancy in its field.

Another way of transforming operations is to move towards being a quinary hybrid, as is the case of General Electric Plastics, which subject to certain con-

ditions, permits clients to access its management and factual database, making available the latest resources in the field of thermoplastic engineering, profiting from the latest information on materials, new techniques, regulatory information etc. Furthermore they can use on-line state of art instruments of engineering, design and calculation, taking full advantage of the huge scientific might of GE Plastics. This all leads to a greater customer loyalty and increased sales for GE.

If it is becoming clearer day by day that routine production services will stay preferentially in the new industrialised nations, industries from the most advanced countries will guarantee their future if they are able to move into virtual structures, *off shoring* standard manufacturing operations and concentrating on business that requires advanced multidisciplinary processes: design, complex manufacturing, specialised assembly, and ICTs.

Orientation to the client

In reality, a total or hybrid evolution towards the quinary is determined by a timely response to the following basic questions on the current real market environment:

- Which elements of our business must we give up?
- Which parts should we keep?
- Which parts should we strengthen?

This does not mean the response should be improvised. The question should be answered intelligently, with reference to five basic skills:

- An open mentality and capacity to view goals and needs (both explicit and tacit) of clients in an all round way.
- Aptitude to exhibit and define the knowledge level of the reference group and what its members do automatically without thinking consciously about their functions.

- Empathy and talent to be able to identify frustrations of clients, (both functional and emotional) and areas where they are not satisfied enough, whether related or not to the product/service being researched.
- Ability to overcome the obstacles encountered in research with perseverance and optimism, changing blips into progress, even in the face of destructive criticism from shortsighted experts.
- Add a high degree of experience to the cross fertilisation of ideas and progress from the world outside of the company and know how to convert limitations into solutions.

Any growth, even if only partial towards the quinary, represents having a workable strategy that will ultimately have to be backed by a knowledge of clients, markets and competitors.

Demands of the quinary sector

As mentioned at the start of this paper, due mainly to market globalisation and the resulting transformation of the industrial sector, with its – more or less considerable – result of; relocation of industry, some enterprises, unable to fight head on with products from newly industrialised nations, are considering a move to the sphere of the knowledge economy to sell their know how. That said, the quinary sector they are now entering has special demands, one being the end goal of maintaining a balance between keeping their organisational structure and that of the market for professionals.

The structure of a company offering professional services comprises of three basic levels; directors, managers and professionals. The directors are responsible for forging and maintaining relationships with clients, managers run the projects and the professionals undertake the skilled tasks. The barriers between these tasks are by no means immovable, but permeable, especially when this permeability allows firms to spot staff who are apt for movement to higher levels. Such details illustrate why management style and corporate culture must be more fine-tuned in a quinary sector enterprise than one from the traditional industrial sector.

Strategic positioning

Once totally or partially in the quinary sector, three differential qualities can be exploited; knowledge, experience and ability to act. These are vastly different from one another, the key being to really master what you can offer and sell it in a suitable fashion. According to David Maister, former Harvard Business School Professor, a useful way of looking at the competitive outlook of this type of company is to establish

a series of analogies with the healthcare sector. This leads to a series of questions that need to be asked:

- What is wrong with the patient?
- What type of clinic do we have?
- Are we an emergency clinic?
- Are we specialised in diagnostic imaging?
- Are we an operating theatre?
- Are we a pharmacy?
- Are we a nurse?
- Or are we a psychotherapy service?

Specialities exist in the quinary sector, which correspond to each of the above types of health services. One thing is clear; that it is impossible to manage the entire spectrum of services in the same way. Different types of areas of practice require different types of commercialisation, marketing, staff, procedures, skills, management styles, etc.'.

The problem is that many quinary-orientated firms try to offer all manner of services starting from a simple "one size fits all" premise.

Sales

When in the quinary sector, a thorough grasp is needed both of the logic of segmentation of prospects and the decision processes involved therein, as well as knowing how to anticipate and exploit its consistencies and irregularities, expectations, context for appraisal and differential analyses for what to offer each client.

Design and management of the distribution chain are also key factors. Many problems arise here and it is surprising how many companies of purely industrial origin struggle to change their channelling strategies due to such reasons as:

- Too much high-grade decision
- Executives detached from sensitive information
- Incentive problems etc.

In the quinary, pricing policy is complex and factors determining this have to be appraised, such as; costs, access to data, perception of clients and reaction of competitors. Surprisingly, price guidelines are highly valued by clients and as such, these should be explained to convince them that the price fixed is the most appropriate.

Although it is good to have many clients, it is better to have suitable ones. Not all business is good, and firms should avoid cut-price clients. In practice, activities that require a commercial development are slow and represent investments over a period. Turning on and

off the flow of commercial activity, especially at international level is not advisable.

After sales is also key in this sector. Doing business in the quinary is like a marriage; it is easy to ruin a romance after the wedding.

Strategic Vision

What is referred today as the *Knowledge Economy* is becoming eclipsed by a new concept called the *Creative Economy*.

Affairs traditionally at the heart of an enterprise; price, quality and much of the technical workings of systems to do with knowledge, are now being transferred to countries like China, India, The Czech Republic or Russia, where there is a large and cheap, skilled workforce. Therefore, creativity is increasingly becoming the mainstay of many enterprises. The rules are changing, and consist not only in the mastery of pure sciences, but also in qualified imagination and above all, innovation.

Leading firms are taking a very serious stand on the issue, such as HASSO Platter, co-founder of the German SSP, which recently announced an investment of 38 million dollars to fund a multidisciplinary design school in the Universitat of Stanford (USA). New forms of innovation are based on an intimate knowledge of consumer behaviour, in the ability to determine what people want before it is out in the open. The new orientation demands a new set of values and organisational principles:

- Client centred innovation
- Innovation metrics
- CECOR (calibrate, explore, create, organise and realise) orientation
- Micro-innovation/Macro-innovation

- Taking apart of successful designs on the market
- Methodology to pinpoint unmet needs and/or those not made clear to the client
- Innovation gyms

Modern innovation strategy does not consist of merely consist of adding more products to a range, nor adding more colours to a palette, but creating new experiences for a client, recreating a whole series of products; in other words innovating in new fields. It is not enough to sell machinery today. Manufacturing firms, who are unaware they had to evolve beyond the classic services of repair and maintenance to those they are offering intelligent services, are highly at risk. One example is that of harvesting technology, which had not evolved much since the invention of the combine harvester, but what has changed in the following case are those aspects related to the tasks they can perform. Claas, Europe's major harvester manufacturer now produces machines that use laser controlled functions, and GPS tracking. The latest model can now harvest 70 tonnes per hour, more than triple that of fifteen years ago.

Conclusion

As stated repeatedly throughout this article, we are being subjected to enormous commercial pressure or hyper-competition by newly industrialised nations. We cannot work our way out meeting it head on, using the same weapons of ultra cheap labour. The solution is to increase the pitch of our competitiveness and work our supply towards the quinary sector, a more complex and uneven terrain, but one far harder to emulate. If we manage to master the three convergent facets of quinary, outsourcing and offshoring, the competitiveness of Catalan enterprise in the globalised world will be guaranteed.

Challenges for the textile and garment sector

Javier Vello

PriceWaterhouseCoopers

The textile and garment sector as a whole is experiencing troubled times, which is affecting the entire value chain, from production through to sales. This state of affairs is having a special effect on Catalonia, where the sector accounts for 35% of the Spanish market.

For this reason, Catalan enterprises have to manage to combine entrepreneurial needs and challenges imposed by the market with the capacity for response and flexibility needed to successfully overcome current difficulties.

On January 1st 2005 one of the greatest fears of the garment sector was realised: an end was put to Chinese quotas, which has only further exacerbated the already delicate predicament of the textile sector in industrialised nations in recent decades due to growing competition among emerging producers. In the 60s and 70s this meant the newly emerging Asian economies, and at the end of the 80s these were joined by China and most recently, South East Asia and India. All these countries have driven their textile activities via cost structures, which are far more profitable than those of the most developed nations.

In the face of this new competition, a regulatory commercial framework was set up to try and liberalise trade, with an aim to avoid a dramatic fall that would bring down the traditional textile industries in developed nations. The multifibre Agreement (AMT) firstly and then the Agreement on Textiles (ATV), driven by the WTO laid down a gradual removal of quotas – import limits – within specific periods, culminating in the absolute liberalisation of the sector in 2005, where import quotas disappeared between WTO member states.

The labour intensive nature of garment making, makes it hard for Catalonia to remain competitive in a sector where wages are around 12 euros/ hours, compared to Morocco where this cost is halved, or China

paying 50c. Given this situation, many firms have been obliged to close some of their factories and move production to emerging economies as the only way of keeping their business going.

In this context, firms have to change their priorities, which means changing from "manufacturing companies to commercial companies". Nevertheless, this change implies a series of complex challenges, which are not easy to tackle.

Transforming oneself into a commercial outfit means knowing how to manage two key factors; holding and managing a brand image; and having access to the end consumer via the right channels.

Consumer access is achieved via a sales channel, which is also changing radically and which is affecting the sustainability of the model itself.

Spain is one of the EU states with the highest number of clothing outlets per inhabitant, (3 times more than France, and double those of the UK). Catalonia accounts for 20% of all outlets in Spain, (The Region of Madrid has just half those of Catalonia).

The traditional multi-brand shop model is still strong in the market accounting for 36% of outlets, but it is in decline compared to vertical chain formats and textile sales in hypermarkets, (the latter accounting for 10% of total sector turnover).

Therefore, it is essential to ensure this access to consumers, basically in two ways: via corners in department stores or hypermarkets or through own shops or indeed franchises.

Linked intrinsically to this consumer access is the need to have a brand to sell to the sales channel and consumers alike. Brand positioning requires the shrewdness to be able to blend diverse elements of

promotion and marketing which companies have on hand, namely; advertising, use of endorsements, relationships with the media, merchandising, access to international fashion shows, (as national shows have proved scarcely attractive from the viewpoint of sales performance), positioning of boutiques, architecture, atmosphere and shop design. However, investment does not always go hand in hand with success. It is necessary to understand how consumer habits and beliefs change and be able to establish an emotional connection, which transfers brand values to motivational ones of consumers.

In short, the sector has changed and enterprise has to be aware and play by the new rules the market dictates. Due to the current structural dimensions of Catalan firms, most of which are SMEs, it is necessary that the Public Administration lend support and oversee the process of adaptation, but that this overseeing should not mean entrepreneurial responsibilities being relinquished. Enterprise itself in this sector must be able to approach change with a dual purpose; to combine the creative component with the ability to think as a business, where sustainability depends on being capable of interpreting opportunities and anticipating change.

Sector trends in automobile parts

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InterBen Consulting

China and Eastern Europe

Set the brief of producing a work on sector trends in automobile components focused on China and Eastern Europe, by COPCA's Observatory of International Markets, has provided us with the exciting and yet ambitious challenge of analysing the complex markets at work in these regions, which without doubt will have an ever greater influence on the decision of businesses in this sector.

The authors of this paper believe that the subject matter of the research has been wisely chosen, given that a constant migration of investment in the sector has been observed moving towards the abovementioned areas. This movement towards China and Eastern Europe is due to several factors:

- The need of companies in the sector to access new growth markets, driven by a business model based on the globalisation of markets and relocation of (manufacturing) capacity.
- The conviction that the internal markets of the countries themselves are growing faster than those of industrialised nations on average, where the sector growth is more characteristic of markets in a mature phase.
- The chance of becoming established in areas with important cost differentials with respect to those experienced by companies in their countries of origin, in which they can, in many cases, use as worldwide production or supply centres, something especially true for component suppliers.

Upon making this analysis, the first challenge faced is that of defining the object of the study itself. In the case of China, despite the immense complexity of the country itself, activity in this sector is effectively limited to only eight regions where vehicles are manufactured, namely; Beijing, Changchun, Chongqing, Guangzhou, Shanghai, Shiyan, Tianjin and Wuhan. On the other hand, when it comes to defining the activity

of the automobile sector in Eastern Europe, the matter is less straightforward, given the interpretation of which nations are to be included in this area. The reality is that often this group of states can be considered to straddle both Central and Eastern Europe, and tends to be used to denote those countries with emerging economies, which are closer to other, more distant geographical zones, such as the ex-Soviet republics. In order to establish limits, for the purpose of this study, the area of Eastern Europe examined here is defined as including the following; Poland, The Czech Republic, Slovakia, Hungary, Slovenia and Rumania, for the reasons given below:

- All the above have an established automobile industry with more or less a certain degree of development
- Positive growth is forecast for their automobile markets
- All have vehicle manufacturers on their soil, as well as both national and multinational component suppliers
- They are located right next to other, more developed nations, which may represent attractive and complementary markets to suppliers that set up operations there.

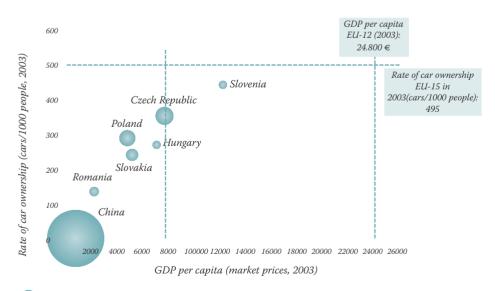
In general all these countries have continued to show sustained growth in per capita income, which is coming close to the 6,000 – 8,000 US dollar mark experts indicate as being the "ignition" point for creating a demand for vehicles. In the case of China, it is calculated that there are already 450 million in this position, although the market for potential consumers today would be below that figure. Furthermore, a convergent trend can be observed in rates of car ownership, which could reach values similar to those of the European average of some 495 vehicles per 1,000 for the 15 member state EU, illustrated by some countries such as Slovenia.

Geographical location of the major automobile production Centres in the countries included in the study





GDP per capita vs. car ownership levels and vehicle production



Total production of vehicles (cars and tracks), 2003

Source: Automotive News i altres

Country/Region	Rate of car ownership (2003)
China	8
Slovenia	446
Shenyang	174
Czech Republic	358
Shenzhen	158
Poland	294
Beijing	100
Hungary	275
Chengdu	64

Country/Region	Rate of car ownership (2003)
Slovakia	247
Guangzhou	50
Romania	142
Tianjin	36
Nanjing	31
Hangzhou	28
Xi'an	18
Shanghai	12
Chongqing	10

Source: World Bank:

Such differences between one country and another should not be neglected; indeed in the case of China alone it would seem worth setting up an analytical field in the study. The reality is that no region anywhere in the world experienced growth comparable to that of China in the context of automation. With an output of 5.2 million vehicles in 2004, 2.4m of which were cars, China is now the world's fourth manufacturer, behind other developed nations. Nevertheless, the extraordinary growth shown the economy of this industrial power leads us to think that year after year it will continue to rise in the rankings, albeit with less pronounced growth than it has shown hitherto.

The evolution of this market will be affected by the fulfilment of perspectives set by the major manufacturers present in the country, as well as the necessary change that will take place in the structure of the sector. This latter factor is of great complexity, given that the sector includes so many great public-private consortiums, and a huge number of both private and public smaller enterprises with varying levels of development and competitiveness. Even though at present nearly 80% of the market is controlled by the great alliances forged between VW, GM and PSA with the Chinese state firms FAW, SAIC and Donfeng, other highly commercially aggressive local firms such as the Chinese company Geely are coming to the fore. With the collaboration of our partners from InterChina, InterBen have drawn up a series of forecasts that suggest an output volume in excess of 4 million cars per year could be reached in China by the year 2008. This

figure could be deemed conservative if the rapid growth experienced in recent years is born out.

In terms of suppliers, China represents an even more relevant challenge, given that unlike vehicle manufacturers, it is expected that China will turn into a major production base for export, taking advantage of synergies with the local market, as well as more favourable production conditions. That said, many comments taken on face value to be true, should be analysed in more depth. This is notably true in the case of economic efficiencies that it is achieve in such countries, given that cost reductions often come side by side with other less obvious expenses. Such aspects as productivity differences, quality, logistic costs, management costs stemming from maintaining a number of ex-pats overseas, or inefficiencies derived from being supplied locally in some cases can mean that building a vehicle in a country like China may still be some 40% more expensive than its Western built equivalent.

We expect to witness a radical overhaul in the automobile sector in the coming years that will shut out any company unable to follow the rhythm of change. Institutions such as COPCA play an important role in communicating this knowledge to our industry in order for it to start adapting itself in suitable fashion. At InterBen, we hope that the research into trends commissioned by COPCA will prove to be a worthy tool to add to knowledge on the markets of China and Eastern Europe for the internationalisation plans of Catalan enterprises working in the automobile component sector.

Trends in the aeronautical and space sectors

Lluís Ramis

Cluster Development

The aeronautical and space sectors are comprised of different businesses that exhibit important differences in terms of their rules of competition. On the one hand, there is general and recreational aviation (aerodromes, light aircraft etc.) and all related business. On the other, there is the business related to airlines, (MRO, or maintenance, repair and overhaul). Another completely different area is that related to airfreight logistics. All in all, when analysing trends in the aeronautical and space sector, one tends to think solely of end manufacturers or OEMs (Original Equipment Manufacturers) like Airbus, Boeing, Bombardier or Embraer along with their component suppliers. However, within this group of aircraft makers and suppliers, three main market segments can be identified; civil aviation, military transport and the space sector. This latter sector, which usually makes up some 10% of the aerospace total involves a number of specialised players, but also includes household names such as; Thales, Alenia or British Aerospace, who compete in both sectors, although in the space sector, the driving force is public purchasing, (more than in the aeronautical sector.

In recent years, manufacturing of end products as well as the supply industry surrounding the aeronautical business (and that to do with space) has been characterised by a number of salient features:

- It is a **highly globalised** market. Purchasing processes of the large OEMs and competing suppliers are truly global when compared to many other sectors (even including the automotive sector)
- This is a dually orientated market (military and civil)
- The sector has **very long business cycles**: it combines moments where there are major projects and

subsequent slumps. It is thought that the last 5 and the next 3-5 years will have been the heyday of great projects; in Europe with the A-380, A-400M and Galileo Project and in the United states with the Boeing Sonic Cruiser and Joint Strike Fighter

- This is an area of business where the **state still plays a major role** in decision making, (especially in space and on military projects). The leadership of the most industrial nations; The EU, United States and Canada is quite apparent, due to the need to invest important sums in R+D to simply undertake a new project. This is a highly advanced sector in terms of technology, which demands highly qualified labour, and a proportionately high amount of R+D+i (14% of turnover in the Spanish market) and therefore by its very nature acts to drag the economy up behind it
- It is a sector structured around major development projects, which last many years and mean huge investment. The sums invested in the new Airbus A-380 are estimated to be around ?12 billion. Companies in the sector require a critical mass in order to absorb development costs, which explains why in the field of civil aviation there are two manufacturers of 100 seat plus aircraft left; Airbus and Boeing and just two for smaller passenger aircraft; Bombardier and Embraer. The great challenges for the sector in the future are namely; a single European sky, the aeroplane of the future (more capacity, lower cost, less consumption and less pollution) and the entry into service of the Galileo satellite, (the alternative to the American GPS), which will open up an infinite area of applications in mobility, (related to logistics and transport), security, communications and Earth watching which will create up to 100,000 jobs in Europe by 2020.

- Limited manufacturing series. Unlike in the automobile industry, investment in the development of new products has to be amortizised in a smaller production series (300-600 units sold). This has major implications for manufacturers supplying aircraft that have to recoup their own development costs within the number of units sold. Such limited volumes, project cycles and lack of guaranteed sales explain why, as a rule, the major automobile makers have not become involved in the sector, considering it a "low" volume sector with too many risks in terms of its profitability.
- This is a sector where client OEMs demand that their own suppliers provide then with top level complex systems, exhibiting a trend to reduce the number of top flight suppliers. Taking Airbus as an example, the company is looking to stick to just some 100 suppliers, (and not the 700 which it may have had until recently). Each supplier must be of a certain size to be able to offer specific guarantee, and furthermore has to finance new projects as OEMs tend to pay suppliers once the planes are being sold and not during development and manufacture. In each class of products, some 4 5- suppliers generally account for 85% of the purchases of the group.

New ways of internationalisation

born and re-born global companies

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Introduction

The process of internationalisation of multinational enterprises has been one of the most widely studied phenomena in the business world. With the advent of free trade, advances in telecommunications, the proliferation of internet connections and the intensification of competition worldwide, many small firms and start ups set up their international operations in their beginnings or shortly after. These companies are fulfilling an increasingly major role in the world economy, not only because they contribute to economic development, but also because they move within a sphere of innovation (Oviatt and McDougall, 1994). As a consequence of this, in the last 10 years, a growing body of research has begun to investigate the particularities of the internationalisation process followed by small and recently created firms.

The process of internationalisation has traditionally been conceived and studied as a progressive sequence of stages, which go from consolidation of home markets to overseas production (Johanson and Wiedersheim-Paul, 1975; Johanson and Valne, 1977). That said, recent works have offered different views that highlight certain differences to the sequential models, (McDougall, 1989; McDougall, Shane and Oviatt, 1994; Bell, 1995; Roberts and Senturia, 1996; Servais and Rasmussen, 2000; Zahra, Ireland and Hitt, 2000; Wicramasekera and Bamberry, 2001; Moen, 2002; Moen and Servais, 2002; Andersson and Wictor, 2003; McNaughton, 2003; Johnson, 2004, among others). Their main argument is that an ever greater number of small and recently set up firms known as "born globals" or "international new ventures", follow a process of internationalisation that traditional theories on international processes are at a loss to explain. Some studies have shown that nearly 40% of small firms that have internationalised follow a

discontinued development model. Just as new firms start on the process of internationalisation much sooner, quicker and on a wide geographical scale, certain practices of already established enterprises also challenge the logic of the sequential model. Motivated by major changes in their internal structure and by the outside environment, they go so far as to reconsider and redefine their own paths of internationalisation to become "born again globals" (Bell et al., 2001, 2003).

This introductory report furnishes a brief description of the phenomena of both born global and reborn global companies and points out key areas of the preliminary conceptual structure to be analysed and defined within the bounds of this work.

This introductory report is structured as follows:

I. Brief background of internationalisation theories

II. Key points of the study

III. Preliminary conceptual framework

IV. Learning expectations for business people and public administrations

I. Brief background of internationalisation theories

The process of internationalisation has traditionally been conceived as a series of gradual stages. One of the first models that tried to explain this was the Uppsala's model or the U Model (Johanson and Wiedersheim-Paul, 1975). It identified four separate modes of movement into overseas markets: 1) sporadic export activities; 2) exports handled by independent representatives or agents; 3) the setting up of a sales branch office abroad, and; 4) product units/manufacturing overseas. According to this model, companies move into new markets following

determined criteria, such as affinities, or geographical and cultural proximity. Johanson and Valne (1977) furthered development of this model by proposing a dynamic model of internationalisation.

Using the U model as a starting point, other authors took a different approach, coining the Model Related to Innovation (Bilkey and Tesar, 1977; Czinkota, 1982; Cavusgil, 1980, and Reid, 1981). According to this model, internationalisation is the result of a series of innovations that take place in the internal running of a company. Conceived in its original form, this internationalisation model was also seen as an evolution via a series of learning stages, (Bilkey i Tesar, 1977).

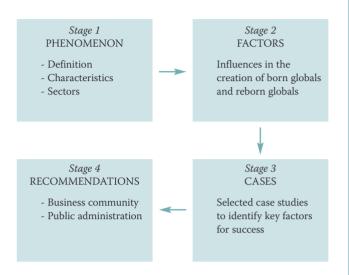
II. Key points of the study

Over time, although these sequential models have been widely used in internationalisation processes, they have also been slated for being too determinist and limited when it comes to explaining the new phenomenon of born and reborn global companies, (Andersen, 1993). Even if research on these phenomena is on the rise, (Oviatt and McDougall, 2005), there is still a lack of clarity behind the definitions, requiring a systematic effort to organise the theoretical and empirical research carried out until now.

Our work attempts to put forward a theoretical framework on the internationalisation processes followed by born globals and reborn global companies, as well as the best practices undertaken by firms that have embraced internationalisation early on and so quickly. This work hinges on the following four key points. (v. Figure 1):

- 1. Definition of the phenomenon
- 2. Identification of factors that bring it about
- 3. Illustrative case studies to discover key factors for success
- 4. Recommendations for business people and the public administration

Key points of the study



III. Preliminary conceptual framework III.A. Born global companies

The phenomenon of the born global companies has been studied using a variety of labels, among which a few are included here; emerging high technology companies, (Roberts and Senturia, 1996), global start-ups, (Oviatt and McDougall, 1995), technology based new firms, (Autio, Sapienza and Almeida, 2000; Jones, 2001), international new ventures (McDougall, 1989; McDougall, Shane and Oviatt, 1994; Oviatt and McDougall, 1994, 1997, 1999; Moen, 2000, and McDougall, Oviatt and Shrader, 2003), international start ups (McDougall, 1989), new high potential ventures (Bloodgood, Sapienza and Almeida, 1996), new entrepreneurs (Zahra and George, 2000), small computer software firms (Bell, 1995), small international high technology start-ups, (Johnson, 2004) or technology based new firms, (Autio and Sapienza, 2000).

Oviatt and McDougall (1994) proposed a definition that has since been widely used and which will serve as a definition in this work too. According to the cited authors, an international new venture or born global venture is a business organisation that, from its inception, aims to gain a major competitive edge using resources and selling products in many countries. The outstanding feature of these new firms has to do with their origins being truly international and that the basic element used to define them as such is how long after setting up they moved into internationalisation. Other authors such as Wicramasekera and

Bamberry (2001) also included those firms that go into internationalisation shortly after starting up, as well as those involved from their beginnings.

Given the differences that exist in the definition of just what a born global company is, certain criteria need to be set down so as to clarify the aims of this work. In this study we will therefore look to establish and define the salient characteristics of this type of enterprise. A number of basic features we aim to focus on are listed below:

- 1) Export intensity. This first criterion is defined as the relationship between exports and turnover of a firm. According to Servais and Rasmussen (2000), Moen (2002) and Andersson and Wictor (2003), a born global company should be exporting 25% or more of its total sales.
- 2) Time lapse between creation of a company and the start of international activity. This second criterion refers to period from the founding of a firm until the inception of the internationalisation process. Rennie (1993) and Roberts and Senturia (1996) define this as being 2 years or less.
- 3) *Independent firms*. This criterion excludes subsidiaries of multinationals and big corporations from being included as born global companies.

Further to the definition of the criteria mentioned above, it is also important to understand just which factors influence the creation of born global companies. Experts point to a number of factors behind this phenomenon:

1) Entrepreneurial related factors. For example, as for a founder or founders of a company, Oviatt and McDougall (1997) suggest that international entrepreneurial experience at top managerial level is the factor that most influences in decisions on international commitments of an international new venture or INV or of a born global company. According to Servais and Rasmussen (2000), What are important are the more developed capabilities of certain individuals, including among them, the founder/entrepreneur starting up a born global company. Other key factors for an entrepreneur to have an influence on rapid internationalisation include; a global outlook of the decision makers (Moen, 2002), the entrepreneur being the one responsible for applying strategy in a company,

(Andersson and Wictor, 2003) and the *international vision* of the founders (Johnson, 2004).

2) Company related factors. Rialp et al. (2002) maintain that a firm's intangible resources, (organisational, technological and those related to human capital) can be of great importance when building up to a critical level in the internationalisation capacity of a firm. Knight and Cavusgil (1996) consider that the application of state of the art technology to develop a unique product idea is a factor, which contributes to internationalisation processes getting under way soon after.

Wicramasekera and Bamberry (2001), for example have observed that acceleration in internationalisation comes from experience in the sector, knowledge of international markets and *overseas contacts* or *networks*, in addition to the guiding commitment. If analysed alongside these networks as an explicative variable for internationalisation, born global companies are therefore examples of "externalisation" of the internationalisation process. This implies that a company is capable of exploiting external resources of business partners or networks in order to get an opening in international markets. Coviello and Munro (1995) point out that the selection of foreign markets and the initiatives to break into them, come from the opportunities created through network contacts, above and beyond strategic decisions that may be taken by company executives.

3) Environmentally related factors. In the case of these factors, some authors recognise that environment does indeed have repercussions on internationalisation. Oviatt and McDougall (1997) hold that sector forces can exert some especially strong influences upon the internationalisation of a company. For example, if clients or competitors of a determined sector are international this can drive new firms to become international regardless of the international experience of each entrepreneur.

Market conditions comprise another key element in the process of industrialisation. For example, Rennie (1993) identifies two market factors: *demand for more specialised and personalised products* and the *reduction of product life cycles*. Bell, (1995) basing himself on numerous case studies, explains that there are determined key factors that influence in the process of internationalisation too, namely; a) *following after international clients*; b) identification of *market veins or niches* and c) other *specific considerations* of the sector.

Further to this, so-called *changing technologies* also represent another factor, which contributes to speeding up internationalisation, (Oviatt and McDougall, 1997). A technological edge is fundamental in order to achieve social progress. Small emerging firms play a pivotal role in the discovery of technological innovations that end up being applied worldwide. These firms exploit their innovations along with other emerging firms in order to accelerate their internationalisation processes.

III.B. Re-born global companies

As in the case of born global companies, the pattern of internationalisation for reborn global firms also throws doubt on the principals of sequential models. Nevertheless, unlike born globals, reborn global companies are typically traditional companies that are long established and have made a sudden major change to their internationalisation strategy, (often influenced by shake ups in the internal or external organisation which triggers off the process). Beyond the aim of improving understanding of born global companies, this work also looks to further knowledge on the process of internationalisation taken by firms known as reborn global companies.

Existing works on these companies known as reborn globals are few and far between, (Bell *et al.*, 2001, 2003) being an exception. These studies hold that the change in the internationalisation pattern is motivated by a critical incident or upheaval or a combination of many smaller incidents at once. This work aims to identify the major factors, which set off a change in the pattern of internationalisation of these companies. Among others, the following factors have proved to be of influence:

- 1. Change of ownership
- 2. Takeovers
- 3. Following after clients

In the work of Bell *et al.* (2003), the most common factor which sets off a process of internationalisation in reborn global companies is a change in ownership and/or change in company management, which can come about in many ways such as a *management buyout* (or MBO), takeover by another company, being acquired by a holding or indeed generational change. From cases studied the authors discovered that in all takeover MBOs, new decision makers with a broader international vision come in to the company. In the case of takeovers, the international orientation of the

new controlling company is a major key factor behind the international strategy of a company. In this case, management practice, international market knowledge and the fact that there are more financial resources and use of pre-existing channels and networks in international markets make up the core of the drive towards the process of internationalisation.

In acquisitions, the following patterns have been spotted: a) acquisition of a company with international links; b) transfer of foreign technology and c) distribution rights. In the case of technology transfer, there are cases where introduction of a new technology or process obliges companies to internationalise in order to recover the high investment costs. Further to this, the acquisition of product distribution rights in a domestic or regional market by an international supplier or major investment in new processing technologies have proved incentive enough for many companies to internationalise operations, (in order to recoup investment more quickly).

Another factor that make oblige reborn global companies to internationalise is when a client moves. This phenomenon can be seen when the clients company may have in their domestic market suddenly internationalise and the company in question as suppliers to them is obliged to "follow" the clients to new markets.

III.C. Selected case studies

In order to illustrate these new trends of internationalisation and to identify key factors for success, the authors wish to analyse a number of cases, to provide both the business and public sectors a valuable insight into this phenomenon. Taking into account the size and limits of the study, the following cases are by no means comprehensive, given that the aim here is to provide a thumbnail sketch of some possible models that exist when the first steps towards internationalisation are taken. Nevertheless, we consider that they can also provide a source of new perception and learning for business and public sector alike, to help motivate the creation of new international enterprise and design new international strategies for existing companies.

As part of this research and after having established the preliminary conceptual framework, a number of cases from around Catalonia will be identified and chosen, bearing in mind different sectors, products/services in order to provide a series of examples of this phenomenon. The particularities of these companies' internationalisation processes will also be looked into and key factors for success will be identified in order to form the base of a learning process for others in the business community and the public administration.

IV. Learning expectations for business people and public administrations

Using the theoretical framework and case studies analysed herein as a starting point, key learning matter for business will be duly identified and recommendations will be put to the public administrations. For business people visions will be provided on new patterns of internationalisation along with the requisites required of companies in relation to resources and capabilities. For the public administration, support areas both for born global as well as reborn global companies will be under the spotlight.

Taking an example from Rialp *et al.* (2002), traditional export programs are no longer valid for born global companies. Instead tailor made policies and programs are needed for companies that undergo rapid internationalisation. Bell *et al.* (2003) gives guidelines to organisations involved in export promotion, pointing out that these organisations should try and become intelligence pools for the hard market and serve a similar function to websites to improve knowledge of how to operate in international markets.

As concerns reborn global companies, Bell *et al.* (2003) recommends they adopt a holistic approach via brokering and supporting mergers, acquisitions and takeovers within the SME sector, or at least provide incentives for internationalisation for the company through a variety of ways such as, strategic alliances, and not just for purposes of export.

According to Bell *et al.* (2003), the rate of internationalisation between born globals and reborn globals requires a rapid response on behalf on the so-called export promotion agencies at the highest level (and with different ways), to help them enter multiple international markets both rapidly and at the same time. It is also necessary to collaborate more with other agencies in order to give support to innovation, and to R+D, given that these areas are becoming more and

more viable for born global companies to work in. Another clear priority is to create an environment, which leads to encouraging the availability of risk capital. Global born and reborn companies need more support in the development of their international relationship networks. At the same time, export promotion agencies should be lending full support to these companies to take advantage of all opportunities available to access these networks in their own domestic markets as well.

This work has set out the key points and hoped for results. We believe that theoretical and empirical understanding of these new phenomena will help us be able to provide useful perspectives both for the business sector as well as for public administrations.

References:

- Andersen, O. 1993. "On the internationalization process of firms: a critical analysis". *Journal of International Business Studies*, 24(2): 209-231.
- Andersson, S.; Wictor, I. 2003. "Innovative internationalisation in new firms: born globals The Swedish case". *Journal of International Entrepreneurship*, 1.
- Autio, E.; Sapienza H. 2000. Comparing Process and Born Global Perspectives in the International Growth of Technology-based New Firms. Working Papers Series 2000l2.
- Autio, E.; Sapienza, H.; Almeida, J. 2000. "Effects of age at entry, knowledge intensity, and imitability on international growth". *Academy of Management Journal*, 43(5): 909-924.
- Bell, J.; McNaughton, R.; Young, S.; Crick, D. 2003. "Towards an integrative model of small firm internationalisation". *Journal of International Entrepreneurship*, 1: 339-362.
- Bell, J.; McNaughton, R.; Young, S. 2001. "'Born again global' firms. An extension to the 'born global' phenomenon". *Journal of International Management*, 7: 173-189.
- Bell, J. 1995. "The internationalization of small computer software firms: a further challenge to stage theories". *European Journal of Marketing*, 29(8): 60-75.
- Bilkey, W.; Tesar, G. 1977. "The export behaviour of smaller Wisconsin manufacturing firms". *Journal of Business Studies*, 9 (Spring/Summer): 93-98.
- Bloodgood, J.; Sapienza, H.; Almeida, G. 1996. "The internationalization of new high-potential U.S. ventures: antecedents and outcomes". *Entrepreneurship Theory and Practice*, 20(4): 61-76.

- Cavusgil, T. 1980. "On the internationalization process of firms". *European Research*, 8: 273-81.
- Czinkota, M. 1982. *Export Development Strategies: US Promotion Policies*. Nova York: Praeger Publishers.
- Jakobsen; De Voss. 2003. "Internationalisation of SMEs". *Observatory of European SME*, 4.
- Johanson, J.; Valne, J. 1977. "The internationalization process of the firm A model of knowledge development and increasing foreign market commitments".

 Journal of International Business Studies, 8(1): 23-32.
- Johanson, J.; Wiedersheim, P. 1975. "The internationalization of the firm From Swedish cases". Journal of Management Studies, 12: 305-322.
- Johnson, E. 2004. "Factors influencing the early internationalization of high technology start-ups: US and UK evidence". *Journal of International Entrepreneurship*, 2: 139-154.
- Jones, M. 2001. "First steps in internationalisation. Concepts and evidence from a sample of small high-technology firms". *Journal of International Management*, 7: 191-210.
- Knight, G.; Cavusgil, T. 1996. "The born global firm: A challenge to traditional internationalization theory". *Advances in International Marketing*, 8: 11-26.
- McDougall, P. 1989. "International versus domestic entrepreneurship: New venture strategic behaviour and industry structure". *Journal of Business Venturing*, 4: 387-399.
- McDougall, P.; Oviatt, B.; Shrader, R. 2003. "A comparison of international and domestic new ventures". *Journal of International Entrepreneurship*, 1: 59-82.
- McDougall, P.; Shane, S.; Oviatt, B. 1994. "Explaining the formation of international new ventures: the limits of theories from international business research". *Journal of Business Venturing*, 9(6): 469-487.
- McNaughton, R. 2003. "The number of export markets that a firm serves: Process models versus the born-global phenomenon". *Journal of International Entrepreneurship*, 1: 291-311.
- Moen, O. 2002. "The born globals: A new generation of small European exporters". *International Marketing Review*, 19(2): 156-175.
- Moen, O.; Servais, P. 2002. "Born global or gradual global? Examining the export behaviour of small and medium-sized firms". *Journal of International Marketing*, 10(3): 49-72.

- Oviatt, B.; McDougall, P. 2005. "The internationalization of entrepreneurship". *Journal of International Business Studies*, 36: 2-8.
- Oviatt, B.; McDougall, P. 1999. "A framework for understanding accelerated international entrepreneurship". A: Rugman, A. M.; Wright, R. W. (ed.), Research in Global Strategic Management: International Entrepreneurship, page. 23-40. Stanford: CT: JAI Press.
- Oviatt, B.; McDougall, P. 1997. "Challenges for internationalization process theory: The case of international new ventures". *Management International Review*, 37(2): 85-99.
- Oviatt, B.; McDougall, P. 1995. "Global start-ups: entrepreneurs on a worldwide stage". *Academy of Management Executive*, 9(2): 30-43.
- Oviatt, B.; McDougall, P. 1994. "Toward a theory of international new ventures". *Journal of International Business Studies*, 1st Quarter, page. 45-64.
- Reid, S. 1981. "The decision-maker and export entry and expansion". *Journal of International Business Studies*, 12(Fall): 101-111.
- Rennie, M. 1993. "Born global". *The McKinsey Quarterly*, 4: 45-52.
- Rialp, A.; Rialp, J.; Knight, G. 2002. The Phenomenon of International New Ventures, Global Start-ups, and Born Globals: What Do We Know After a Decade (1993-2002) of Exhaustive Scientific Inquiry? Working Paper. Universitat Autònoma de Barcelona.
- Roberts, E.; Senturia, T. 1996. "Globalizing the emerging high-technology company". *Industrial Marketing Management*, 25: 491-506.
- Servais, P.; Rasmussen, E. 2000. *Different Types of International New Ventures*. Working Paper. Academy of International Business Annual Meeting.
- Wicramasekera, R.; Bamberry, G. 2001. *Born Globals within the Australian Wine Industry: An Exploratory Study*. Working Paper n. 1/01.
- Zahra, S.; George, G. 2000. "International entrepreneurship: the current status of the field and future research agenda". A: Hitt, M.; Ireland, R.; Camp, M.; Sexton, D. (ed.), *Strategic Leadership: Creating a New Mindset*, page. 255-288. London: Blackwell.
- Zahra, S.; Ireland, R.; Hitt, M. 2000. "International expansion by new venture firms: international diversity, mode of market entry, technological learning, and performance". *Academy of Management Journal*, 43(5): 925-950.

Strategies, organisational structures and

key factors for the international success of catalan enterprise: an international comparative study

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Project background

The internationalisation of business is an issue that has been arousing a great deal of interest for quite some time now among public administrations, academic research bodies and companies themselves, due to its importance in fomenting economic growth and potential it offers to the structure of our enterprise.

In recent years, different public administrations have carried out initiatives to increase the internationalisation level of enterprise, (such as; the Plan for the Internationalisation of Catalan Enterprise 2005-2008 promoted by COPCA- Catalan Administration), developing specific programs to back this initiative both in Catalonia and Spain, as well as in the EU Member States. In academic circles, the internationalisation of enterprise has also become established as an issue for scientific research and the number of scientific studies carried out in this field here is growing considerably, just as it is at national level. (Canals, 2004; Rialp i Rialp, 2005).

Most notably it is Catalan enterprise in general and especially those who have received awards from COPCA for export achievement from 1983 to the present that, in our opinion, represent an outstanding business segment, embodying the aims and effects of being able to appreciate what, from the viewpoint of structural and organisational strategic orientation, the key factors for success at international level are, as amply and objectively demonstrated by these companies. Therefore, a strictly defined research work, which looks into these "winning" companies, who have triumphed in their respective internationalisation races, should bring out a series of results which provi-

de a number of lessons and success stories. These lessons are of great interest, both to public administrations, which back internationalisation, (such as COPCA in Catalonia), as well as to enterprises that have yet to embark on their adventure overseas or who wish to breath more life into operations and with greater success.

Here we ought to mention that this research project, of which a short preview is given below, fits into a broader and well founded line of research into the internationalisation of enterprise undertaken by senior researchers involved in this undertaking and which has given rise to a significant number of scientific publications of late, both nationally and internationally: (Rialp, Axinn & Thach, 2003; Rialp, Rialp & Knight, 2005; Rialp, Rialp, Urbano & Vaillant, 2005; Rialp & Rialp, 2005). Moreover, this new project includes the singularity of being able to form part of another, broader and more comparative research work at international level, where field work is taking place with the same goals in mind and methodology to analyse other "Champions of internationalisation" abroad, although still focusing on a size and business structure similar for those cases comparable to Catalonia. The international comparative study areas chosen are namely; Finland, Denmark and the region of Pavia in Italy).

Description of the research project in progress

Project objectives and structure

The main goal of this project is, via the application of quantitative and qualitative techniques, to research into the key factors behind the international success of a select group of Catalan companies, that in most part have been awarded with different prizes by the Generalitat of Catalonia (Catalonian government) to acknowledge their export achievements and processes of internationalisation, from the early eighties until the present. The successful experiences of these Catalan enterprises will be compared to those of companies from other European countries/regions of a similar size and structure to Catalonia; Finland, Denmark and the region of Pavia, Italy), which too have been awarded fro export achievements.

The idea here is thus, to systematically identify and compare internationalisation strategies, forms of international organisation and results achieved in foreign markets by both Catalan and foreign companies, which have both been evaluated and recognised publicly. We believe in particular that it is of great interest, both in terms of a purely academic approach as well as from a business and industrial policy, to be able to recognise the existence of a pattern of internationalisation or of an international behaviour pattern, which may be drawn out and which is also clearly differentiable as followed by this type of enterprise in relation to the rest of the business community, within a pre-defined geographical area.

The analytical part of the study is structured into three major blocks:

- 1) The first identifies and analyses the following key aspects linked to international business processes and strategies of the chosen Catalan companies and includes, among others:
- Profile of basic features of Catalan companies, (strategic market orientation, size, sector etc.)
- Dynamic decision making and action patterns in terms of choice of products -operations/technologies-markets (domestic and foreign)
- Design and execution of the most relevant international strategies at international level
- More efficient internal organisation systems for foreign trade, (optimum organisational structures to enter and penetrate international markets, processing of relevant information, etc.)
- Establishment of alliances and other distribution formulae that strengthen and intensify the internationalisation and/or globalisation of a business.

Results achieved in international markets and future expectations.

2) The second block will take a more in depth look at a series of outstanding examples of internationalised Catalan companies from which a number of lessons can be learned, both from an institutional and a business management perspective, example of some of which are given below:

At institutional level:

- Importance, obligations and needs for backing Catalan enterprises in their internationalisation phases
- Implications of industrial policy making at localregional level

At the level of business management:

- Know how to better plan, apply and direct of develop a potentially successful internationalisation strategy.
- Definition of good international management practices for internationalised firms and/or those not yet internationalised, but with an interest in doing so in the short term.
- 3) The third and last block makes a systematic comparison of the above points between Catalan companies analysed and their European counterparts in three areas, which show many similarities to Catalonia, namely; Finland, Denmark and the Italian region of Pavia. It should be pointed out that possible development of this third comparative dimension of the project at international scale will essentially rely on the availability and comparison of necessary information, (still being compiled), and above all on the current state of progress of each parallel research project as commissioned by our organisation to a number of foreign researchers, who are all engaged in working on their part of the project in the above mentioned lands.

Project beneficiaries

As for possible net beneficiaries, due to the fact that this work is focused essentially on Catalan enterprise, as well as involving an international comparison, we consider it logical to assume that the prime beneficiaries of this project would be first and foremost the Catalan business community, the main players in the process of internationalisation. After this group, then a number of public and/or private institutions whose work revolves around supporting foreign business activity will also benefit. The project will notably generate results and therefore proposals for action which should prove highly interesting in terms of dynamism and improving the management of Catalan firms from

the viewpoint of their international competitiveness. This will logically include creation of a body of knowledge based on practical information on how to plan and run a process of internationalisation.

References:

- Canals, J. (2004): "La internacionalización de la empresa espanyola". *Papeles de Economía Española*, nº 100: 249-263.
- Rialp, A., Axinn, C.N. & Thach, S.V. (2003): "Exploring channel internalisation among Spanish exporters", International Marketing Review, 19 (2). 133-155.
- Rialp, A. y Rialp, J. (2005): "Las formas actuales de peneteración y desarrollo de los mercados internacionales: caracterización, marcos conceptuales y evidencia empírica en el caso espanyol". En *Claves de la Economía Mundial*, 2005, Madrid: ICEI-ICEX.
- Rialp, A., Rialp, J. & Knight, G.A. (2005): "The phenomenon of early internationalizing firms: what do we know after a decade (1993-2003) of scientific inquiry?", *International Business Review*, 14(2): 147-166.
- Rialp, A., Rialp, J., Urbano, D. & Vaillant, Y. (2005): "The born-global phenomenon: a comparative case study research", *Journal of International Entrepreneurship*, 3(2):133-171.

The Catalan Agri-food industry

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The agri-food industry is of great importance within the structure of Catalan enterprise. Indeed, it is the first industrial sector in terms of sales, contributing just over 17% of the total, followed by the chemical industry, with 15.6%. In terms of the workforce it employs, it can be seen that with some 12.4% of Catalan workers in the sector it has a lot of influence. This sector is also a major force in Spain itself, contributing 23% of output and employing 20% of the workforce in the Spanish agri-food sector.

As for its evolution, the data in the table below illustrate the highly significant rise in sales, where in 2004, these reached the figure of 22.5%, more than from the mean average figure obtained from the period 1998-2003. In line with the rest of the industrial sector, there has been a drop in both the workforce and work places during the same period. To be precise, there are 1,000 employees less than in 1998 and nearly 20% less work places than from the mean obtained from the previous 6 years. Most work places, some (77.2%) are small, (employing less than 20 people)2. Only 2.8% have more than 100 workers, but contribute 89.7% of the sector's volume of business³. That said, the current trend, due to a process of concentration, is on the increase for larger work

Table 1 Catalan agri-food industry figures							
Year	Sales (Thou. €)	Workforce (Thou.)	Work places	Output			
1998	11.919,1	78,3	4.413	152,2			
1999	13.344,0	79,2	4.445	168,5			
2000	13.235,4	79,8	4.260	165,9			
2001	14.893,1	76,1	3.337	195,7			
2002	14.149,8	75,0	3.110	188,7			
2003	14.871,2	75,0	2.821	198,3			
2004	16.828,4	77,3	2.989	217,7			
04/98-03 (%)(1)	22,5	0,1	-19,9%	22,2			

(1) Percentage variation from 2004 with respect to the mean average in the period 1998-2003. Source: Own data based on IDESCAT.

places and a reduction is being observed in the smaller ones.

Within the whole, it is worth mentioning the importance of certain branches in the sector, such as the meat industry, which contributes more than 30% to the total sales of the sector. This is followed by the industry for other foodstuffs and that of animal feed, which account for nearly 20% and 12% respectively.

Table 2 Foreign trade figures for the Catalan agri-food industry (in thousands of €s)									
Year	Exports	Variation (%)	Imports	Variation (%)	Balance of payments	Variation (%)	Coverage rate (%)		
1998	2.231,8	3,4	2.662,9	9,4	-431,1	56,9	83,8		
1999	2.285,8	2,4	2.743,0	3,0	-457,2	6,1	83,3		
2000	2.664,6	16,6	2.995,8	9,2	-331,2	-27,6	88,9		
2001	3.026,8	13,6	3.533,8	18,0	-507,0	53,1	85,7		
2002	2.983,7	-1,4	3.621,0	2,5	-637,3	25,7	82,4		
2003	3.229,6	8,2	3.654,2	0,9	-424,6	-33,4	88,4		
2004	3.423,6	6,0	3.916,2	7,2	-492,6	16,0	87,4		
2005	3.609,1	5,4	3.964,1	1,2	-355,0	-27,9	91,0		

Source: Own data based on IDESCAT.

Foreign trade sector figures illustrate an increase in trade with markets abroad, (see table 2), although the main destination for produce is the home market, (just over 80%). The overall balance of the agri-food industry is in the red, despite undergoing reduction in the deficit of late, due to an increase of exports, which managed to outstrip imports. This is indicative of an improvement to the overall competitive position of the agri-food sector, as backed up by evolution of its index of revealed comparative advantages, which has gone from -9.6 in 1998 to -5 in the last year, 2005.

In international markets, the EU member states represent the main destination for Catalan agri-food products, especially France (33%), Germany (17%) and Italy (17%). Sales to the rest of the world total some 6%, with the comfortably the major market here being the United States. Thus, there is a clear concentration of exports to European markets, which are becoming increasingly saturated. Nevertheless, in recent years, Catalan products have also broken into non-European markets, such as South Korea or Mexico, because a prime goal is to diversify export markets, moving into those with the greatest growth potential.

In terms of imports, intra-community purchases account for some 20% of volume in the sector, although in the last few years, they have lost ground from non-European imports. Catalonia's prime EU supplier is France with (28%), but also worth a mention are Germany, The Netherlands and The United Kingdom⁴. As for imports from outside the EU, trade with Argentina is far by the greatest with (27%), followed by Brazil (7.6%), China (5.4%), USA (2.5%) and Indonesia (5.4%).

One of the major challengers facing the agri-food industry at present is that of dealing with a series of demands that have come about due to harmonization of legislations affecting goods for human or animal consumption, which are having repercussions both in the facilities as well as in the handling of the product, staff and raw materials used. In the following summary we have highlighted a number of these recently legislated areas:

Health: Since July 2003, companies must be responsible for the safety of foodstuffs. All food industries have to be able to trace and identify firms and individuals who have supplied them with foodstuffs, feed, animals for production or any substance that is inclu-

ded in manufacturing. The company has to be able to trace the origin of all foodstuffs and feeds to thus be able to ensure the entire production, manufacturing and distribution process is under control.

Environment: Environmental protection is a key factor when making a productive investment. Processes have to be carried out taking into account the need to keep spillage and waste to a minimum and/or take advantages of sub-products.

Sales and quality: The administration has made a number of demands concerning labelling and content of produce, as well as improvements in quality, which has made it necessary to invest heavily to improve these aspects of the goods.

All the above obligations imposed by the administration have to be accompanied by mechanisms that can lead to opportunities being created in the future instead of being perceived as simple restrictive legislation. This means they can lead to the creation of elements that must to contribute the added value of a product. It is therefore understood that the aim in the future is to create a number of productive strategies along the lines mentioned, in order to shape and hone the future competitiveness of the sector.

One primary strategy is that of differentiating products based on a higher quality. Such could be the case of foodstuffs like olive oil, wines and cavas of protected designated origin or indeed specific varieties⁵, as a vehicle to raise market share with a higher unit price. World markets are currently exhibiting trends in which certain sectors of demand for relatively cheap, average quality products are already well covered.

Nevertheless, there still remains an important demand from those who insist on quality and who value such factors as protected designations of origin. Production quality is a tool that can, on the one hand help the Catalan sector consolidate its presence in local markets, which are highly differentiated from one another, and which are often saturated with cheaper products lacking in quality guarantees. On the other hand, quality products oblige producers to strengthen diversification of Catalan agri-food exports towards markets with growth potential.

As such, agri-food companies making differentiated and quality products have to work to improve traditio-

nal farm produce, (examples of which would include the spring onions of Valls, Montserrat tomatoes or tomatoes on a string)⁶. Along these lines, it is necessary that the quality and traceability of these products be made known using mechanisms such as branding, labelling or certification; elements which all add value to a product and which have yet to be fully exploited. It is also true that consumers increasingly demand products comply with traceability; a vehicle, which permits them to choose the foodstuff which best, satisfies a particular need, as well as making it easier to follow back to its origins.

Furthermore, mention should be made of the growing concerns of consumers in health related matters. This means that information and the spread of checks on and volume of checks on foodstuffs carried out serve to increase confidence among the public in aspects of health and safety of produce. Attention is drawn here to certain reactions (such as drops in consumption) due to consumer mistrust in cases such as mad cow disease, swine pest or avian flu, all of which have been responsible for causing major losses and readjustments in the sector.

Another strategy that is going to come to the fore in the near future is that related to hybrid products, which fall between the area of cosmetics and food. This represents a diversification of production towards new food products that can contribute effects similar to those of cosmetics by adding certain substances given foods.

It can be seen that all strategies discussed involve a strengthening of investment and research as a vehicle, which leads to a great competitiveness in the sector. This is why is should be pointed out that, given actual production structure, dominated by SMEs, R+D activities still account for little. Therefore, it is necessary to reinforce them within the companies themselves, at the same time fomenting collaboration with public research organisations.

Another way of improving competitiveness is that of clustering of companies, which as mentioned, is currently taking place in the sector. This practice is not worthwhile just in the context of improving margins due to scale economies, but also plays an important role in improving the capability to access a broader range of markets, through shared logistics, distri-

bution, and marketing which all help brand recognition. This is about standing up to the bargaining power of the major distributors, who force products on to the market with a bigger brand image, which leaves less products less well known to consumers cast aside, due to their limited advertising potential⁷.

All the same, reinforcement of vertical integration processes between agriculture, agri-food and distribution also positively contributes to improving competitiveness in the sector, as it must be remembered that vertical integration processes reduce transaction costs and improve coordination, internal controls and access to services and infrastructures of the integrated activities themselves.

Lastly, the agri-food industry comprises of a series of activities of a broad and diverse nature. Therefore, in order to set down the guidelines for the future recommended herein, it is necessary to divide sector activities, which exhibit a higher degree of maturity from those showing a significant level of innovation.

In terms of the former group of companies referred to in the above paragraph, as they begin to find it more difficult to achieve growth in demand, (especially in industrialised nations⁸) it is more advisable to introduce innovations achieved through R+D+i investment, with an aim to putting new products on the market with a higher added value. Along with these, we can include the so called "health" or "functional" products⁹, such as yoghurts and other dairy products which contain fibre or are recommended for keeping down cholesterol, as well as juices and other stimulating and enriched beverages, or indeed low-calorie foods.

As concerns the second type of company, current sector activities, which provide the greatest scope for innovation, include the preparation of ready-made meals, sauces and condiments, pre-refrigerated pizzas and pastas or microwave/oven ready frozen foods. These are all growth areas unlike those of the first type and are undergoing a rise in demand¹⁰. The strategy of these firms has to be that of diversifying their products as a way of raising both production and sales.

- 1. Often from primary processing and rurally located, which is the driving force of industry in these areas.
- 2. Such companies include: Nestlé España S.A, Corporación Agroalimentaria S.A, Danone S.A, Cargill Espanya S.A, Cobega S.A, Moyresa, Panrico, S.A, Corporación Alimentaria Guissona S.A, S.A Damm, Corporación Borges S.L.
- **3.** It should be pointed out that in the last 5 years, the latter 2 states have lost ground in the total of intra-community purchases, to the benefit of Germany and Italy.
- **4.** Along such lines, the EU has its own rules for protected designated origins and other quality products. There are now 727 regional products and specialities with a protected designated

- origin registered within EUquality systems, a figure which continues to grow. Spain has at present 96 agri-food products registered.
- **5.** Competitiveness in the agri-food sector is a key element for the develpopment of the Catalan farming sector. According to information from the DARP (Catalan Government Department for Agriculture and Fisheries) in 2003, this industry consumed between 60 – 70% of all primary fish and agricultural produce of Catalonia.
- **6.** In this context, it is more difficult for small producers to find their way into the larger distribution and sales channels.
- **7.** Due to the fact that interest-elasticity of products from these activities is relatively low. At

- the same time, economic expansion cycles have little impact on the demand of these mature activities.
- **8.** The term used refers to the inclusion of innovations (from the fields of medicine and biology) to stable consumer products, which reduce the risk of certain diseases or help a bodily function beyond that simply provided by its standard nutritional components. Such would be the case of foods with added fibre. aminoacids, unsaturated fatty acids, phytosterols, vitamins, minerals and antioxidants. All these push up the unit price of the original product.
- **9.** According to data on domestic food expenditure for 2004, readymade and ready to serve meals were the products with the greatest growth in this food industry segment.

Basic features and recent developments in Catalan foreign trade

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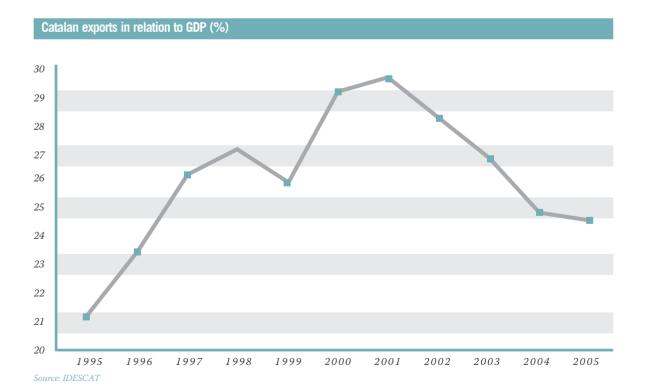
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When it comes to analysing an economy, foreign trade flows represent one of the most outstanding barometers, especially when the environment is becoming increasingly globalised, and where economic growth perspectives and the increase in wealth of countries and economic regions rely largely on their ability to compete in international markets. It is for this reason that basic data on the two-way trade of the Catalan economy can be said to compare favourably with respect to other communities within Spain, although this does not mean it lacks weaknesses that have to be taken into account.

1. Importance of exports in relation to Catalan GDP and degree of economic openness

In 2004 Catalonia achieved a very significant ratio of exports to GDP of 25%, and in 2005 this dropped only a little. Even though, this comparison, which provides an introductory insight into the degree of openness of economies to international markets, may only proffer limited information in relation to the contribution of this index to the creation of wealth, it does provide an indication of the scale of foreign trade and hence allows us to get an overall picture of the scale of this flow throughout the economy as a whole.



Looking from a broader, short-term angle, it is possible to observe that the ratio of exports to GDP embarked on a major upward trend throughout the mid-nineties, which lasted until 2001. In this time the ratio grew from 21.3% in 1995 to 29.9%, a ten year high for the period 1995-2005. Following this, a major change was experienced to break the trend in which three consecutive financial years returned a drop of nearly 5 percentage points, making it clear to see the negative dynamic into which this index has moved during the last few years. This trend has carried on into 2005, although less acute, due to the fact that Catalan exports in terms of current value rose by 7.1%, a percentage just below that of GDP growth calculated on current price levels.

When put next to other European economies, the ratio of Catalan exports to GDP reflects similar trends to those of countries such as The United Kingdom, France, Italy and indeed the rest of the Spanish economy, which move between 25-27% in this index. Nevertheless, this is far below the figures for states such as Belgium, Denmark or Germany where differences are noticeable, and where the above ratios reach heights of 85%, 48% and 36% respectively of exports in relation to GDP.

The index most usually used to assess the degree of openness of an economy, looks at the sum of foreign trade, i.e. exports and imports, in relation to GDP. In 2005 the Catalan economy returned a ratio of 64.7%, given that imports rose to nearly 40% of GDP. The above-mentioned percentage is clearly above that of the French, Spanish, Italian and British economies with values of between 51% - 56%. At the other end of the scale are Germany, Denmark and Belgium, where the latter more than doubles the Catalan figure with 167%, and where the Danish and German economies register 88% and 67% respectively.

Therefore, Catalonia has a significantly higher degree of economic openness than many major European powers, although this figure is derived mainly from the level of imports, which reach a figure clearly above those of exports, with all the logical implications for the balance of payments. This figure also deteriorated appreciably in 2005, as imports leapt by 12.5% compared to just 7.1% in exports at today's prices.

2. Contribution of the foreign trade sector to economic growth

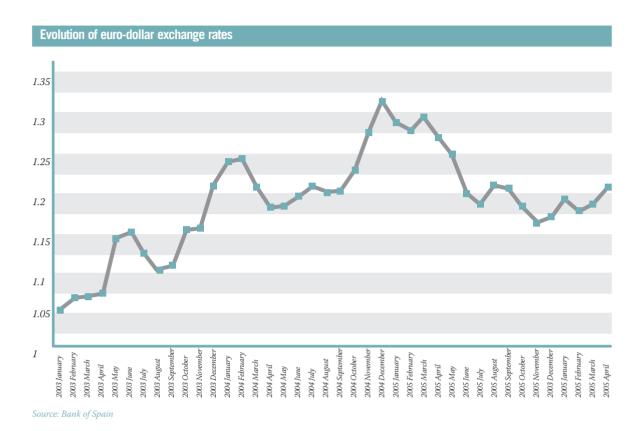
In recent years, foreign trade has produced a series of adverse repercussions within the Catalan economy.

For the financial year 2004, the net balance of payments for foreign trade knocked 2.4% off Catalan GDP growth, whilst in the two years prior to this a similar situation was observed, although with somewhat more moderate figures, to be precise; -0.6% in 2003 and -0.2% the year before. Should this trend continue, figures for 2005 would be expect to return an even more significant negative balance of payments in terms of foreign trade, with its all its consequences on Catalan GDP, given that once again imports comfortably outstripped exports last year.

Contrary to the above, in 2000 and 2001, this component of overall demand was in a much more favourable position, as far as balance of payments were concerned, actually contributing 1.1% and 1.4% respectively to the growth of the Catalan economy. This implies that the dynamic of this variable has been seriously affected since 2002. It seems clear enough that this is linked the a major surge in imports from 2002 onwards combined with a loss in export revenue due to falling competitiveness brought about by the rise in the exchange rates of the Euro against the US dollar, among other factors.

The reality is that in January 2002, when the Euro came into circulation, the average exchange rate was 0.883 dollars per euro, which rose to an average of 0.946 for the financial year, to leave an important rise in value of the European currency throughout the year. By 2003 the average exchange rate had hit 1.131 and the following year the upward trend continued to rise, ending the year at an average of 1.244 dollars per Euro, a tendency underlined by figures for the first quarter of 2005 which saw values around 1.3 dollars, although later in the year the dollar regained ground to finish the month of December at an average of 1.186 dollars/Euro.

In short, the depreciation of the North American currency, notable since the introduction of the Euro until the first quarter of 2005, has had a severe effect on European exports and more specifically on those from Catalonia. At the same time it has caused a major rise in imports from dollar trading areas, due to the positive effect on exchange rates on competitiveness of products produced in areas using or pegged to this currency. From the point of view of its influence on the balance of payments and GDP growth, the consequence of this pattern of exchange rates has led to foreign trade deficits making a clearly negative impact on the Catalan economy from 2002-2005.



Despite the relative stability shown by dollar/Euro rates since mid 2005, which leads analysts to expect a more favourable development in 2006, it is necessary to remember there are still a number of negative factors that will still be a major influence on the conditions controlling foreign trade, such as fuel price rises – which effect both Catalonia as well as rest of Spain heavily, rises in family consumption, which puts more pressure on imports, loss of competitiveness of the Catalan industrial community due to strong competition coming from not only newly industrialised nations, but also the states of EU expansion.

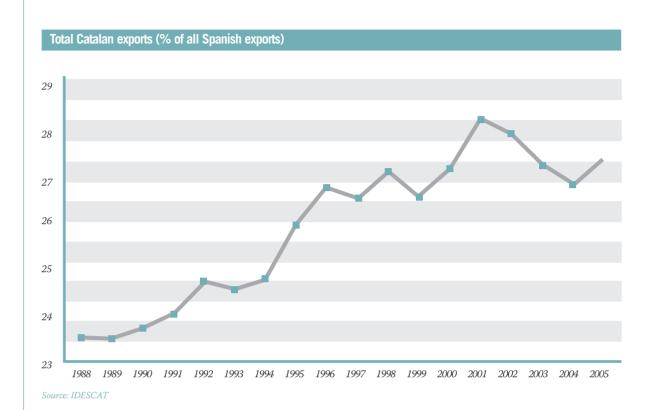
3. Catalan involvement in Spanish foreign trade Catalonia's participation in Spanish foreign trade far exceeds its proportional demographic and economic weight. The population resident in the Principality at the beginning of January 2005, (last available data) accounted for some 15.9% of the state's population, though it contributed some 18.8% of GDP, with exports attaining 27.4% of Spain's total. Thus the export data for Catalonia comfortably outstrip those of the national average, as does the index of economic openness.

If we take export figures from all Spanish regional communities over the last 10 years at today's prices, Catalonia has been at the top for the entire decade,

followed by The Community of Valencia and then that of Madrid. In the financial year for 2005 Catalan exports totalled more than double the amount of the second highest exporting region, (Valencia). Indeed, this has been the case over the last decade.

The reality is that the importance of Catalonia in terms of Spanish exports as a whole continued to rise from the end of the eighties until 2001, whilst from 2002 – 2004 the trend started to change, and Catalonia's contribution to the whole went into decline, even though this trend was reversed in the financial year for 2005. This leads to the conclusion that at first, the negative repercussions of the rise in value of the Euro had a greater effect in Catalonia than in other regions that concentrated their exports in less vulnerable geographical areas or sold products less sensitive to this change in rates. This trend could, to a certain extent, be put down to differences in production structures among certain Spanish regional communities too.

In the latest financial year Catalonia has registered a rise in exports far above that of the national average, as mentioned earlier. That said, other regions also registered greater export activity. The top seven autonomous regions, (all of which contributed more than 5%), accounted for some 81% of Spanish exports. Worth



mentioning among them are Galicia, with a rise in 15%, whilst Andalusia and Madrid experienced rises of over 7%, similar to that of Catalonia. The Basque Country saw above national average growth, whilst Valencia saw a downturn of 2. 1% in exports in nominal terms, the biggest drop of any autonomous community.

Taking into account the patterns followed by exports in Spain's autonomous communities over a longer period, it can be seen that in general, those contributing a greater proportion of the Spanish total tend to be the most dynamic ones. By calculating the average accumulated export growth rate in the 10-year period from 1995-2005, in Spain as a whole there was an 8.2% rise at today's rates. Of all major exporting areas, Galicia stood out as being the most dynamic, with an annual accumulated rate of 13.3%, with Madrid, Catalonia, The Basque country and Andalusia growing above the state average, with 9%, 8.8%, 8.7% and 8.5% annual growth respectively.

On the other hand, Spain's second community in terms of export share returned accumulated annual growth figures of just 5.5%, far below that of the average for the state. As for the rest of communities, worth a mention too are the cases of Castile- La Mancha and Extremadura, which returned annual nominal growth rates of 9.9% and 10.7% during the ten year period from 1995-2005, thereby raising their

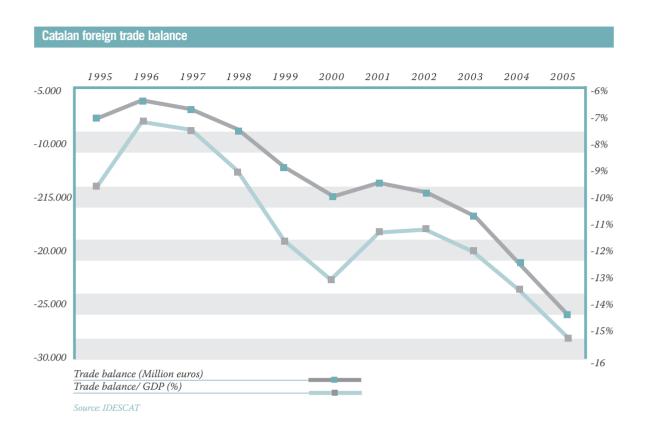
share in Spanish exports appreciably, although their contribution is still relatively low as a whole.

All in all, in the last decade Catalonia has shown a progression which demonstrates a dynamism in the field exports clearly above that of the Spanish average and indeed similar to other communities that head the table of export sales volumes. The two communities, which displayed most variation over the reference period, were Galicia, with a boom in exports and The Community of Valencia, which lost ground.

4. Trade balances

As mentioned earlier, Catalan trading in international markets has returned significantly high negative values, which have been consistently repeated in recent years in this Community. In 2005, the trade deficit reached 25.66 billion Euros, which represented a rise of 22.6% at today's values with respect to the previous financial year. Despite the underlying growth of this negative balance in foreign trade during the last decade, it is only since 2003 that it has become so appreciable.

If the evolution of the trade deficit is judged in relative terms alongside Catalonia's GDP, the overall progression can also seen to be really quite unflattering. In 2005, the value reached – a little over 15% of GDP – represented a 10-year high and added nearly 2 per-



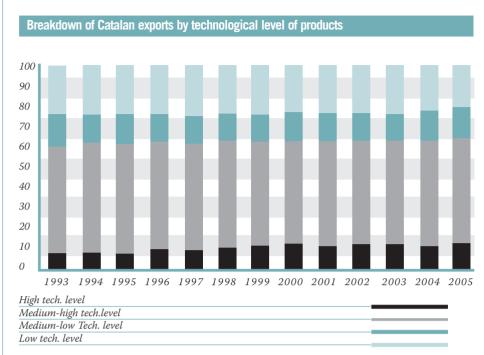
centage points to figures from the previous year. As for the period from 1996 – 2000, a considerable rise in the trade deficit can be appreciated, although in 2001 a clear improvement was made, leading to stable values in 2002. Nevertheless from 2003 on, the pattern has once again been of strong growth of this deficit, both in relative as well as in overall terms, to the point where record levels were reached in 2005. As a consequence of this, the data available shows up the unfavourable situation due to the Catalan foreign trade balance, in addition to the fact that its progression in recent years tends to suggest that the situation will prove difficult to turn around. As previously commented, there are a number of different structural factors which will continue to exert an influence to maintain this trend, which therefore make it hard to believe that the course set can be easily altered.

5. Export structure

The first thing to consider when looking at Catalan sales internationally is that of being able to accurately appraise the composition of this flow according to the technological level of the products exported. The following table illustrates a that a major proportion of goods are those classified as medium-high tech, and furthermore, it should be taken into account that for all the financial years included in the study, year after year, this group makes up over 50% of total exports.

On the other hand, the area of low-tech goods makes up the second most important group, with over 20% of exports. To be precise, in 2005 products coming in this category comprised some 35.1% of total export sales, whilst those of a medium-high technological level registered 52.5% of the total, with high-tech goods accounting for the remaining 12.4%. It appears to be clear enough that the latter of the above threes groups, namely high-tech exports, which imply a higher proportion of added value, still contribute relatively little to the total of exports. Here the driving export force is occupied by goods with a medium-high technological level, due to the importance of certain branches of Catalan industry for products normally included in this category with this level of technological processing.

From the point of view of dynamics, the changes that the composition of Catalan exports have undergone in recent years in terms of their technological components, show few major variations, which is to be expected given the structural conditions of the economic base of the community, which tends to produce changes which take place very gradually over time. That said, at least some increase can be detected in the relative importance achieved by high-tech goods, given that, between 1993 – 2005 their share rose from just 7.7% of total exports to 12.4%. This rise has

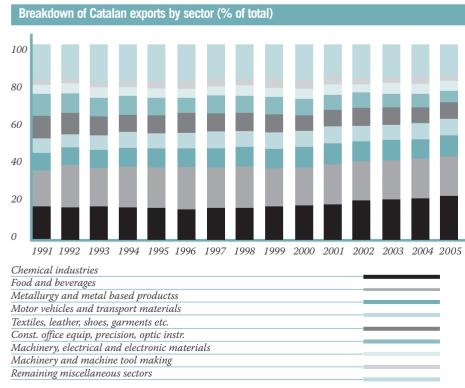


Source: IDESCAT

been proportional to the drop in exports from the low-medium technological product segment, which over the same period dropped from 39.5% of total exports to 35.1% in the financial year 2005.

A look at the breakdown of exports according to the different areas of activity, reveals that the major influence of the group classified as medium-high tech. largely comes down to the contribution in export flow

from specialised industrial products included in this segment, such as those of the chemical and transport material sector. The downside is that exports of textile products, garments, leather goods and footwear go a long way to accounting for losses in low technology level goods – some 4.4% of their share of the total value throughout the period under study. A similar trend can be seen in the machinery and mechanical apparatus sector which, along with the textile sector, has suffered the greatest recession in recent years.



Source : IDESCAT

The extensive margin of Catalan exports (1988-2004)

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Jordi Puig Gabau

The Catalan export sector has been characterised by a quite considerable dynamism during the last years of the twentieth century and the beginning of the current one. Indeed, the total value of Catalan exports from 1988-2004 grew by an average accumulated rate of 11.8%, which means that in this period exports multiplied by a factor of nearly six. The overall aim of this study, of which this paper is designed to serve as a presentation of results obtained until the present, is to discern if part of this growth is due to the fact that Catalonia has begun to export new products, products not previously exported; the so called "extensive margin" or whether it is simply exporting more of the same type of products as before; known as the "intensive margin" or alternatively, if it is now exporting more expensive products, implying trading higher quality products, known as the "quality margin".

This work aims to analyse in depth statistics related to Catalan exports in order to uncover the comparative importance of the growth of the extensive margin. Following the methodology of Kehoe and Ruhl (2003), our measurement of the extensive margin will take into account the relative importance of goods in trade relationships between Catalonia and other states. With the aim of establishing an absolute minimum value, below which a commodity cannot be traded, the exercise we will undertake will consist of calculating which proportion of the value of Catalan exports from 2004 corresponds to the total of; firstly, products of a lesser export value, that represented up to 10% of the year 1988 and secondly, all those products that were

exported in the year 2004 and not recorded as being exported in 1988. In other words, the calculation of our measurement of the growth of the extensive margin from 1988-2004 excludes all those major export values, which accounted for 90% of all Catalan exports to respective trading partners in 1988.

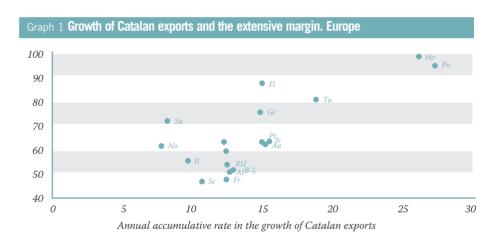
Reference data for the study is based on the "Estadísticas de Comercio Exterior de España" (*Spanish Foreign Trade Statistics*) published by Spain's Inland Revenue office. The information compiled comes from annual figures and is broken down provincially and by products according to the integrated EU trade and tariffs classification or TARIC. For the purposes of this work, we have taken the break down of products used in the Harmonized System (six digits), which takes in a maximum of 5,224 products.

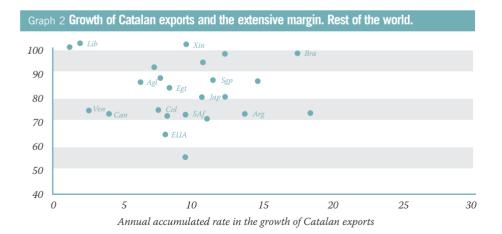
The results obtained are indicative of a major growth of the extensive margin of Catalan exports for all countries studied that make up 91.11 and 91.37 % of all Catalan exports for 1988 and 2004 respectively. All values for the growth of the extensive margin of exports are situated between a minimum of 46.48% (Sweden) and a maximum of 98.51 (Hungary). One of the aims of our research in the future will be that of comparing these results which refer to the Catalan economy with those of other European economies to be able to make an appraisal of whether the growth in Catalonia's extensive margin is similar to that experienced by other states or regions in the area.

Table 1 Growth of the ext			
	(%) Share 1988	(%) Share 2004	Extensive margin (%)
World	100	100	35,12
Total represented	91,11	91,37	
Europe	69,67	76,36	
European Union	66,17	71,15	37,69
Belgium & Luxembourg	2,70	3,12	51,29
Germany	10,80	12,24	50,70
Austria	0,89	1,43	62,14
Denmark	0,76	0,82	59,52
Finland	0,34	0,52	87,20
France	17,98	19,59	47,40
Greece	1,07	1,65	75,29
The Netherlands	3,42	3,63	63,13
Eire	0,26	0,43	62,99
Italy	14,46	10,56	55,13
Portugal	5,69	8,86	63,16
United Kingdom	6,91	7,55	53,70
Sweden	0,90	0,76	46,48
Od E G		5.01	
Other European States	3,50	5,21	00.51
Hungary	0,12	0,84	98,51
Norway	0,35	0,19	61,52
Poland	0,13	1,00	94,81
Switzerland	2,18	1,28	71,55
Turkey	0,72	1,90	80,67
Rest of the world	21,44	15,02	
Africa and Middle East	6,37	3,98	
Saudi Arabia	1,12	0,35	69,98
Algeria	1,29	0,56	81,49
Egypt	0,50	0,30	79,43
United Arab Emirates	0,26	0,39	82,00
Lebanon	0,27	0,15	68,98
Libya	0,20	0,04	95,99
Morocco	1,15	1,23	76,08
South Africa	0,65	0,46	69,42
Tunisia	0,93	0,50	82,89
1 umsta	0,73	0,30	02,07
NAFTA	7,21	5,36	
Canada	0,95	0,29	69,58
EUA	5,47	3,12	62,10
Mexico	0,78	1,95	70,31
T (* A *	1.46	1.70	
Latin America	1,46	1,79	CO E 4
Argentina	0,35	0,46	69,74
Brazil	0,38	0,83	92,29
Columbia	0,39	0,21	71,13
Chile	0,33	0,29	68,11
Venezuela	0,89	0,22	70,81
Asia-Pacific	6,41	3,88	
Australia	0,60	0,42	53,66
South Korea	0,43	0,37	88,79
Hong Kong	0,76	0,39	86,97
India	0,23	0,24	91,87
Japan	1,07	0,89	76,09
Singapore	0,29	0,27	82,40
Taiwan	0,87	0,17	94,31
China	1,28	0,91	95,72

Albeit in a preliminary fashion, we would like to tackle a number of issues concerning those factors determining the extensive margin. From this angle, our research would suggest that there is a need to distinguish what is happening with respect to European nations, (which account for nearly 80% of Catalan exports) and the rest of the world. Here it seems clear that in Europe, the quicker exports have grown to a given country, then by the same token the greater the growth in the extensive margin has proved to be. (See graph 1). This has not been the case for countries in the rest of the world. (See graph 2). There are countries, such as Mexico,

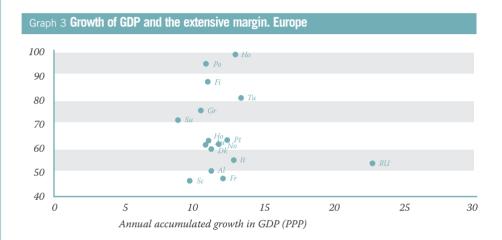
where exports have grown rapidly (18.4%) and where the extensive margin growth has been moderate (70.31%) or Brazil, where export growth is very similar, but where there has been a considerably higher growth in the extensive margin of 92.29%. Other countries such as Taiwan and Venezuela both return figures of export growth far below the average, but with vastly different extensive margins, (94.31 and 70.81% respectively). The breakdown of countries in the rest of the world into geographical area does not allow any light to be shed on possible patterns nor correlations between these two variables.

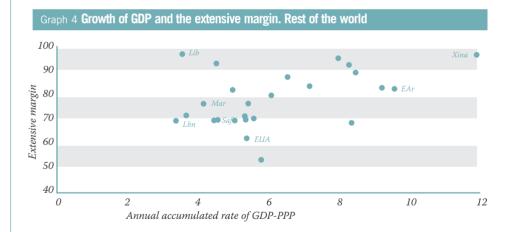


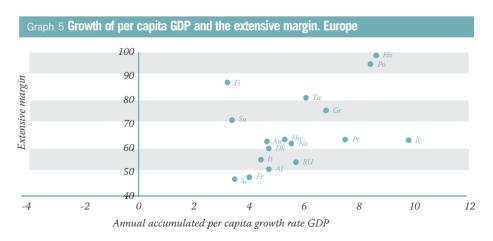


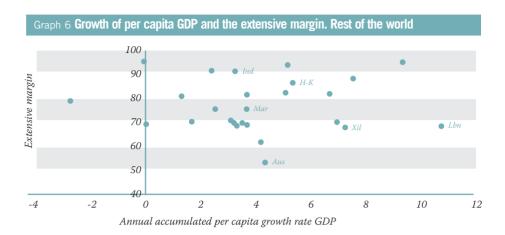
Further to this, it would be interesting to look into the influence of economic growth of the different trading partners of Catalonia in the diversification of trade and growth of the extensive margin of Catalan exports. If we study the relationship between annual accumulated GDP (adjusted to spending power) and compare it to the growth in the extensive margin of Catalan

exports, no apparent relationship seems to come out in either Europe or the rest of the world, (see graphs 3 and 4). However, when it comes to per capita GDP growth, there does seem to be a correlation with the growth of the extensive margin for European states, (see graphic 5), but not so with the rest of the world, (Graph 6).

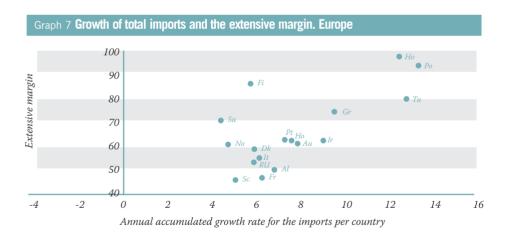


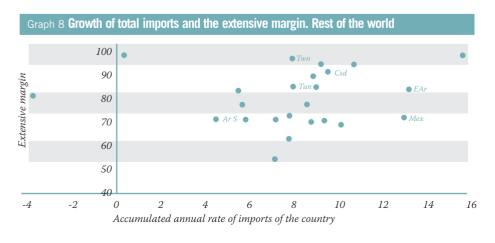






Last, but not least, we wish to study the influence of the growth of imports worldwide from each one of Catalonia's trading partners in the growth of the extensive margin of exports to each country. Once again here a positive relationship can be seen between these variables in the European states, (see graph 7), whilst this proves to be very tenuous for the rest of the world, (see graph 8). The two preliminary findings seem to be emerging from this study, which is still only at its half way stage. Firstly, the growth in the extensive margin of Catalan exports is significant, although it would need comparing with the figures to be obtained from other European economies in order to see whether the Catalan export pattern turns up any interesting peculiarities. Secondly, it is necessary to distinguish bet-





ween European economies and those of the rest of the world when contemplating factors, which determine this margin. Thus, while it appears clear that on the one hand, growth in the extensive margin of Catalan exports for each country returns a positive correlation with the growth in total value of Catalan exports to the country in question, the growth of the total of imports of the country and economic growth, on the other, it is difficult to infer a similar relationship with countries in the rest of the world. This con-

clusion is perhaps not remotely surprising if we take into account the huge difference in economic and institutional heterogeneousness between the two groups of countries.

References:

TIMOTHY J. KEHOE I KIM J. RUHL (2003) "How Important is the New Goods Margin in International Trade?" Federal Reserve Bank of Minneapolis, Research Department Staff Report 324

Future of the Regulatory framework:

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further or better, but anyhow different

Developments in the system of international trade relations in the last 20 years

In the last 20 years, the buzzword which has set the pace for the regulatory framework for international economic relations, specially in trade, has been that of "further"- further liberalisation, deepening, broadening, enlarging).

The time when this started could be pegged to a number of key accords and events such as a) the negotiations and passing of the Single European Act within the framework of the European Community (1985-86), and b) the start up of talks of the Uruguay round of GATT in 1986, which eventually finished in 1993-1994. This development began to speed up due to historical processes of decisive importance, most of which came to a conclusion between 1992-4. These include: a) policies of unilateral trade liberalisation in many developing nations, especially in Latin America: b) the setting up of processes of regional economic integration, such as MERCOSUR or NAFTA, which were a direct result of these policies; c) the race to close bilateral agreements of the European Community, (accompanied by the Member States in the accords that were nearer at hand and which went beyond the exclusive authority of the Community); d) the break up of the Soviet Block and the integration of the economies of which it comprised into the capitalist fold; e)Further bonding, (especially in Monetary Union) and expansion to include new members in the process of European integration.

The policy of "further" wears out

The policy of "further" began to show clear signs of being exhausted by the mid nineties.

The first sign was the resounding failure of negotiations held in the framework of the OECD with the aim

of signing a multilateral, (in reality plurilateral) investment agreement or MAI, between 1994 and 1998-1. The second sign could be taken as the difficulties to make headway in the process of WTO trade liberalisation following the ministerial level conference in Singapore in 1996, (failure of Seattle, mended in part in Doha, but only in quite unusual circumstances). The third episode is that of the inability to reach agreement on the subject matter and agenda of the Free Trade Area of the Americas or (ALCA/FTAA), a meeting whose failure only became common knowledge upon the failure of the Miami Ministerial Conference, despite originally being sold as a success in November 2003. Nevertheless, any informed observer with a critical eve would have been able to tell from the start that it was doomed not to succeed2. The fourth was the placing of the MERCOSUR agreement in a regulatory, low altitude plateau from 1995 onwards, once the first phase of removing regional block trade tariffs had been carried out³, which just went to confirm the apparently insurmountable difficulties experienced by Latin American sub-regional integration processes in achieving the goals they had once been commissioned to accomplish. Fifth and last was the inability to reach a deal between MERCO-SUR and the EU.

As for policies of EU integration, to many it seemed that its progress had no limits. This is why the accumulation of all kinds of failures in 2005 has caused such a stir. These range from; institutional failures such as that of not being able to pass the new Constitutional Treaty, failure of the policy of expansion with general discord on the process of entering into negotiations with Turkey, and budgetary failures, proved by the inability to agree on the new pluri-annual framework to be applied from 2007, (admittedly rectified at the eleventh hour with a compromise reached by the European Parliament in December 2005, (but a watered down compromise nevertheless when compared to the proposals mooted prior to this, which

leave little room for optimism concerning future movements). It is fair to say however that the writing had been on the wall for some time concerning the institutional and political decline of the process as well as the inability to define a coherent strategic project to replace the original one, (the solution to the historical Franco-German conflict via economic cooperation, successfully applied)⁴. This decline and inability became even clearer following a series of strategies put into place by *default*, which led to the application of the systematic game plan of fuite *en avant* and the enshrining of the "bicycle theory", which determines that it only falls if the wheels are not turning round, now a mainstay of political arguments.

An end to the policy of "further"

If the process of European integration could, to a certain extent, be attributed as being the trigger of the policy of "further", with the kick-off of talks for the Single European Act, it should come as no surprise that this process now has to take on the role of being the official undertaker of this policy 20 years on. Indeed it is clear, (although sometimes it is hard to accept the reality), that not only has the European "bicycle" come to a halt, at least for a very long time, but that this inactivity is now recognised and being taken into account in the current European processes of thinking out and taking political decisions.

A similar pattern can be observed in other regional integration processes. El MERCOSUR is still on the same plateau it found itself on back in 1995 and its very credibility and effectiveness look to be beyond resuscitation. Other Latin American sub-regional processes do not look to be in better health either. Furthermore, in the ALCA framework it has been confirmed that The Miami Ministerial Conference only helped freeze the process further. All these setbacks on the matter are now openly admitted and accepted.

The results of the WTO Hong Kong Ministerial Conference last December and the continuation of negotiations in 2006 with a view to their finishing before the Trade Promotion Authority Presidency of The United States expires in July 2007, appears only to confirm that the policy of "further" is officially worn out. Should these talks succeed, it is predictable that such success would be so limited, (try as they may to sell it to public opinion), it would be hard to read as a decisive step forward, if compared to the ground bro-

ken 20 years ago. In case of failure though, it will be played down and (correctly) postulated that the *raison d'être* of the multilateral trade system is not so much the uncontrolled process of free trade as much as the creation of a stable framework of rules that prevent Uturns in a liberalisation, which was freely agreed upon and which has stopped trade wars which in fateful past were the mainstay of "Block Capitalism."

Are we now faced with a crisis of regional processes and the stalling of the multilateral system, replaced to be replaced by an age of proliferation of bilateral accords, that will cause a real break up of the world trade (and economic) system? Without ruling out the risk of such events⁵ (especially in the form of more or less "rough" agreements with little legal honing), sooner rather than later it is possible that the theory already put forward by some, 6 namely that the only bilateral accords possible are highly asymmetric ones between large and small blocks/states, where the large block/state imposes its criteria on the smaller one. (with bilateral agreements between big player and big player being impossible). If this is the case, (and regardless of the appraisal to be made of such asymmetric accords), it won't take long to realise that; a) their effects on the system worldwide are very limited, and b) their interest even for the big players is not great and is perhaps not worth it for internal difficulties caused, (e.g. look no further than the US). From this standpoint, it is also evident that the policy of "further" has little chance of living up to its name through bilateral agreements.

From the policy of "further" to the policy of "better"

The exhaustion of the policy of "further" should come as no surprise. A look at the far-reaching implications of the 5 processes mentioned at the beginning, added to such a decisive factor as the progressive integration of China in the world of trade relations, makes it is easy to see that this process of liberalisation and integration could not continue forever and that some day the brakes would have to be applied.

With the policy of "further" burnt out, what direction should be followed next? It is not hard to come up with the answer of "better." In this context this refers to improving the state of international economic (and especially) trade relations from the standpoint of a better use of the accords in force. Nevertheless, it is worth mentioning several elements that have shed

light on the type of issues to be approached in the future and which the Observatory of International Markets should focus attention on:

First an effort must be made to **consolidate**: i.e. avoid superimposing new and unwieldy reforms, which are still being developed and have not realised their full potential yet. Two such examples are archetypal and it is indeed telling that they have not been widely discussed:

- In the framework of European integration, the mechanism of "reinforced cooperation" has already been reformed twice since its creation, without it being applied even once,
- In a multilateral framework, almost no-one spoke out against setting up a new round of talks before the transitional periods of ten years were up on the three essential agreements that came out of the Uruguay Round on Agriculture, Textiles and Services, (hence before their results could be seen).

Secondly, priority must be given to **finishing off** outstanding work. For the WTO this means following this criterion in relation to China's entry into the organisation, and likewise for Russia. As for Europe, it was already clear that once the case for expansion Eastwards was taken, then there should have been a firm commitment to close talks with the pluri-annual framework sorted, and having taken the effects of expansion into account instead of simply stalling and putting it off for a future date, thereby leaving negotiations in the air, (not just for new member states, but for the existing ones too).

Thirdly, it is also necessary to reinforce the **coherence** of the entire global system and the variety of accords

that coexist in its core, so that contradictions among them can be avoided to stop their respective benefits being cancelled out, which would lead to the system being ungovernable.

Fourthly, time is needed to better **get to know** about all the multiplicity of political and legal vehicles, thus avoiding what are essentially absurd arguments that will generally end up in dispute, like those related to investments as a "new issue" in the centre of the WTO when the GATS is basically an accord on foreign direct investment, and where those most interested in renegotiating another deal on the rules for investments, (The TRIMs agreement) appear to be developing nations. Sound knowledge is therefore a pre-requisite for getting a greater benefit from the existing system of agreements. This axiom also applies, (and above all) to the institutional side with the aim of not getting lost in the maze of setting up new institutions instead of spending time making full use of the existing ones.

And anyhow "different"

For those who wish to continue thinking in the policy of "further", it is essential to humbly and realistically acknowledge that progress will not be made by continuing to go down the same path taken in the recent years, a path which has led nowhere. New approaches need to be tried and tested. It is necessary to be well aware of this requirement, which was clearly pointed out by the Assistant Director General of the WTO, Alejandro Jara in the keynote speech given on the occasion of the presentation of the International Chair of WTO/Regional Integration in Barcelona February 22nd last

- 1. In the author's opinion, the best explanation published of the causes and reasons for this failure is still that of E. Glimet, C. Lalumière and J.P. Landau: Rapport sur l'Accord multilatéral sur l'investissement (AMI): http://www.finances.go uv.fr/pole_ecofin/international/ami0998/ami0998.htm
- 2. See following footnote. See also Roberto Bouzas "Onde conduz a reta final da ALCA" and Pedro Da Motta Veiga "A estratégia brasilera e suas implicaçoes potenciais", in *A Revista Brasileira de Comércio Exterior*, n°.78, Jan-Mar 2004, FUNCEX, Rio de Janeiro.
- **3.** See the MERCOSUR series on the notes of l'Observatori de la Globalització de la Universitat de Barcelona written between 2000 -2003 by R. Bouzas and P. Da Motta Veiga: http://www.ub.es/obsglob/Seriemercosur-.htm, as well as the work by these authors with R. Torrent; "In-depth analysis of MERCOSUR integration, its perspectives and the effects thereof on the market access of EU goods and investments": http://mkaccdb.cec.eu.in

t/study/studies/32.doc

- **4.** From the perspective of international economic relations, discussion of these inadequacies can be found in R. Torrent, "Derecho y práctica de las relaciones económicas exteriores en la Unión Europea", Ed. CEDECS, Barcelona, 1998. A French version is also freely available at http://www.ub.es/dpecp/ep/livreTorrent.html
- **5.** See recent articles and conferences of Carlos Pérez del Castillo on this risk; e.g.; « Comercio mundial y proteccionismo agrícola" in El País. Suplemento Agropecuario, nº. 126, August de 2005, Uruguay.
- 6. In this context, see some of the following works (and especially those discussions held in the core of the workshops) of the Chaire MERCOSUR de Sciences-Po de Paris. held in the core meeting of Group I of OBREAL 2005 (in process of publication at http://chairemercosur.sc iences-po.fr). See also the latest works of R. Bouzas, which provide a less benevolent vision of the "new regionalism" and the North-South accords: "El Nuevo Regionalismo y el Área de Libre Comercio de las Américas: Una Visión Menos Indulgente", CEPAL magazine, Nº. 85, April 2005 and http://www.obreal.unibo .it/publications.aspx?IdP ublication=33