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**PORTUGAL'S CONVERGENCE PROCESS:  
LESSONS FOR ACCESSION COUNTRIES**

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Abstract

The Portuguese convergence process in the last half-century is a success story. From 1960 to 2003 the gap with the EU (15) average decreased from 56.8 to 28 percentage points. The paper distinguishes three periods: a golden age of fast convergence, a statization period of stagnation, and the EU accession period which relaunched convergence. After the estimation of econometric models, these are used for disentangling the factors behind that performance. An aftermath phase of stagnation is now currently affecting the economy, which adds additional aspects to this rich experience. Finally, good and bad lessons are drawn that may be useful to guide economic policy in the convergence process within the EU.

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Conference of the Central Bank of Poland on "Nominal and Real Convergence in EU: Lessons for Poland".

## **1. Introduction**

The Portuguese convergence process in the last half-century is a success story. In fact, Portugal is one of the few countries that changed from a developing to a developed country in the last 50 years.<sup>1</sup> From 1960 to 2003 the gap with the EU (15) average decreased from 56.8 to 28 percentage points (28.8 percentage points), or at an annual average of 0.67 percentage points per year. However, as Figure 1 shows, the process is not monotonic. There were periods of fast convergence, particularly from 1960 to 1974 and again from 1986 to 1997, followed by periods of slow convergence and even divergence.

Among present EU Member Countries, Portugal may be the country with the most relevant experience to Accession Countries, since it experienced an episode of socialism with statization of the economy since 1975 and throughout most of the 1980s. Afterwards there was a process of privatization and liberalization. It is also the country with the most similar position in terms of development, relative to the EU average.

The purpose of this paper is to try to disentangle the factors behind this performance: what are the positive factors that induce convergence and the factors that decelerate it? We build a small growth model that encompasses the neoclassical and endogenous growth models and try to identify those factors. We find that building up human capital has been a determinant factor and physical capital has not played the usually attributed role. However, the residual factors are also essential, and among these, the openness of the economy is crucial, largely associated with the transfer of technology and intensification of competition. Among institutional factors we single out macroeconomic stability and a developmental orientation. Periods of slow convergence or divergence were associated with large macroeconomic disequilibria, institutional instability and inefficient use of resources with the state playing a major role.

The good lessons for Accession Countries are that convergence and even fast convergence is possible, but it is not a mechanical process, it depends on good policies and good institutions. Building up a market and competitive system is an essential infrastructure and a pre-requisite for growth as the 1970s and 1980s Portuguese experience of socialism followed by privatization and liberalization shows. The institutional building associated with EC accession is nowadays recognized as the most important contribution of EC accession.

The bad lessons are that high fund transfers may lead to aid dependence and encourage rent seeking which is detrimental to growth. The emphasis in physical infrastructure, encouraged by EU structural funds, may also lead to a less efficient resource allocation.

## **2. The Portuguese Convergence Process (1960-2002)**

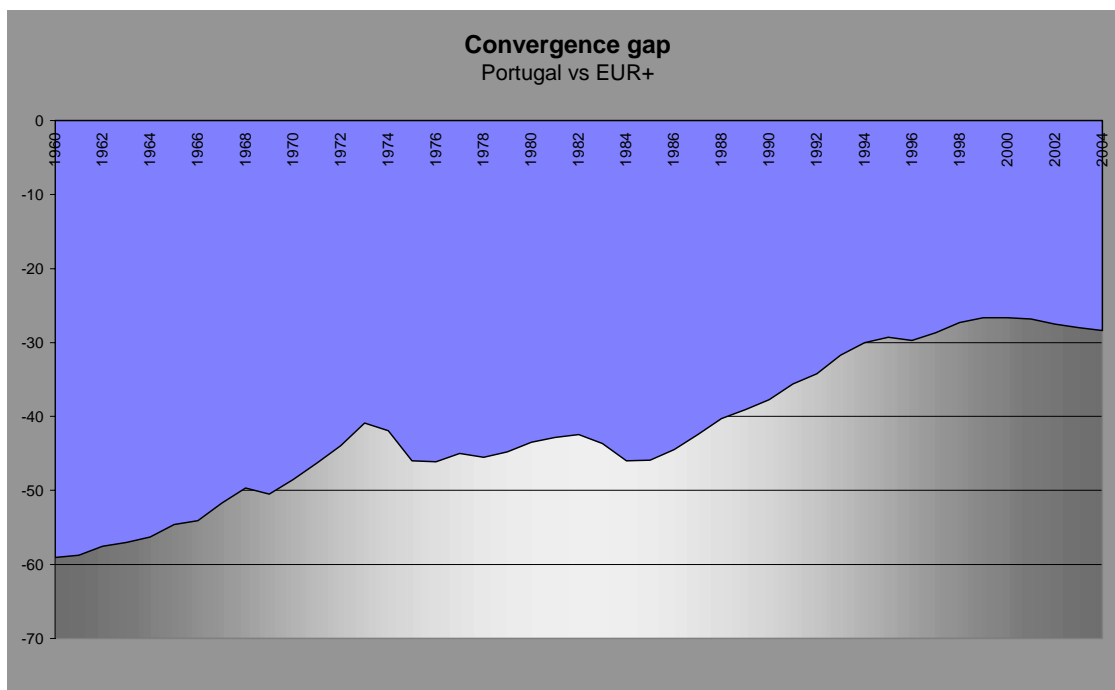
From 1960 to 2003 the gap with the EU (15) average decreased from 56.8 to 28 percentage points (28.8 percentage points), or at an annual average of 0.67 percentage points per year. However, as Figure 1 shows, the process is not monotonic. There were periods of fast convergence, particularly from 1960 to 1974 and again from 1986 to 1997, followed by periods of slow convergence and even divergence. The period from 1974 to 1978 was one of fast divergence, followed by an episode of almost stagnation

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<sup>1</sup> The other countries are the Asian Tigers (Singapore, Hong-Kong, Korea and Taiwan) and Greece. We define developed country, as the World Bank. Among other criteria, the World Bank uses an income per capita of \$US9.656 at 1997 prices.

up to 1985. Since 1997-98 Portugal is experiencing an episode of stagnation-slow divergence that most economists do not anticipate to end before 2005-06. Below we will study the major characteristics of these periods.

Figure 1



Most recent research has brought out the importance of institutions<sup>2</sup> and good policies to explain Total Factor Productivity, the single most important factor for long-term sustained growth. We follow closely G. Driscoll, Jr. *et al* (2003) and Gwartney (2003) to build indices for each institutional characteristic (Table 1). We use Driscoll's scale of 0 to 5: 0 is the best and 5 the worst grade.

Table 1

Year	Degree of openness	Fiscal pressure	State intervention	Macro policy	Foreign investment	Banking	Prices and wages	Property Rights	Regulation	Black Market premium
1960	3.2	2.0	3.0	1.0	4.0	4.0	4.5	1.4	5.0	2.0
1965	2.9	2.0	2.8	1.5	4.0	3.0	3.5	1.4	5.0	2.0
1970	2.8	2.0	2.8	2.0	3.7	3.0	3.0	1.4	4.0	2.0
1975	3.0	2.7	3.7	3.6	4.0	3.9	3.7	4.7	4.0	3.2
1980	2.5	3.5	3.5	3.0	3.2	3.8	3.2	3.2	3.7	3.3
1985	2.1	3.7	3.3	2.7	3.0	3.7	3.2	3.0	3.6	2.7
1990	1.5	3.6	3.2	2.5	2.3	3.5	2.6	2.7	3.5	2.0
1995	1.3	3.6	3.0	2.3	2.5	3.0	2.0	2.0	3.2	2.0
2000	1.3	3.6	2.5	1.7	2.5	3.0	2.0	2.0	3.2	3.5

Based on the components of Table 1, we build an Index of Economic Freedom (EF) presented in Table 2, as a simple average of the above factors. The Index of

<sup>2</sup> An admirable synthesis and an effort to build a theoretical framework can be found in Acemoglu (2003).

Economic Policy (EP)<sup>3</sup> is calculated as a weighted average of the previous index and the index of Development Policy. This index results from the importance that a developmental policy, translated in terms of development plans and orientation towards growth of the economic policy (a long-term horizon in economic policy), has for economic growth. Table 2 also reports an Index of Total Factor Productivity<sup>4</sup> that is based on an estimate of the Solow residual.

Table 2

	Index EF	Development Policy	Index EP	Index TFP
1960	199.4	2.0	249.7	126.0
1965	219.4	2.0	259.7	142.1
1970	233.4	1.5	291.7	164.1
1975	135.0	3.0	167.5	183.0
1980	171.0	2.1	230.5	184.1
1985	190.0	2.0	245.0	189.4
1990	226.0	1.6	283.0	200.9
1995	251.0	2.0	275.5	206.5
2000	247.0	2.0	273.5	208.1

The Index of Total Factor Productivity shows the highest jumps in the 15-year period from 1960 to 1974, at an annual growth rate of 3.8%. Similarly to most of the developed countries experience, the first oil shock caused a sustained deceleration in the total productivity growth. There was only a bout of productivity resurgence in the 1985-90 period, with an annual growth rate of 2.3%.

Both EF and EP indices show a strong increase in the 1960-75 period, followed by a precipitated fall in 1975 due to the 1974 Revolution that started a socialist experiment in the country leading to economy-wide nationalizations without compensation, overthrowing property rights and leading to large macroeconomic disequilibria. A fast recovery set in, but only in 1985 the index of EF returned to the 1960 level. The indices continued to increase steadily in the 1985-1990 period, associated with the reforms that had to be carried out with EC accession. There was a decrease in the EP index since 1990 largely due to a deterioration in the development policy coupled with the decrease in the EF index after 1995 due to the deterioration in the balance of payments.<sup>5</sup>

Let us study each of the above periods from the perspective of convergence:

#### The golden age of the convergence process (1960-1973)

At the beginning of the 1960s, Portugal was one of the least developed countries in Europe, with only Greece behind. But it is precisely at this date that development takes-off: from an average annual growth rate of GDP per capita of 1.6% in the previous 50 years, growth accelerates to 6.4% in the 1960-73 period. Total factor productivity increased at an average of 3%, physical capital at 2.6% and human capital at 0.6%. During the previous two decades, pre-conditions for take-off were being created: electrification, transport network, primary education was being generalized, build-up of

<sup>3</sup> The base of all indices is 1910=100.

<sup>4</sup> The base is 1910=100.

<sup>5</sup> Reflected in the jump in the black market premium, signaling disequilibria in the balance of payments.

foreign exchange reserves during the II WW and a more pro-developmental policy started to be implemented with the First Development Plan of 1953-56. However, one main factor was behind the take-off: the first wave of European integration with Portugal entering the EFTA<sup>6</sup> in 1960. In the 1960-72 period, exports grew at an annual rate of 19% in volume, within a context of strong European growth and elimination of tariffs on industrial goods in the EFTA trading partners, while Portugal lowered its tariffs on a phased process – 5 steps of 20% up until 1977.<sup>7</sup> Manufacturing exports boomed: metal mechanics, paper pulp, textiles, food and chemicals. This growth took place on an environment of macroeconomic equilibrium and stable political system, despite the dictatorial Salazar regime and the colonial war. There was a strong developmental policy that shifted from import substitution in the 1950-mid 1960s towards export-promotion in the mid-1960s to early 1970s. There was also a major institutional change, as the regime that created barriers to entry in manufacturing (condicionamento industrial) was abandoned and more competition was injected in the economy.<sup>8</sup> The investment rate grew from 20% in 1950 to a record high of 36% in 1973, with a large surplus of savings largely fed by the emigration of more than 10% of the work force towards Western Europe.

#### The socialist and statization period (1975-1985)

The golden age came suddenly to a halt due to the oil price shock of 1973, the 1974 Revolution that brought democracy to the country<sup>9</sup>, and the populist economic policy associated with large nationalizations that took place in the 1974-1976 period. The external shock due to the oil price increase, deceleration in the European growth rate, and loss of colonial markets, amounted to 8% of GDP, with a terms of trade deterioration of 18% in the 1974-77 period, and a large appreciation of the Portuguese escudo. The internal shock was due to a 35% wage increase in 1974 and again in 1975, following the rising of expectations due to the revolution. The serious balance of payment crisis obliged the government to undertake the first IMF adjustment program in 1977-79. All major manufacturing firms, banking and insurance, and large farms were subject to nationalization, that added to state enterprises in infrastructure sectors. The change in property rights and the major institutional disruptions before democratic institutions were built, led to temporary losses in productivity. From 1973 to 1985, the economy diverged in 5 percentage points relative to the EU, with total productivity growth decelerating to 0.8% per annum.

An increased budget deficit reaching 13% of GDP in 1982,<sup>10</sup> coupled with the second oil price, led to another balance of payments crisis that culminated with the second IMF stand-by program of 1983-85. The program reestablished the

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<sup>6</sup> This free trade area was formed by Norway, Portugal, United Kingdom, Sweden and Switzerland.

<sup>7</sup> The degree of openness jumps from 15% in 1960 to 25% in 1974.

<sup>8</sup> Foreign competition exerted important pressure. Both phases of European integration were preceded by a heated debate about the impact of foreign competition in the domestic economy. In both cases entrepreneurial associations and economists argued that the fragility of domestic firms would lead to waves of bankruptcy. This nightmare did not materialize. But two lessons should be learned. First, the country needs to have an equilibrium exchange rate and macro stability so relative prices lead to a correct resource reallocation. Second, as we argue further down, major restructuring in the manufacturing and agricultural sectors will take place – which will be facilitated by flexible product and services markets, and if the labor market does not remain flexible will lead to a high unemployment rate.

<sup>9</sup> Political democratic institutions took some time to be fully implemented: most observers place that date on the early 1980s.

<sup>10</sup> From 1975 to 1995 the financial costs to the state budget due to state enterprise deficits totaled 21% of GDP.

competitiveness of the economy and the strong reversal of the terms of trade in 1984-85, led to a surplus of in the balance of payments.

### The EC accession and nominal convergence to the euro (1986-1996)

After about 10 years of negotiations and preparation, Portugal enters to the EC in January 1<sup>st</sup>, 1986, jointly with Spain.<sup>11</sup> The first majority center-right government, led by Cavaco Silva, from 1986 to 1995, undertook a major program of institutional reform of privatization and introduction of a market-oriented economy. Twinning with the UK, Portugal was one the EU countries that introduced an ambitious privatization program: from 1989 to 1995, there were 130 privatization initiatives--starting with the financial sector, manufacturing and then spreading to the infrastructure sector--, halving the enterprise sector under state control down to 10% of GDP.

The Portuguese economy gained 16.6 percentage points in the ten-year period from 1985 to 1995. Physical capital increased at the rate of 4.4% and human capital at 5.5%. While in the first half of the period the Solow residual increased at the rate of 3.2%, in the second half it declined slightly due to the recession that set in 1992-93.

The natural rate of unemployment that had increased from 2 to 6% after the 1973-76 shocks, decreased to about 5% in 1995.

There are four main impacts of EC accession: trade, investment, transfers and institutional. These impacts may reinforce one another. The degree of openness increased from 29 to 53% of GDP in the 1985-95 period, the fastest rise in Portuguese history. Just the direct impact on exports represented 5.6% of GDP. After 1988 there was an explosion in FDI that represented an increase of about 4.2% of the productive stock of capital, adding about 0.31 percentage points to GDP growth, per year.<sup>12</sup> The impact of transfers, that represented about 2.3% of GDP, in net terms, over the same period, was estimated at about 0.23 percentage points per year. Summing the three impacts, it represents an impact of 1.1 percentage points per year, or 25% of the average annual growth rate: 4.4%.

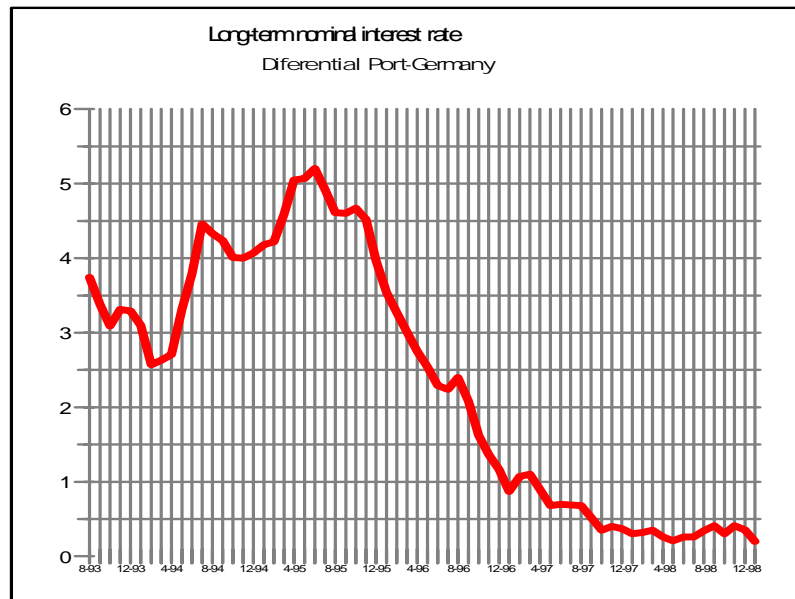
However, we consider the impact on the Solow residual as the most important. Besides the building-up of the market economy, there were major reforms in the fiscal structure (VAT and income taxation), infrastructures and a large increase in secondary and university education. There was also a large appreciation of the exchange rate and the persistence of the budget deficit started to threaten the expansion of the economy.

Figure 2

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<sup>11</sup> Mateus (1999) gives details about the accession process.

<sup>12</sup> This is a minimum limit, since it assumes the same marginal productivity as domestic investment.



The 1992-1998 period marks the large effort of Portugal to reduce inflation and satisfy the Maastricht criteria in order to be among the founders of the euro. The nominal convergence was achieved by a disinflation policy<sup>13</sup> characterized by the maintenance of a high interest rate,<sup>14</sup> and a decline in the budget deficit, although at a slower pace than recommended. In fact, the deficit decreased from 6.5% in 1991 to 4.1% in 1996. Portugal entered the European Monetary System in 1992, after a heated discussion between the Ministry of Finance (in favor) and the Banco de Portugal (against), and went through several bouts of exchange rate speculation. Large foreign exchange reserves (at a record of 32 billion USD, or 30% of GDP) allowed the country to fight speculation and maintain the escudo within the limits of the EMS.<sup>15</sup> A moderate wage policy and the recession of the 1992-93 period, followed by a slow recovery, also contributed to the moderation of the nominal variables. In 1997 Portugal fulfilled all criteria, and was admitted along with 9 other countries, as founder of the euro.<sup>16</sup>

#### The present stagnation period (1996-2004?)

The success reached in the previous period contained already the seeds of the negative factors that led to the stagnation period of 1996-2003, which will eventually be extended by a few years. There are three major reasons for the stagnation. First, several major reforms required in the institutional and economic structures kept being delayed. Second, the lowering of the nominal interest rates, that even led to prolonged periods of negative real interest rates, coupled with over-extension of credit by the banking sector led to a situation of over-indebtedness of most economic agents. Third, an accumulation

<sup>13</sup> The inflation differential vis-à-vis the EU average decreased from 6 percentage points in 1991 to below 0.5 percentage points in 1996.

<sup>14</sup> The 3-month real interest rate differential vis-à-vis Germany reached 6 percentage points in 1994 and decreased gradually to about 1.5 percentage points in 1997.

<sup>15</sup> The three devaluations were to maintain bilateral parity to the Spanish peseta.

<sup>16</sup> The international press, as well as Central and Northern European governments did not believe that Portugal would be a founder of the euro. In fact, some observers even advance that the criteria was established to exclude the Club Med. We do not agree with this opinion, and consider that the criteria made sense even from a macroeconomic stability perspective.

of errors of economic policy and loss of competitiveness of the economy led to a slow increase in productivity. Let us look at each factor.

Major reforms that could modernize the economy kept being delayed, in order not to incur the short-term political costs of the adjustment, sometimes blocked by interest groups. The weight of the public sector increased steadily, reaching a level of about 8 percentage points of GDP, above the expected level among EU countries. Labor laws, still coerced by the Constitution, introduced major rigidities in the firing and mobility of labor. Product markets were still overly regulated and competition was seriously repressed, mainly in the nontradables and particularly infrastructure sectors. Education, health, public administration, the pension system and the justice system were all frequently referred as requiring reform and modernization.

With the euro accession, Portugal lost whatever capability it still had of an independent monetary policy. With the lowering of long-term interest rates to 3-4%, and even negative in real terms, banks embarked in heated campaigns<sup>17</sup> to push mortgage credit. As Figure 3 shows, the ratio of indebtedness of households increased from below 40% of disposable income in 1996 to above 100% in 2002. A similar process took place among private enterprises. In other European countries, Central Banks acted to break credit expansion by imposing tough prudential criteria or by simple gentlemen's agreements. Portuguese authorities considered that by doing so they would be interfering with the working of the markets. The high levels of private indebtedness, coupled with the increase in the recourse by the government to securitization, public-private partnerships and project finance projects, led to a large increase in the external indebtedness of the economy. From a comfortable surplus situation, the stock of debt of the banking system, actors in the intermediation process, reached about 50% of GDP in 2003 and is expected to level off only at a rate of about 70%, which is one of the highest in the world among developed countries.

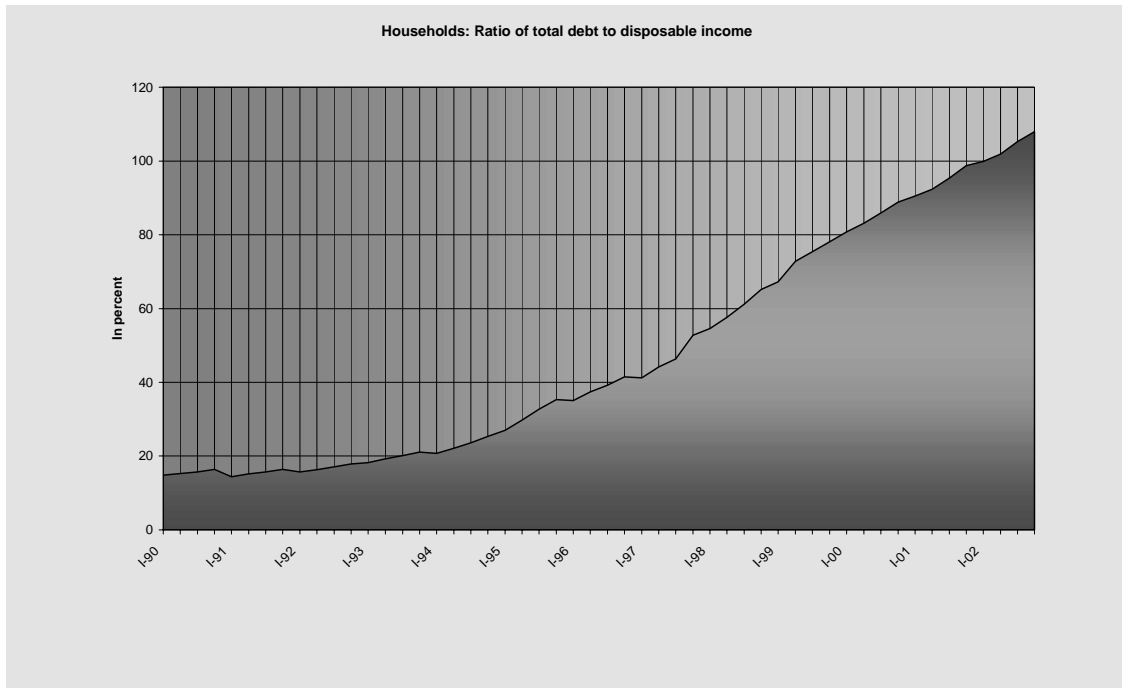
The budget constraint is acting as a lever to slow growth of demand of economic agents, as it can only expand in line with revenue. The present European recession, which already led to an increase in the unemployment rate in Portugal, from 4 to 6.5%, is an important factor in the deepening of the recessionary phase in the country.

Figure 3

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<sup>17</sup> A state bank, that had the largest market share of credit markets, was one of the leaders in this process.





Finally, there were some important economic policies that contributed to the present slowdown in the economy. There were major public investment projects undertaken in the last decade, amounting to more than 10% of GDP, with very low economic return, and some of them with a negative impact.<sup>18</sup> The European Commission has also been responsible, since it does not scrutinize carefully large investment projects, and pressure to spend builds up as badly designed programs approach deadlines.

Despite the 3% ceiling for the budget deficit, spending by the state increased substantially from 1996 to 2002, with the government using recourse to several credit vehicles like other EU countries. Some of this marginal spending has been of dubious productivity.

Finally, the EU transfers, that were instrumental to build badly needed physical infrastructure at the beginning of the accession period, started to ingrain some “subsidy dependence” among several sectors of the private economy, which created an obstacle to productivity increase. In fact, the single most cited factor of the backwardness aspect of the economy, presently, is the low productivity and loss of competitiveness in large segments of the economy, as wages increase, technological upgrading is not undertaken, and Portugal remains as the country in the EU with the lowest level of human capital.<sup>19</sup>

### 3. A growth model: factors explaining the convergence process

The previous analysis was mainly based on anecdotal evidence. Let us now use a growth model to disentangle the different factors. We use a generalized growth model of the type proposed by Mankiw et al. (1992) and Barro and Sala-i-Martin (1995) that

<sup>18</sup> Among them, the World Exhibition of 1998 (EXPO 98), over-investment in road construction, ten new stadiums for the Euro-2004 football competition, a large dam in Alentejo, a railway project linking Lisbon and Oporto. And the list for future projects goes on: high speed trains, new international airport, etc.

<sup>19</sup> One of the main criticisms of the EU structural funds is that it under-invests in human capital.

encompasses both exogenous and endogenous growth theories. The following equation puts together a model for the steady-state and a transition equation:

$$\Delta \ln y(t) = a_0 - \phi \ln y(t-1) + a_1 \ln s_k(t) + a_2 \ln h(t) - a_3 n(t) + a_4 t + \sum_j a_{j+4} \ln V_j + b_1 \Delta \ln s_k(t) + b_2 \Delta \ln h(t) + b_3 \Delta \ln n(t) + \sum_j b_{j+4} \Delta \ln V_j + \varepsilon(t)$$

where  $y$  is GDP per worker,  $s_k$  is the gross rate of investment,  $h$  is the investment in human capital proxied by the average years of schooling of the labor force,  $n$  is the growth rate of the labor force,  $t$  is time in years, and  $V$  is a vector of exogenous variables capturing economic policy. We have included the degree of openness of the economy, rate of inflation and the weight of the state in GDP, as well as financial intermediation. The model was estimated for the 1910-2000 period.<sup>20</sup>

Using the results of the estimation, we compute for each of the previous periods the total contribution of each factor:

	GDP growth	Physical capital	Human capital	Openness
Golden age	115%	48%	28%	45%
Statization	45%	25%	44%	8%
EC accession	42%	12%	17%	47%

It is clear from these results that both the golden age period, with EFTA accession, and the EC accession periods were characterized by a strong impact of the openness of the economy.

We next proceeded to estimate a real convergence equation, explained by investment in physical and human capital, as well as the degree of openness and a macro-stability variable (def). The equation was corrected for serial correlation. All variables have the expected sign and are significant at 5% level, except for the deficit variable. It confirms again a strong influence of both the human capital accumulation<sup>21</sup> and the openness of the economy.

Dependent Variable: CONV  
Method: ML - ARCH (Marquardt)  
Date: 10/19/03 Time: 13:04  
Sample: 1910 2000  
Included observations: 91  
Convergence achieved after 36 iterations  
Variance backcast: ON

	Coefficient	Std. Error	z-Statistic	Prob.
OP	25.63406	4.351909	5.890303	0.0000
DEF	-0.069420	0.079192	-0.876605	0.3807
INV	11.31502	6.696086	1.689796	0.0911
H1	4.475878	0.711735	6.288684	0.0000
C	21.68631	0.916482	23.66257	0.0000
Variance Equation				
C	1.473141	0.891505	1.652420	0.0984
ARCH(1)	0.835054	0.342946	2.434944	0.0149
GARCH(1)	0.000566	0.179760	0.003151	0.9975

<sup>20</sup> For estimations, see Mateus, A. (2003).

<sup>21</sup> These results confirm micro-studies that show a high rate of return for human capital in the case of Portugal.

R-squared	0.959624	Mean dependent var	45.54626
Adjusted R-squared	0.956219	S.D. dependent var	12.60761
S.E. of regression	2.638017	Akaike info criterion	4.457298
Sum squared resid	577.6081	Schwarz criterion	4.678033
Log likelihood	-194.8070	F-statistic	281.8095
Durbin-Watson stat	0.549202	Prob(F-statistic)	0.000000

The following table shows two regressions explaining total factor productivity, TFP (TFP1 for average of schooling years and TFP2 for a Mincerian definition of human capital). The explanatory variables are: money velocity of M2 (Finm2), that is a proxy for the degree of financial deepening; the degree of openness (Op), measured by the ratio of exports and imports on GDP; and the inflation rate (Inf) as a proxy for macro stability. The two first variables explain between 89 and 93% of total factor productivity. Inflation does not add anything to the explanatory power.

	Op	Finm2	Inf
TFP1	218,093 (68,426) <sup>22</sup>	-4,140 (-16,300)	-0,578 (1,550)
TFP2	330,545 (31,960)	-4,294 (-9,539)	-0,033 (-0,437)

These results show that an increase of 1 percentage point in the degree of openness of the economy adds 0.27 to 0.41 points to the increase in the total factor productivity. An increase of 1 percentage point in the M2 velocity adds 0.09 points to the productivity of the economy.

Finally, we estimate the impact of the institutional factors studied above on the total factor productivity. The impact of the EP index on TFP shows that an increase of 1 point in the index translates into an increase of 0.49 percentage points in the productivity growth rate. The following table shows that the improvement in the economic policy index (EP) is an important factor in explaining the large increase in the TFP of the golden age. The slowdown in the TPF during the statization period was also connected to the deterioration in the EP index, as the recovery in TFP of the EC accession period is also related to the improvement in policies and institutions.

	TFP variation	EP index	Black Market Premium	Banking	Development Policy
Golden age	59	32	5	25	45
Statization	6	-24	-26	-27	-49
EC accession	17	15	26	19	21

An analysis of individual institutional indicators show the largest impact on TPF of the decrease in the black market premium, which stands for disequilibria in balance of payments, the level of development of the banking sector and the stand of development policy. As the table above shows, improvement in development policy was the major factor behind the increase in TFP during the golden age. All institutional indicators deteriorated during the statization period. During the accession period, all institutional factors improved consistently.

#### 4. Lessons for Accession Countries

<sup>22</sup> Os números entre parêntesis por baixo de um estimador referem o t-student.

There is an important difference between Portugal and the largest Accession Countries. Poland, Czech Republic, Hungary and Eslovaquia were under a socialist regime marked by state intervention and central planning, while Portugal was always a market economy, although with some connotations of a “corporative state” up until 1974. There was always an important entrepreneurial class. In the Central and Eastern European Countries, the soviet domination eliminated that class, although the older generations still lived under a capitalist system previous to the II WW.

Notwithstanding, among present day EU Member Countries, Portugal may have had the most relevant experience in terms of economic and social transformation, for Accession Countries, since it experienced an episode of socialism with statization of the economy since 1975 and throughout most of the 1980s.

### Good lessons

The good lessons for Accession Countries are that convergence and even fast convergence is possible, but it is not a mechanical process; it depends on good policies and good institutions. Building up a market and competitive system is an essential prerequisite for growth as the 1970s and 1980s Portuguese experience of socialism followed by privatization and liberalization shows. The institutional building associated with EC accession is nowadays recognized as the most important contribution of EC accession.

The GDP per capita in Portugal is presently about 47% above the largest 4 PECO's. However, as the following figure shows, the stock of human capital is substantially behind those countries (Figure 4). To rebalance its growth path, these economies will have to improve significantly both in terms of productive physical investment and mainly in technological and institutional development. The experience of the last four decades of the Portuguese economic development is relevant for those countries. Three factors are at the top: (i) openness of the economy and society to technological transfer from the more developed countries, both in technical and institutional terms, (ii) maintenance of micro incentive systems conducive to growth, both in terms of investment and in terms of technological and management improvements; and (ii) bias towards developmental policies as well as maintenance of macroeconomic stability. We conclude that opening up the economy to the external world is equivalent to increase competition with access to a better technology. The two successful phases of growth were clearly linked to the European integration and had at the center of the process the increase in the level of competition,<sup>23</sup> which led national enterprises to increase their productivity and caused substantial resource reallocation.<sup>24</sup>

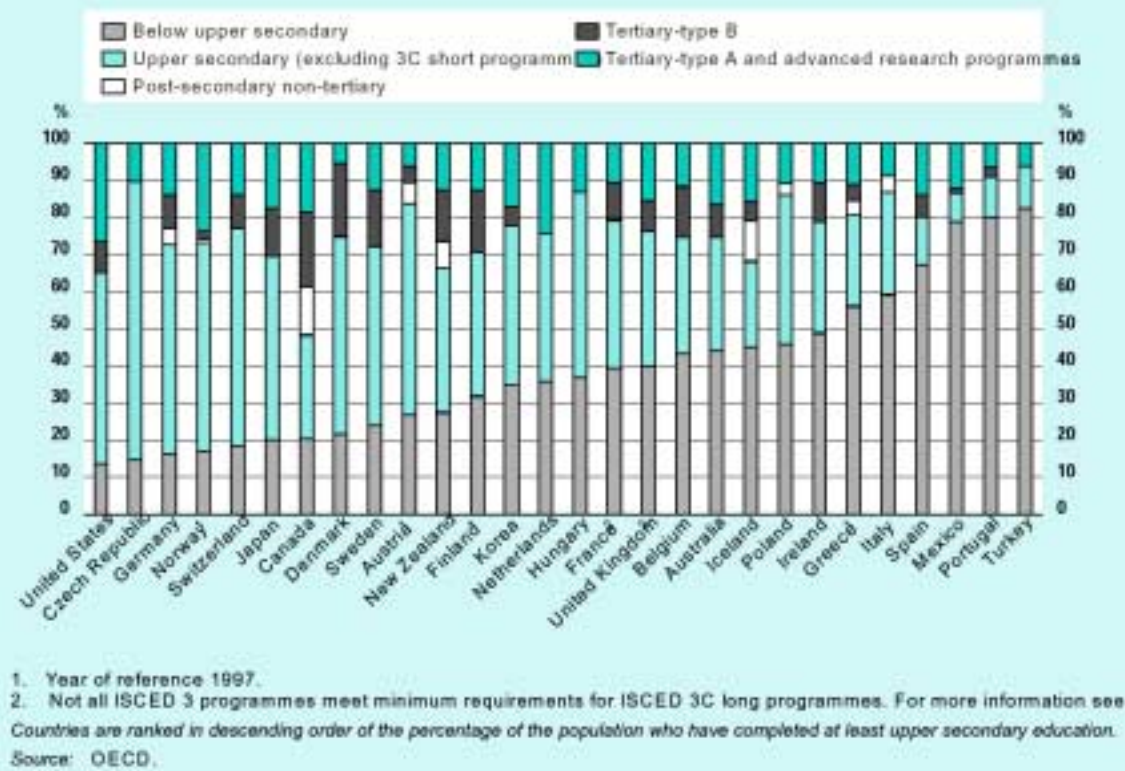
Figure 4

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<sup>23</sup> The OECD has carried out extensive research that proves the importance of regulation and competition in closing down the technological gap between the less developed countries and EU levels.

<sup>24</sup> All less developed countries in the EU: Spain, Ireland, and to a less extent Portugal went through major restructuring of their productive systems, mainly in manufacturing and agriculture. That restructuring was associated with unemployment rates of up to 20%. Restructuring has been more gradual in Portugal, but some economists argue that it has not yet run the full course, due to the extensive mechanism of subsidization. The more flexible wage rate system, active informal sector and the large construction activity, with higher levels than the above countries may justify the lower unemployment rates (the peak, so far, was to 8-9%)

**Chart A2.1. Distribution of the population 25 to 64 years of age by the highest completed level of education (1998)**



Source: OECD, Education at a Glance, 2001

Bad lessons

Unfortunately, there are also some mistakes in the Portuguese experience that should be avoided. The bad lessons are that high fund transfers may lead to aid dependence and encourage rent seeking among entrepreneurs, which is detrimental to growth. The emphasis in physical infrastructure, encouraged by EU structural funds, may also lead to a less efficient resource allocation, and a careful benefit-cost analysis of the big projects should be scrutinized by the central government and Parliament. The momentum of institutional reform needs to be kept all the time, in view of the major transformations that countries in the transition phase need to undertake: corporate governance, public policies, funding pensions, technological and management transfers from developed countries, etc. Finally, as nominal convergence progresses, the threat of financial crises should be avoided. This is the role of an efficient supervisory system of the financial sector, using mainly a prudential approach. This means that euro accession should not be rushed.

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