A picture of the economy and business in Catalonia: threats and opportunities

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Catalonia is doubtless one of the most powerful regional economies in Europe: the surprising economic growth experienced in recent years has allowed the Catalan economy to be at the forefront in the European context. However, the global economic crisis that started in late 2007 gave way to necessary reinterpretation of the growth model the country had followed so far. This article intends to provide an interpretation of the structural elements that have taken Catalonia to its present situation and to show the challenges posed by the crisis for the near future. As a result of this analysis, different initiatives are suggested to reorient Catalonia towards a sustainable model taking advantage of its current assets.*

* This paper is based on a large research project on competitiveness in Catalonia ordered by the Foment del Treball employers' association to the Public-Private Sector Research Center and directed by Pankaj Ghemawat and Xavier Vives. A summary of the results can be found in Ghemawat, P.; Vives, X. (2009). «Competitiveness in Catalonia. Selected Topics». *Reports of the Public-Private Sector Research Center, 2. IESE Business School*, and on http://www.iese.edu/en/ad/sp-sp/CompetitivenessinCatalonia.asp. I would like to thank Jordi Ollé for his excellent assistance.

Recent evolution of the Catalan economy

Catalonia has benefited from a worldwide expansive economic cycle. In terms of GDP per capita, Catalonia is six percentage points above the EU-15 average (as opposed to 1986, when this indicator hardly reached 90% of the European average). Real GDP growth was between 3% and 4% in the 2000-2007 period, based on a strong rise of employment –up to 4,850,000 new jobs in Spain, 15% of which in Catalonia– that was made possible by incoming migration to the country. In the labour market, indicators showed a good development up to late 2007: jobs were increasing at a sustainable level every year, the employment rate (rate of employed labour on potential working population) raised to 57.4% (surpassing the EU-15 average at 53.5%) and unemployment was below European average (6.6% vs. 7.8%, respectively). Right now (September 2009), however, unemployment close to 20% is one of the main concerns of the economic policy of the Catalan government.

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Catalonia has an economic structure similar of that of the main European industrial regions like Baden-Württemberg in Germany, Lombardy in Italy or Rhône-Alpes in France. With a solid and diversified base accounting for almost 21% of GDP, employment in the Catalan industry is reducing progressively, while activity in industrial and generally specialised services is increasing significantly. The rate of technology-intensive service workers (on the total within each industry) was also growing by 3.3% in 2006, whereas in manufacturing the ratio has become stabilised between 8% and 9%.

Research and development (R&D) expenditure has kept a growing trend (at 1.48% of GDP in 2007, being 1.96% in Madrid), the hi-tech export rate on total exports is 13% and that of medium technologies is 46%. Also, knowledge society indicators show a good penetration of ICT in Catalan society and businesses, but the quality in the use of these technologies is not rated as high. Catalonia also has a high percentage of working population with a university degree (31%, several points above the EU-15 average).

Nevertheless, although Catalonia is taking advantage of the push of the world economy, it is also affected by the trust crisis following the failure of the financial system. This crisis also reveals the shortcomings of a diffuse growth model that focused its resources on activities creating wealth but did not lead to the generation or accumulation of productive factors (stagnation of productivity!), while the main former competitive advantages such as low labour costs have been cut by inflation, which has kept persistently above the European average. Consequently, a situation has been created in which optimism shown by many indicators cannot hide uncertainty raised by a more critical analysis of the present situation in Catalonia.

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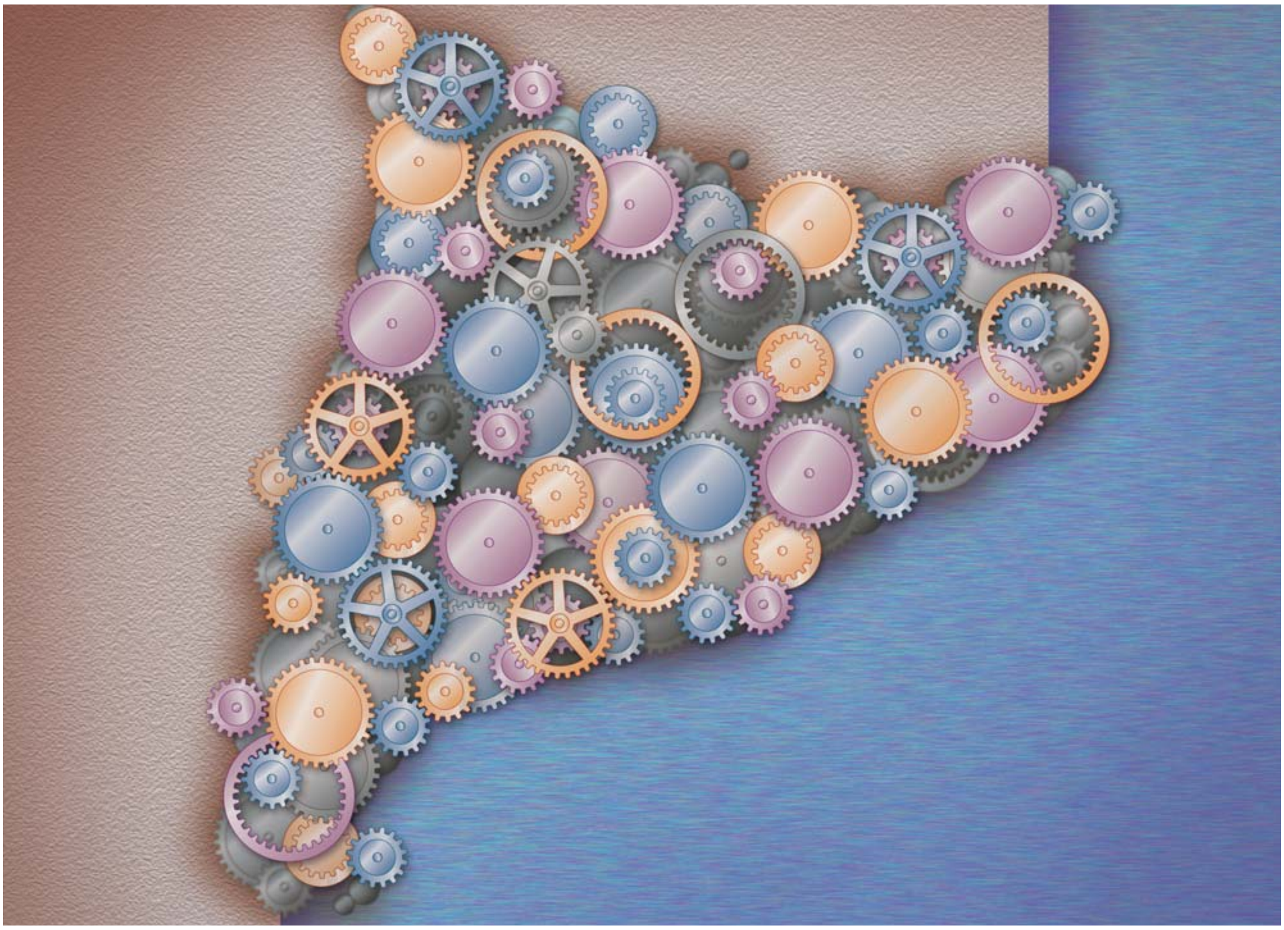
Through the BRIC (Brazil, Russia, India and China), now direct competitors of Catalonia in key industries of the Catalan economy such as car assembling, globalisation pushes Catalonia to make a step forward. The country has many necessary assets to compete with the main regions in Europe and the world, like the strong «Barcelona» brand, a city ranking top among the best places to live



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and work in.

The Catalan capital could enlarge its potential using the synergies of deeper integration within the Mediterranean Arc, with the strong technological business footprint in the Toulouse region or the economic dynamism of Valencia. In spite of that, the country has not done the necessary quantum leap from a well-equipped economy to a sustainable and creative production model able to find its place in the global economy.

When asked for the difficulty in doing business in Catalonia, entrepreneurs quickly point towards bureaucratic hassle, labour market rigidity and poorly trained labour. More implicitly, when choosing the location of their headquarters, international companies show little interest in an area that despite having important research centres is struggling with a poor connection between science and business.

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We will now give a general overview over the business setting in Catalonia, considering the influence of decisions beyond governmental economic policy and showing the main aggregated results. The following is a picture of evolution by industries, taking some lessons from the relation between innovation, productivity and internationalisation. Finally, some of the most successful Catalan business experiences in different areas are shown. With this little piece of research we intend to suggest new perspectives to face the big challenge of the Catalan economy.

External factors and business setting

Factors beyond the Catalan economy are very often decisive in determining the macroeconomic magnitudes of the country and thus affect the business setting in Catalonia. An example that has already been mentioned is the inflation gap between Catalonia and the European Union, clearly influenced by the expansive policies of the European Central Bank (ECB). Also, low interest rates in the eurozone in recent years possibly had an effect on the drop of lending rates and the surprising surge of the debt rate in the Catalan and Spanish economy.

Some authors point out that the competitiveness model of Catalan companies has been very profitable but with a risk of exhaustion due to the limitation of still relying on low capital and labour costs. In the 1990s, *ex-ante* competitiveness (translating into indicators such as effort in product, process and organisational innovation) was almost stagnating, whereas *ex-post* competitiveness had a very positive development, explained primarily by the low price of primary factors.[1]

Another factor linking the global economic situation with soundness of the Catalan economy is foreign direct investment (FDI) and its intimate relation with the establishment of multinational company headquarters in the region, a hot issue right now. When comparing investment input in manufacturing and services according to their technology level, it becomes visible that in manufacturing, relative investment in the medium-low technology segment increases at the cost of a big drop in the car industry, whereas the rate of hi-tech activities comes close to zero. In services, the increase of investment in non-knowledge-intensive areas (real estate, wholesale) is apparent, while all knowledge-intensive service branches experience a reduction in investment. These data may indicate that for international companies, Catalonia is becoming specialised in branches with a low-key technology and knowledge profile.

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It has been mentioned that foreign investment has to do with the headquarter factor. To illustrate this as well as to see the different implications of this relation, we will show the Seat example. In 1986, the Instituto Nacional de Industria (INI) sold Seat to the Volkswagen (VW) group, so the Spanish company lost financial control over the group. However, it was with the crisis in Spain in 1993 when the decision centres started moving to parent companies as change in the senior management took place. This integration of Seat in the VW group went hand in hand with the international development in the car industry, characterised by breaking up of the value chain into different geographical areas. Thus the emergence of reasonably competitive stakeholders like Eastern Europe and Morocco, which could displace Catalonia in mature industries, together with the latter's incapacity of attracting high added-value activity within this chain such as design centres or hardware or accessory production, placed Catalonia at a difficult crossroads.

The Seat case illustrates somehow the importance of decision centres, which allow a certain independence from what occurs outside the country. In 2005, out of 29 Spanish companies listed in the Forbes Global 2000, only three had their headquarters in Catalonia: Gas Natural, Banc Sabadell and Abertis. As to international companies, the recent evolution shows increasingly an establishment of headquarters in Madrid at the cost of a reduction (also in absolute terms) of headquarters set up in Catalonia.

Sectorial development

Competition in the markets generates incentives for companies to do an effort in setting out strategies to seize the added value associated to these markets. These strategies can involve cost reduction, product differentiation or a combination of both, but they all focus on the basic goal of increasing productivity. Recent academic literature has tried to shape the mechanisms leading to increased productivity and show the relation they bear with innovation and foreign activity.

The theoretical standard model has a sequential shape: a company makes an innovation (either a process or a product) leading to increased productivity (link 1). This increase will translate into higher likeliness of exporting the product to other countries (link 2). This export activity has positive effects on innovation at the company (link 3). In this section we will compare this model with business reality in Catalonia. However, the context regarding these three elements (productivity, innovation, export) in Catalonia needs first to be set.[2]

Labour productivity has become one of the main concerns on the Catalan political agenda as it has stagnated since the turn of the millennium. There are authors encouraging the idea that the biggest job increase has taken place in low added-value industries like building and all this may have compensated the productivity increase in other branches. However, when looking at the evolution of total productivity of factors there are also growth rates close to zero between 2000 and 2005.

Nevertheless, when entering deeper into the Catalan economy and analysing the evolution of the different branches we inevitably find differing results. Table 1 shows the different industries in Catalonia ordered by annual average productivity growth. This ranking allows to describe the evolution in Catalonia, but some questions arise immediately: what shall be inferred from this growth pattern when comparing it with Europe, for instance? How has productivity growth affected the competitive advantage in exports?

To answer the first question, growth in labour productivity needs to be combined with productivity differences between Catalonia and the EU-25 average at the beginning of this century. When doing so, we observe that productivity growth is clearly higher in industries having a productivity advantage and smaller in most industries having a certain disadvantage. This shows a situation with a differing growth pattern by which differences increase instead of shrinking.

To answer the second question, the relation between productivity growth and the evolution of the commercial advantage can be useful. Among others, it can be stated that there

***Table 1.* Annual average productivity growth by industry**

1995-2003

Non-metal products	2.8%
Food industry	2.4%
Paper and wood	2.4%
Textile	1.8%
Metal products	1.7%
Electrical products	1.4%
Machinery	1.3%
Plastics	1.3%
Chemical industry	0.8%
Transport	0.5%

Source: Own

are industries improving their commercial position despite their low productivity growth (pharmaceutical, chemical and electronic products). These results may suggest that these industries are gaining market share thanks to their efforts in product innovation and adaptation rather than by raising their productivity. However, there are industries that have seen how their commercial position became worse despite a strong productivity growth; such is the case of non-metal, textile and wood products. All seems to indicate that as they are low-technology branches, foreign competition by cheap labour countries has increased dramatically. Finally, two opposed groups are to be pointed out: the good performance by the food and paper industries with a high productivity increase and improved commercial advantage, and car manufacturing, a branch in distress.

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We will now do a little analysis of innovation activities at company level. Jordi Jaumandreu uses the ESEE (Enquiry on Business Strategies) database, an enquiry done with the support of the Spanish Ministry of Industry, to conclude that Catalan (and Spanish) companies innovate rather little – in fact, the rate of companies claiming that they do innovation has been declining since 2000 – and when they do so, they rather innovate in processes than in products, so they tend to not patent their innovations. Having said that, expenditure (63% by private companies, 12% by the government and 25% by education institutions) is spread in line with other European regions, though at an overall lower level.[3]

Within Spain, Catalonia is in a better position compared to the average, including the Madrid region. The proportion of small companies (having less than 200 employees) with R&D expenditure is 35.5% of the sample, as opposed to 18.6% in Spain and 19.6% in Madrid. The same pattern appears in large companies, of which 77.6% spend money on R&D in Catalonia. The proportion of companies innovating in processes is above that of companies doing product innovation. However, the effort of companies (calculated as R&D expenditure divided by sales volume) in Catalonia is smaller than in Madrid and the rest of Spain in both large and small companies. These data show that innovation has not taken a firm grip in Catalonia yet.

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Catalan companies have a strongly internationalised profile. With a global share of 0.5% on total exports, Catalonia had an economic openness rate close to 65% in 2007. Although exports have been constantly increasing, the growth of imports still remains higher, which means an increase of Catalan trade deficit. Yet once again, objective data show a picture a wider study is able to put in its right terms. The international trade perspective sometimes forgets flows within one same country having occasionally a higher volume than those crossing borders, as is the case of Catalonia. When combining international and interregional trade not only do the main trade partners change (Valencia drives France from the first place, whereas four Spanish regions overtake the first five countries) but so do also the balance sheets of each industry. Considering interregional trade, we see that branches considered hardly competitive based on their high trade deficit yield a surplus now. This is the case of the chemical industry, food and electronics. Thus Catalonia can be considered a trade gate into Spain as it often imports from abroad to sell within the country.[4]

As has been said in the beginning of this section, the theoretical model relating innovation, productivity and trade needs to be combined with business reality in Catalonia. By doing so, the theoretical model is confirmed, while some more complex linkages come up.

In Catalonia, two basic mechanisms are observed that lead to increased productivity: imports and innovation (of processes and products). Catalan companies import some of their inputs and add value to their products by means of transformations applied on them (e.g. new designs) rather than through new intermediate materials or products. This product innovation bears a strong relation with the decision to export. Once the company enters the export market it is very likely that it stays there. Innovation in processes will reinforce this export position. We therefore find three main mechanisms of increasing productivity (imports, product and process innovation), while two of them, imports and product innovation, affect exports positively and directly, which in turn has positive effects on productivity growth.

Management models

Catalonia lags behind in sophistication of business models, which in most cases still have a strong family component and are hardly professional. The underlying idea is that in the last twenty years, the business setting has changed a lot in Catalonia, yet this has not motivated any change in business management patterns. A protected market at national level, a basic need for technology fed by machinery imports from European countries and abundant and cheap labour – which set the pace prior to entering the EEC – has stopped being the tune in Catalan business.[5]

Nevertheless, Catalonia has several examples of successful business ventures such as Ficosa, Mango and Abertis. Ficosa used to be a company geared to providing systems and components for cars that had to reinvent its business model upon Spanish accession to the European Union (then the EEC) as it was becoming obsolete under the new market conditions. The Ficosa model was traditionally characterised by its closeness to the local customer (in the Spanish market), a copy of designs coming from abroad and a combination of economies of scale and cheap labour leading to a policy of low prices. With the aim of approaching the main European car manufacturers, Ficosa started an expansion in 1986 that meant a review of its organisational strategy: opening of manufacturing plants in Germany, France, Italy and the United Kingdom, creation of design centres for own products and implementation of a Europe-wide network management system of plants, while keeping its policy of low prices. The main consequence of all this was that Ficosa became a technological partner for car manufacturers. The success of this first opening beyond national borders led to a second expansion in 2000, this time global. This shows the will at Ficosa of adapting the car industry to global conditions.

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Mango, a company working in garment design, production and distribution, is in its turn a clear example of seizing a new, wide market portion out of reformulating a traditional activity as the clothing branch. Not only did Mango use the opportunities offered by relocation of production sites (the basis to reach an offer at a reasonable price), but it also invested strongly in developing a dynamic and flexible logistic capacity, implementing well-thought human resource policies and ICT systems to increase the efficiency of its different business areas. Mango has also gone for strong marketing campaigns to create a global brand based on a strong and consistent concept, with flexible, high-quality production at moderate prices.

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Finally, there is the Abertis case, a company dedicated to mobility and telecommunications infrastructure management. Despite its big and complex structure, two aspects can be made out that have allowed this Catalan company to be among the biggest in the world. On the one hand, constant investment to obtain concessions allows to build a knowledge and expertise base facilitating the acquisition of a wide know-how in infrastructure management. On the other, having different activities in one same geographical area allows Abertis to tie strong links to local bodies –contracts made involve a public-private combination in which both areas work together– and thus increase the likeliness of obtaining new concessions. New activity thus means more experience, which in turn feeds the above-mentioned knowledge base.

Future perspectives

As has been said in the beginning, the aim of this paper was to reflect the situation Catalan companies are in at present as well as the threats and opportunities posed by a crisis in which uncertainty increases but that also pushes the need for change.

All in all, as P. Ghemawat i X. Vives pointed out recently, Catalonia has big strengths to tackle the challenges it has ahead.[6] For the country has a diversified industrial base, a high degree of economic openness, a trade hub within Spain with a high logistic potential in the Mediterranean, an entrepreneurial tradition with a segment of dynamic export-minded companies, a high standard of living, a good level of human capital and some of the most advanced research and educational centres. Notwithstanding this, it also has some shortcomings. For instance, regarding infrastructures (ports, airports, rail, local transport), Catalonia is lagging behind; the overall innovation level in the economy is low; there is mainly a business fabric of small companies with poor productivity, a lack of cooperative tradition as well as an absence of locally established multinationals. Besides, the entry and exit process in the industry shows a large deal of rigidity, partly resulting from a stiff system of labour relations; the service sector has not enough competition; university and the scientific system are dominated by bureaucracy and there are no incentives for excellence; limitations on mobility are latent and command of English is very poor; R&D policy has rather tended to spreading than to consolidating a critical mass in key areas; and regulatory measures by public authorities are a heavy burden, with a high degree of institutional complexity and budgetary allocations.

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Opportunities to converge with the best of Europe are there as long as necessary structural adjustment is made. As Ghemawat and Vives point out, the current crisis should be a starting point for action. Steps forward have been made, and Catalan companies have done efforts to be more competitive in the last two decades, reducing costs, investing in human capital and adopting new technologies. However, small companies have had much trouble in adopting innovation processes. Besides, there are indications that many companies are still trapped in the traditional Catalan business model stemming from autarchic times, with cheap labour, imported technology and a protected market. With the present crisis, this model will not survive. Of course there are exceptions and many companies have tried to change their business models, generally through an effective effort for internationalisation, as the three cases in the previous section show.

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Notes

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