SOUSA GALITO, Maria (2000). Portugal in the EU: the Perspective of Convergence – Parte II.G. *CI-CPRI*, Tese, Nº14, Setembro, pp. 81-87.

Portugal in the EU: the Perspective of Convergence

<u>Tese de Mestrado</u>

Âmbitos (2000):

Economia
Estudos Europeus

4. Conclusion

Convergence was understood to be a balance between the individual forces of the market and the countries measures pushing for competitiveness and trade intensification. Markets shown them moved by the consumers' preferences while firms and industries did their best to satisfy those new needs through innovation, industrial organization and market strategy, for what they also promoted technological alliances between them. Countries cooperated by allowing goods and factors mobility while fighting for the reduction of living differentials.

According to the theory of welfare in an open economy, progressive reciprocal liberalisation implied more exports for small and big countries because of the higher return of capital of large-based firms. But that lead to a steady outflow of industrial firms from the small country with low trade barriers, implying a worse medium-run growth situation for the small country and a better one for the large country. That was why structural changes were considered indispensable in countries like Portugal, so that they may recuperate from their backwardness and increase their competitiveness. And Integration incentive a safer investment common market because of the diminishing premium of risk, and that augments the stock market value of investment and the Tobin's q, leading to medium-run growth consequences, also guaranteed by lower imperfections of the market.

Prices ended affected by lower trade barriers, entering in the calculations of the marginal cost function of the capital-producing sector. Then liberalisation pushed more for traded goods sectors than for non-traded and since the firsts are more physical capital intensive than the seconds, higher investment in the traded sector was traduced in the short run by a stronger return for capital and in the long run for a higher steady state capital stock.

The theory says that more investments in physical, human and knowledge capital augment trade and growth, the reason why firms should always renovate their machines and give continuous formation to their workers, is it for the creation of new ideas or knowing how to work with the existent technology, so that the consequences may be pro-competitive, implying new intermediate goods and intersectoral changing expenses. With this strategy firms could verify skilled growth, investment-led growth and technology-led growth, pushing the economy as a whole one step forward.

So, this paper continued with the growth models of Dixit and Norman (1980) and Helpman and Krugman (1985) where it seemed to be important to test if the growth of the European industry was regularly distributed between countries or concentrated on an industrial sector that might be geographically central or peripheral, all this_because some countries tend to specialise themselves in certain sectors according to the advantages of localisation.

Models like the ones of Linnemann (1966) and Bergstrand (1985,89) shown them capable of testing if the fluxes of external exchanges were determined by the geographic proximity, if the countries were concerned with the advantages of localisation.

Following the model of Bergstrand (1985), that had added the prices to the model of Linnemann, this paper made some estimation to respond to the question thought above. First the estimations were made under the larger period, between 1970 and 1997. The results testified in favour of the importance of localisation in the Portuguese commercial fluxes with the considered countries from 1970 to 1997, the chosen period for the analysis. Adding to that, the coefficients of the GDP and GDP per capita of the importer country were positive, meaning that a higher income from that country pushed for Portuguese trade. The coefficient for the Portuguese GDP was particularly different from zero in favour of producing goods intensive in capital. The coefficient for the Portuguese GDP per capita was less significantly different from zero. The common frontier coefficient was the less clear, at the same time as the coefficient of the real exchange rate resulted negative as was to be expected since a depreciation of the Portuguese coin usually increases exports.

More or less the same conclusions were reached when the estimations were made only under the period of 1970/85 but changed a bit when the sample only considered the period of 1986/97. The coefficient of the GDP per capita of the importer is positive but much smaller, in favour of lower expenses on luxury goods. The coefficient for the Portuguese GDP is higher than ever (7,308), explaining that the domestic production of goods intensive in capital increased exponentially. The coefficient of the Portuguese GDP per capita now negative, testifying in favour of an exchange of goods intensive in labour. The coefficient for the real exchange rate is even more negative. Having a common frontier incentives trade, also because countries usually have similar economic structures, and the estimation finally traduces that exactly. The coefficient is positive when in the other two estimations was negative. A frontier does matter. It's consistent with the fact that Spain became a strong partnership in the Portuguese commercial fluxes.

New estimations were made, more directly concerned with other indicators for trade like the weight of the balance on goods over the GDP, the Hirshman and the Herfindahl Indexes and the Grugel-Lloyd Indexes.

What can be summarized about the first indicator is that while most of the countries shown a particular effort in reducing their deficits over the GDP, Portugal maintained strong negative values, contrarily to other performances like the one of Ireland with a remarkably motivated strategy export-orientated, an example that Portugal seemed far from following. Convergence didn't seem very convincing when trade was weighted by the GDP.

If more concentration in the Herfindahl and Gini-Hirshman Indexes could express competitiveness and higher industry-wide profits, than Portugal presented market concentration for exports around 40/50% and for imports around 30/40%, a not surprising result considering that Portugal is a small and open economy.

In the seventies Portugal was a country with considerable inter-industry trade. His main exports belonged to the traditional chains like Food Agriculture, Wood Paper and Textiles, its imports were in chains with higher technology like the Chemicals, Machinery and Vehicles, some Electrical and Electronical, but always in small volumes since Portugal was a closer economy back then, privileging the transactions inside the domestic market.

It was with the Portuguese adhesion to the European Regional Block, that the intra-industry trade gain importance as well as the relations with the exterior and in such a way that in 1997 the intra-industry trade already dominated the Portuguese exterior fluxes, especially in chains like the Electrical, Wood Paper, Vehicles and Textiles, at the same time as for the Energy and the Iron & Steel the inter-industry yet seemed to win.

So, from the squares of the Grugel-Lloyd the changed tendency towards the substitution of the inter-industry trade for the intra-industry trade seemed clear. But this new environment raises a question. Knowing that the intra-industry trade grows among countries that are structurally similar, can these results be a reflex of a Portuguese rapid convergence through trade?

General Conclusion

This paper tried to understand the convergence process, measure and test it, by studying the behaviour of the countries and the one of the firms and industries. The main purpose was to realise if Portugal was a more solid and structured country than before, if the living standards were higher and closer to the other state-members average, if geographic distance was still a determinant constraint, if there had been trade intensification and productivity growth, in other words, if Portugal had in fact beneficiated from the integration process.

For this well-defined objective, the two parts were consecrated to the analysis of statistics and some own estimation using several economic variables in the selected period of 1970/97.

Since dealing with the concept of convergence, as with any other word, means understand from the beginning its technical definitions, measures and implications (to directly reach its problematic instead of driving around), this project started by saying that the concept resulted from a study where two or more economies were compared according to their average difference evolution and dispersion over time, having the first the inconvenient of dealing with initial special differences in the relative variable (for instance, differences in the GDP per capita between countries), while the second shown series volatility. It was also seen that with initial special differences in the relative variable, convergence existed if the initial distribution became more equal.

Convergence needed to be tested. For that, this paper studied the β-Convergence and the σ-convergence tests. The β-Convergence for showing the rhythm at which the income per capita of a particular economy faced the average of the income per capita of the rest of the world, even if only considered the evolution towards a regular long term growth. The σ-convergence for informing if the differences between poor and rich countries had diminished over time. Both tests were then compared and criticised, reaching the conclusion that neither considered the particularities of each region but that it wasn't for that they weren't useful.

According to the estimations using the model of Hénin and Le Pen (1995), the considered countries presented a b-Convergence significantly different from zero and no σ-Convergence. Those general results could only be more favourable (but not sufficiently) if the estimation only involved Portugal and Spain.

According to the results of the nominal and real statistics, Portugal was understood as a country facing nominal convergence for a stronger discipline of the public finances, an exchange stability and monetary convergence. But these

results must be very well measured, especially because the indicators of public deficit and dept are targets of several pressures in a united Europe with a common Euro, for not much more than budget policies can be manipulated by the states in the case of asymmetric shocks or other regional unbalances.

Nevertheless, real convergence was considered away from the country's needs. From the observation of the squares, Portugal shown interesting low unemployment rates but its GDP per capita, as well as the GDP per capita growth, verified a considerable backwardness. If the country seemed to grow faster than the more developed state-members, the tendency was realised needed (to reduce the delay) but insufficient.

To complete the idea over convergence, this project proposed a study differentiating a macro from a micro perspective. The first had as main indicator the GDP per capita, the central players were the countries and convergence was reached through economic growth, while the second privileged the point of view of firms and industries to which innovation defined the lines of the market strategy. In fact is balancing these two forces, at the same time as capital mobility, cooperation and higher competition standards, that convergence as a whole is possible. We can't understand convergence only as the result of higher profits for the firms because industrial growth must lead to a development process that includes all the chains and regions of the country. That's why governments must work on nominal and efficient measures that in the medium and long run will be traduced by real convergence, stable effects that may push the country forward. Consequently, convergence was simultaneously a constructed model, a harmonisation rule, an intermediary level and a final objective.

Convergence was a model, a harmonisation rule, an intermediary step and a defined objective, for the country as well as for its firms and industries, so that the Portuguese Regional Integration would not lead to improvements that were not yet remarkable, perhaps because of the inherited delayed or perhaps because the efforts had not been determined enough. The truth is that the liberalisation after 86 affected prices, pushing more for traded goods sectors (physical capital intensive) than for non-traded, increasing investment in the traded sector, leading in the short run to a stronger return for capital and in the long run to a higher steady state capital stock.

According to the Regional Integration and Growth theories need to invest in physical, human and knowledge capital, some of the causes for more trade and skilled growth, investment-led growth and technology-led growth. A larger common market with intensive competition doesn't leave to the countries any other choice.

Once again countries had to cooperate with its firms and industries to reach convergence as well as with the other state-members, in favour of reducing the market imperfections, promoting the general welfare with the protection of the region resources, through political measures in favour of business specialisation and free movement of factors and goods, adopting common attitudes inside the

Regional Block and towards third countries. Firms and industries, profiting from lower transaction costs because of the diminishing barriers, would be able to have more capital to invest in technology and products quality, better explore the competitive advantages and synergies, and improve their competitive position. Countries were suppose to arrange the field for the action of firms and industries at the same time as imposed some rules of market by reducing imperfections and abuses of the market position, as well as firms produced more and invested in the country, promoting employment and infra-structures.

Being important to test if the European industry was concentrated around an industrial sector that can be geographically central or peripheral, or if its growth was regularly distributed between countries, this paper proposed to present some theoretical background.

According to the estimations over the constructed gravitational model considering 1970/97 and 1970/85, geographic distance does matter in the Portuguese commercial fluxes with the considered countries. The coefficients of the GDP and GDP per capita of the importer country were positive (higher income abroad pushed for the Portuguese trade), the coefficient for the Portuguese GDP was particularly different from zero (production of goods intensive in capital), the coefficient for the Portuguese GDP per capita was less significantly different from zero. The common frontier coefficient was less clear. The coefficient of the real exchange rate resulted negative (since a depreciation of the Portuguese money tends to augment exports). Considering the period of 1986/97, the coefficient of the GDP per capita of the importer is positive but much smaller (lower expenses on luxury goods). The coefficient for the Portuguese GDP was higher than ever (domestic production of goods intensive in capital increased a lot), the coefficient of the Portuguese GDP per capita was now negative (goods intensive in labour), the coefficient for the real exchange rate was even more negative and having a common frontier incentives trade, also because countries usually have similar economic structures, was finally shown as important. A frontier did matter after 86. The results were consistent with the fact that Spain became a strong partnership in the Portuguese commercial fluxes.

The reasons for the results can be found in the Portuguese historical evolution in the past twenty years, since the country came out wounded from the seventies because of the political and social battle resulted from the war in the overseas colonies and the subsequent revolution of the 25th of April. Years of changes, obliged the new government to adopt a stabilisation policy between 77/80 under the International Monetary Found (IMF). Curiously, the Portuguese economy suffered even more in the beginning of the eighties, especially between 83/84, reason for which capitals started to leave the country, forcing a new deal with the IMF, following the prime objective of controlling the balance of payments deficit, in such a way that the Portuguese economic recuperation only began in 85. This instability meant large deficits of the balance on goods over the GDP for strong imports and slower economic growth, a tendency that was inverted with the adhesion and the end of the domestic crisis.

After 1986, there was economic and politic stability with control of inflation, so the economic agents had higher expectations on the markets. The trade increased, the exports dynamic too. According to the Hirshman and Herfindahl indexes, the Portuguese relation towards the other state-members didn't show big concentrations of market, a result even clearer when the study focused each chain, being for exports 40/50% and for imports 30/40%. Nevertheless, the intra-industry trade augmented much between Portugal and France, Benelux, Germany, Ireland and Netherlands. With countries like Spain also increased but maintaining a considerable inter-industry trade, a curious result since many other indicators had shown how the two countries had became structurally closer to each other, for what should be expected a even higher intra-industry.

In the year of 1992 Portugal entered in the European Monetary System (EMS). The European market was living a period of instability that Portugal imported. But Portugal had gains of trade for selling at a higher price than buying; exports rose, especially to the United Kingdom since the main partners, Spain and Germany, were living days of economic constraint. The Unique market and the total mobility of production factors and capitals started in 1993. Consequently, the Portuguese interest was to converge rapidly so that the escudo would not have to stop its real appreciation, creating as well correct incentives to the process of economic restructure. In a small open economy like Portugal the depreciation of the coin could only give short-term gains and the illusion of strong and permanent profitability, reducing the potential of economic growth for not investing in modernization at the needed levels. The context of crisis was substituted by a golden period for Portugal after 1994 by a new dynamic of the Portuguese exports to countries like Spain, France and United Kingdom.

Those same results are testified by the statistics and estimations made for countries and chains throughout that period. After 1996 the countries shown tendency for lower weights of their deficits on the market of goods over the GDP, but Portugal still had big weights of the deficit of its balance on goods over the GDP as well as Greece. Even though trade increased and the exports-dynamic seemed particularly motivated, didn't seem to be enough when compared with the GDP values. On a larger European market with free circulation of goods, the more open Portuguese economy was losing concentration levels but according to the Grugel-Lloyd indicators, the intra-industry trade was considerably high between Portugal and the other state-members, around 80%, when begun by being around the 42% in 1970, what could be in favour of the Portuguese convergence in terms of trade. Trade might be opening a path for a stronger Portuguese convergence in the future.