

**“THE THEORY OF ECONOMIC RELATIVITY APPLIED TO
THE INTERNATIONAL ECONOMY AND TO COOPERATION
POLICIES**

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Abstract: I intend to explain the importance of a Competitive Advantage Dynamic Model, taking into consideration the evolution of capital "stock", of labour supply and of the capital intensity component.

We will see that this model finds an explanation for the income evolution of a country by considering the variation rate of the gross fixed capital formation, the employment level and the capital intensity coefficient (which includes the technological progress indirectly).

Then we will also consider the main structural features of the Portuguese economy, trying to explain the relative importance of the Three Well-Fare Diamonds Theory.

Keywords: Competitive advantage, Dynamic model; stock of capital, three Well-fare diamonds theory.

Resumo: Pretende-se explicar a importância do Modelo de Vantagens Competitivas Dinâmicas, tendo em linha de conta a evolução do "stock" de capital, da oferta de mão-de-obra e do coeficiente de intensidade capitalística.

Veremos que este modelo explica a evolução do rendimento de uma economia, partindo-se da consideração das taxas de variação da Formação Fixa de Capital Bruto, do nível de Emprego e do Coeficiente de Intensidade Capitalística (o qual está, por sua vez, indirectamente ligado ao progresso tecnológico).

Iremos, ainda, analisar os bloqueamentos estruturais que existem na economia portuguesa, procurando explicar a importância relativa da Teoria dos Três Diamantes do Bem-Estar.

Palavras chave: Vantagem competitiva, Modelo dinâmico, "stock" de capital e teoria dos três diamantes ao bem-estar.

1. The importance of the competitive advantages dynamic component

1.1 Preliminary Considerations

Conventionally, the income evolution is considered to be the function of labour and capital productive factors¹⁹.

If we admit that, beyond the importance of the employment level and capital stock, in absolute terms, it is convenient to consider the type of productive combinations adopted (and, therefore, the technological progress incorporated in the productive process), then there would be a third explanatory variable for the income evolution to be considered, namely, the capital intensity coefficient (K/L).

Then, an additive simplified econometric model²⁰ or, alternatively, a multiplicative model of Cobb-Douglas' type²¹ would be adopted as there was also the possibility of using a multiplicative model with an additive component²².

In all of the cases mentioned above, the explanatory variables were related to absolute values and not to variations or growth rates, not considering the income expansion "dynamic component".

We shall admit now that the relative variables, that is, $\Delta K/K$ for the capital "stock", $\Delta L/L$ for the labour supply and $(\Delta K/K) / (\Delta L/L)$ for the capital intensity component are more important than the absolute variables of the capital "stock" (K), the work force supply (L) or the capital intensity coefficient (K/L) to explain the income evolution (Y).

This would mean that the variation dynamics of the growth explanatory factors was being given particular importance and, therefore, in a long term perspective, it would be more interesting if the increase rate of the capital "stock" or of the capital intensity coefficient of an economy was effectively higher than the perception of the significant increase, in absolute terms, at the level of the explanatory variables previously mentioned.

In other words, if, on one hand, we consider an economy A with a high initial capital "stock" as well as with a high labour offer level and a significant capital intensity coefficient, and on the other hand an economy B with a lower capital "stock" and with lower labour offer levels and less significant capital in-

¹⁹ See, for example, Cobb-Douglas production function.

²⁰ Of the type $Y_t = \alpha_0 + \alpha_1 K_t + \alpha_2 L_t$ or $Y_t = \alpha_0 + \alpha_1 K_t + \alpha_2 L_t + \alpha_3 K_t / L_t$

²¹ Of the type $Y_t = \alpha K_t^\beta L_t^\delta (K_t / L_t)^\phi$

²² Of the type $Y_t = \alpha_1 K_t^\beta L_t^\delta + \alpha_2 (K_t / L_t)$

tensity coefficient, it would be obvious that the conclusion would be that A was more developed than B.

However, if the increase rates of K, L and K/L were substantially higher in B, then and in accordance with a dynamic perspective, B could gradually exceed A if B presented a minimum capital "stock" level, available labour supply and technological progress.

This conclusion would still be more valid if A was close to the maximum capital "stock" (and, therefore, to the possible production limits).

In order to test the validity of such an analysis, it is possible to adopt econometric models in which the income evolution explanatory variables become $\Delta K/K$, $\Delta L/L$ and $(\Delta K/K) (\Delta L/L)$, as referred to above.

1.2 Model Selection

As for this dynamic analysis, it is possible to consider additive models and multiplicative models.

Initially, two additive models and two multiplicative models were considered (however, one of these with an additive component):

- (a) $Y_t = \alpha_o + \alpha_1 \Delta K_t / \Delta K_t + \alpha_2 L_t / L_t$
- (b) $Y_t = \alpha_o + \alpha_1 \Delta K_t / K_t + \alpha_2 \Delta L_t / L_t + \alpha_3 (\Delta K_t / K_t) / (\Delta L_t / L_t)$;
- (c) $Y_t = \alpha (\Delta K_t / K_t)^\beta (\Delta L_t / L_t)^\delta + \alpha (\Delta K_t / K_t) / (\Delta L_t / L_t)$;
- (d) $Y_t = \alpha (\Delta K_t / K_t)^\beta (\Delta L_t / L_t)^\delta [(\Delta K_t / K_t) / (\Delta L_t / L_t)]^\phi$;

Secondly, the mentioned models for the group of industrialized countries and for the 80s and the 90s were analysed and the conclusion was that the additive model (b)²³ presented better results.

Once the model is selected (drawn up on the basis of the industrialized countries) four different groups of countries were considered and classified according to their income level and their region (in accordance with the "World Development Report – 2000 – 2001" report), namely: the LLDC's, the LDC's, the PVD's, herein included the "Intermediate Countries") and the IC's.

18 observations were considered for each group of countries. These observations were related to the income percentage variations (Y), to the gross fixed

²³ In general, the additive models are stronger than the multiplicative models when the explanatory variables are ratios and their segmentation is more advantageous (considering the LLDC's, the LDC's and the IC's)

capital formation (K)²⁴ and to the labour productive factor (L).

As for the countries considered above, the data n/a (non-available) to K and for the 80s was obtained by means of a simplified methodology which did not imply the existence of a multicollinearity risk.

Therefore, it was assumed that the growth rate of K during the 80's was similar to the one verified in the 90's. This fact allowed the achievement of the missing observations.

Once this problem was solved, it was important to analyse in which way the additive model (b) was applicable to the four groups, considering the existence of atypical years, which would correspond to the ones that registered greater deviations in relation to regression (or, in other words, to the years in which there were greater deviations between real Y and the predicted Y – based on the model).

Therefore, for each of the groups in question there was the need to exclude the three years where a greater deviation was verified. Calculations had to be redone with fifteen observations. This gave place to the significant improvement of R² (as well as the adjusted R²).

Considering the additive model – and with the adjustments referred to above – an R² of 0,817 (0,767 – adjusted R²) was achieved for the LLDC's, of 0,921 (0,889 – adjusted R²) for the LDC's, of 0,828 (0,782 – adjusted R²) for the PVD's (including the "Intermediate Countries") and of 0,797 (0,741 - adjusted R²) for the IC's in the 90s.

This means that the model mentioned above is presented as valid for the generality of the groups and, therefore, it is possible to find an explanation for the income evolution of a country by considering the variation rate of the gross fixed capital formation, the employment level and the capital intensity coefficient (which includes the technological progress indirectly)²⁵.

Such conclusion leads necessarily to another: the income evolution of an economy results not only from the capital "stock", labour supply (in absolute terms) and from the capital intensity coefficient but also from the corresponding

²⁴ For operational difficulty reasons as regards the achievement of the values corresponding to capital "stock", there was the need to apply for the gross fixed capital formation.

²⁵ Despite being possible to formulate several critics to such model (v.g. stronger in the 90s than in the 80s, coefficient of L/L being negative in the LLDC's – what may be connected to the Peter Kenen's concept of "weakening growth" – and a significantly negative coefficient affecting the variation of the capital intensity in the LLDC's – what can be explained by the technological indivisibility - the model presents itself as globally valid.

variation rates and, therefore, from the economy "dynamic component".

Thus, despite the importance of recognising the dimension and the starting point of economies to proceed with an analysis of comparative advantages, it is important to consider the corresponding "dynamic components" in order to understand the expected evolution in terms of competitive advantages.

And, from such analysis, we are now in the condition to explain the importance of the New Diamond Theory as regards the formulation of a global development policy as well as the instrumental importance that may limit cooperative consistent policies in accordance with an integrated and integrating perspective²⁶.

²⁶ Please note that the coefficients affecting the explanatory variables K/K and L/L present themselves as positive for all groups with the exception of the explanatory variable L/L for the LLDC's group.

This means that for LLDC's, a high demographic growth rate does not imply an economic development, what is also explained when realising the limitations resulting from what was defined as demographic explosions.

Another interesting aspect consists of the fact that the coefficient relating to the capital intensity explanatory variable is presented as negative and slightly high as regards the LLDC's (with lower values, in absolute terms, for the remaining countries).

A possible explanation to such value is connected to the existence of technological indivisibilities, which imply the adoption of intermediate type combinations and not intensity capital combinations.

Economic Evolution by region according to its development degree

Annual medium growth in %

Group of Countries According to the Development Degree		Y		K		L		Aux.cal
		1980-90	1990-99	1980-90	1990-99	1980-90	1990-99	
LLDC's	Angola	3.4	0.8	2.8	12.9	2.3	3.0	54,83
	Ghana	3.0	4.3	2.2	4.2	3.3	3.7	2,93
	Guinea	3.8	4.2	13.7	2.4	2.1	2.1	2,7
	Haiti	-0.2	-1.7	0.1	1.7	1.5	1.8	7,04
	India	5.8	6.1	6.1	7.4	1.7	2.3	6,62
	Indonesia	6.1	4.7	5.8	5.1	3.0	2.6	2,40
	Lesotho	4.6	4.4	4.1	2.3	2.0	2.5	0,58
	Madagascar	1.1	1.7	2.7	0.9	2.3	2.9	-4,69
	Malawi	2.5	4.0	-4.1	-7.5	3.0	2.4	-0,18
	Mali	0.8	3.6	2.7	0.8	2.3	2.6	2,99
	Mauritania	1.8	4.1	9.3	6.8	2.0	3.0	-0,21
	Mozambique	-0.1	6.3	-0.2	13.1	1.2	2.0	14,45
	Vietnam	4.6	8.1	14.5	25.5	2.7	1.8	3,31
	Pakistan	6.3	4.0	3.3	2.1	2.9	2.8	9,35
	Kenya	4.2	2.2	0.1	4.9	3.7	3.3	3,00
	Senegal	3.1	3.2	3.0	3.1	2.6	2.6	11,30
	Zambia	1.0	1.0	-5.1	11.3	2.8	2.9	-1,05
Zimbabwe	3.6	2.4	2.9	-0.7	3.5	2.2	0,34	
LDC's	Algeria	2.7	1.6	0.3	0.2	3.7	4.0	-0,48
	Bolivia	-0.2	4.2	-0.5	10.1	2.6	2.6	1,13
	Bulgaria	3.4	-2.7	1.1	-0.9	-0.4	-0.7	12,08
	China	10.1	10.7	3.6	12.8	2.2	1.3	1,28
	Philippines	1.0	3.2	1.3	4.1	2.8	2.8	0,95
	Guatemala	0.8	4.2	-2.5	5.0	2.8	3.2	3,39
	Latvia	3.7	-4.8	4.8	-4.4	0.3	-1.0	2,74
	Morocco	4.2	2.3	2.7	1.5	2.4	2.7	0,96
	Namibia	1.3	3.4	1.0	2.5	2.5	2.3	1,56
	Paraguay	2.5	2.4	1.6	1.5	2.8	3.3	4,68
	Sri Lanka	4.0	5.3	4.7	6.2	2.2	2.0	2,08
	Syria	1.5	5.7	2.1	7.9	3.3	4.0	8,22
	Egypt	5.4	4.4	8.2	6.7	2.5	2.9	0,70
	Iran	1.7	3.4	-3.5	1.4	3.0	2.4	4,92
	Romania	0.5	-1.2	4.9	-11.8	-0.2	0.1	1,7
	Thailand	2.6	4.7	-4.7	2.9	2.7	1.7	-4,69
	Tunisia	3.3	4.6	2.4	3.4	2.7	2.8	2,44
Turkey	5.4	4.1	6.1	4.6	2.6	2.8	6,06	
PVD's - IC	South Africa	1.0	1.9	1.6	3.0	2.3	2.7	1,58
	Argentina	-0.7	4.9	-1.3	9.1	1.5	1.9	-1,30
	Botswana	10.3	4.3	-3.1	-1.3	3.4	2.4	3,11
	Brazil	2.7	2.9	2.9	3.1	3.2	2.2	2,89
	Chile	4.2	7.2	6.7	11.4	2.7	2.4	6,65
	Estonia	2.2	-1.3	3.1	-1.8	0.4	-0.7	3,05
	Hungary	1.3	1.0	-1.0	8.4	-0.8	0.1	10,92
	Lebanon	3.4	7.7	8.3	18.4	2.9	3.1	8,12
	Malaysia	5.3	6.3	1.5	6.2	3.1	3.0	5,22
	Mauritius	1.8	4.1	9.3	6.8	2.0	3.0	2,99
	Mexico	1.1	2.7	-4.7	3.9	3.2	2.9	1,59
	Panama	0.5	4.2	1.4	12.1	3.2	2.6	1,44
	Poland	2.2	4.7	5.6	11.9	0.1	0.6	5,57
	Czech Republic	1.7	0.9	11.9	6.3	0.3	0.5	11,90
	Korea Republic	9.4	5.7	11.1	1.6	2.3	2.1	2,64
	Slovakia Republic	2.0	1.9	4.8	4.6	0.8	0.9	4,84
	Uruguay	0.4	3.7	-7.7	8.9	1.6	1.2	0,96
Venezuela	1.1	1.7	-3.7	2.9	3.4	3.0	1,88	
IC's	Australia	3.4	3.8	5.5	6.1	2.3	1.4	5,46
	Germany	2.2	1.5	0.7	0.5	0.6	0.4	0,73
	Austria	2.2	2.0	3.2	2.9	0.4	0.7	3,19
	Belgium	1.9	1.7	0.3	0.3	0.1	0.8	0,34
	Canada	3.3	2.3	3.7	2.6	1.8	1.3	3,73
	Spain	3.0	2.2	-0.7	-0.5	1.4	0.9	-0,68
	USA	3.0	3.4	4.8	7.0	1.3	1.2	6,18
	France	2.3	1.7	2.8	-1.6	0.5	0.7	-2,16
	Greece	1.8	1.9	-1.6	1.3	1.0	0.9	1,23
	Holland	2.3	2.7	1.3	1.5	1.9	0.9	1,28
	Ireland	3.2	7.9	1.9	4.8	0.3	2.1	1,94
	Italy	2.4	1.2	1.7	-1.0	0.8	0.7	-2,00
	Japan	4.0	1.4	4.8	1.1	1.2	0.7	3,14
	Norway	2.8	3.7	3.9	5.1	0.8	1.0	3,86
	Portugal	3.1	2.5	4.3	3.5	0.5	0.5	4,34
	United Kingdom	3.2	2.2	2.6	1.8	0.6	0.3	2,62
	Sweden	2.3	1.5	-3.4	-2.2	0.9	0.4	-3,37
Switzerland	2.0	0.5	-1.6	-0.4	1.6	0.9	-1,60	
Switzerland	2.0	0.5	-1.6	-0.4	1.6	0.9		

Source: World Development Report 2000/2001

1.3 From dynamic competitive advantages to future challenges for the Portuguese economy

The author intends to explain the economic growth through non-conventional explanatory variables, this is, from capital "stock" growth rates (or from GFCF – gross fixed capital formation), workforce, capital intensity coefficient, thus assigning particular evidence to the explanatory growth factors dynamics.

As we have, already, said, according to the conventional analysis, if we consider an economy A with a high initial capital "stock" as well as with a high labour supply level and a significant capital intensity coefficient, and on the other hand an economy B with a lower capital "stock" and with lower labour supply levels and less significant capital intensity coefficient, it would be obvious to conclude that A is definitely more developed than B.

However, if the increase rates of K, L and K/L were substantially higher in B, then, and in accordance with a dynamic perspective, B could gradually exceed A if B presented a minimum capital "stock" level, available labour offer and technological progress.

In order to develop such theory, two additive models and two multiplicative models were tested and the following econometric model was adopted:

$$Y_t = \alpha_0 + \alpha_1 \Delta K_t / K_t + \alpha_2 \Delta L_t / L_t + \alpha_3 (\Delta K_t / K_t) / (\Delta L_t / L_t);$$

Four different groups of countries were hereby considered, namely the LLDC's, the LDC's, the PVD's and the IC's as well as sets of 18 other observations.

By using some methodologies, it was possible to achieve reasonable values for R² corresponding to the different Groups. This led to the conclusion that the selected model presented itself as valid for the groups in general, and, therefore, it was possible to explain the income level development of a country from the variation rates of K (or from FBCF), of L and of K/L (the latter including the technological progress variable).

The importance of the economy dynamic component is, therefore, explained. This component is closely related to the confidence, modernization, investment, training and investigation variables and it is worth referring that this group of variables determines the New Diamond Strategy.

However, any effort to apply the New Diamond Theory to the Portuguese economy implies the formulation of its features as well as the analysis of its recent development.

Abel Mateus considered, as he himself said²⁷, the following structural features of the Portuguese economy:

- EU short peripheral economy with a high opening level as regards the integration area;
- primary sector not very significant – still possible to register a desindustrialized and transition process of the Portuguese economy²⁸;
- Intermediate technological level in industry and in the export sector²⁹;
- weak institutional development level and high importance of the public sector;
- high external and budget fluctuation aggravated by the family, companies and State debt level.

Authors such as Abel Mateus, António Antunes and Maria Filomena Medes came to the conclusion that, in 1950 and 1999, the principal factors that contributed to the GDP in Portugal were physical and human capital. They still mentioned that one of the most preoccupying factors of the Portuguese economic growth, in the last few years, was what they called “cement focused investment” as well as a certain “decrease in the economic restructuring of the country via business activities”³⁰.

Eduardo Catroga underlines that there was an excessive allocation of resources to the BNT sector. This author also stated that Portugal needs “competitive business strategies” which may give more emphasis to the productive investment, export and the development of immaterial competitive aspects³¹.

For Manuel Pinho³², the product increase has been having better results lately. This fact is more connected with the intensive use of work productive factors than with the productivity increase (when comparing with more distant past).

²⁷ See MATEUS, Abel – “Do Ajustamento estrutural ao relançamento do crescimento”, in Cabral, F. Sarsfield; TAVARES, L. Valadares; MATEUS, Abel – “Reformar Portugal – 17 estratégias de mudança”, oficina do Livro, 2003, pags 23 a 66.

²⁸ Please note that, according to Ranis e Fei, Portuguese economy reached the “commercialization point”.

²⁹ It is possible to verify the high importance of the traditional sectors of low dynamism and technological contents as regards national productive activity.

³⁰ MATEUS, Abel; ANTUNES, António; MEDES, Maria Filomena – “Cenários Macroeconómicos”, in “A Engenharia e a Tecnologia ao serviço do Desenvolvimento de Portugal: Prospectiva e Estratégia, 2000-2020”, Editorial Verbo, Novembro de 2000, pags 42 and 43.

³¹ CATROGA, Eduardo – “Políticas Estruturais e Estratégia de Desenvolvimento”, in TAVARES, Luís, Ob. Cit., pags 93 to 115.

³² PINHO, MANUEL – “Produtividade e Crescimento em Portugal”, Edição Economia Pura, Nov. 2002.

In short, productivity has not been increasing sufficiently in Portugal during the last few years (in a perspective of convergence with the EU). The investment was highly directed to the BNT sector and the methodology that enabled a more intensive use of the work productive factor is now worn out, what may possibly generate some negative "side effects".

Considering the above mentioned, it is possible to conclude that there is the need to direct our development strategy to an industrial specialization and services' diversity model. Simultaneously we should create basic conditions to allow companies to use aggressive commercial policies, thus applying a cooperation policy which can also be included in an internationalization process in order to maximize our competitive advantages.

Once the Portuguese economy is defined both in structural terms and in what regards its recent development, it is important to consider the existing "alternative scenarios" in order to adjust the development model (and the application of the New Diamond strategy) to the existing real challenges.

For A. Mateus, it is possible to consider three scenarios: a pessimistic scenario – "Business as usual"; a "moderate" optimistic scenario – "Stabilization Policies Adequate to a Structural Reform"; and an "ultra-optimistic" scenario – convergence with the EU of the 15-20 years.

OECD also developed a study about the economic development of its integrating countries, considering a "scenario" of High Growth" and a scenario of "Low Growth". This study considered a possible starting point (which would correspond to an "intermediate" scenario), according to which the annual growth rate average for the OECD group would be of approximately 2,5% and for the EU group of 2 to 2,5%.

Portuguese economy development could be set up between the growth rate which grants the convergence with the EU-15 to 15-20 years and another rate which grants the maintenance of the present ratio between the Portuguese GDP_{p.c.} and of the communitarian average (0,74 to 0,75).

Anyway, if there is the intention of "influencing" the economy growth rate, it is necessary to conclude that granting a macro-economic stability (CONFIDENCE) is not sufficient, by simply leaving the market mechanisms work. It is necessary to consider the remaining factors, such as success social valorization, management capacity at a macro-economic and business level (Training, Education and R&D), the institutions' quality (Theory of Economic Relativity), the capacity for innovating (INNOVATION), and the improvement of opportunities opened by the Globalization (internationalization).

All the above leads to the importance of the New Diamond and of the Theory of Economic Relativity, thus still being necessary to analyse the stabilization policies in an articulated way, which integrates the triangle CONFIDENCE/CONTRA-CYCLE/BUDGET ACCURACY.

In certain circumstances we may probably think that it is not possible to conciliate the binomial confidence / contra-cycle with the budget accuracy (and with the aim of reducing the deficit) specially when we are facing a recession crisis.

For such effect, it is important to distinguish what is understood by public investment projects from State Budget financed projects, as it is possible to adopt the PFI/PPP methodology (Private Finance Initiative/Public Private Project).

In short, there is a wide consensus as regards the fact that productivity has not been increasing at a desirable rate (that is, a rate that allows the attainment of convergence with the EU-15 until 2020), that the external competitiveness increase has proved to be insufficient and that investment has privileged the BNT sector in the last few years and that income increase is basically due (from the 90s until today) to the increase of the work productive factor use (immigration flows and the entry of women in the active population).

It is an already worn out model, considering that economic growth cannot continue to be based on the intensification of immigration flows, on the importance of women in the active population and on a BNT sector-oriented investment.

On the other hand, contra-cyclic budget policies of neo-Keynesian's inspiration are currently conditioned to the Stability Pact.

Thus, the only "way out" for stagnation is based on productivity and competitiveness increase, what implies structural reforms in Public Administration (with the reduction of employees), in Education (the technical schools being privileged), in Justice (debureaucratizing) and in Health (adopting "project finance" solutions).

By putting into practise a New Diamond strategy, we may achieve an annual rate average of 2,5 to 3%, reaching the convergence with the EU-15.

The New Diamond strategy also goes through the control compatibility of public expenses by using public investment projects, following the PFI/PPP methodology, by means of a fiscal policy which enhances reproductive private investment and applications developed abroad by national companies and by the

observation of two additional assumptions:

- favourable development of the world economy, in general, and of the European economy in particular;
- creation of adequate conditions so that the national economic agents be in condition to adopt consistent internationalization strategies (what, in macro-economic terms, follows the Entrepreneurial New Diamond concept). The cooperation policy is herein considered as one of the basis for the internationalization strategies above mentioned.

The admissibility of a positive development of the Portuguese economy (enabling the convergence with the EU-15 until 2030) implies the existence of a “scenario” of globalization analysis at an international level (and not a protectionism return scenario).

Cumulatively, it is assumed a “scenario” that consists of a liberalisation maintaining (in its essential) the current correlation of strengths between the parties, at an international level.

If we admit these are the most probable “scenarios” as regards international economy and Portuguese economy development (increase in accordance with the optimistic version, granting a convergence to 2030 within a liberalization reinforcement context with the maintenance of the current strengths correlation), Portugal should continue to adopt an industrial specialization and services’ diversification model, investing on the intensification of an intra-sector based market (without renouncing the traditional industries, such as textiles, clothing and footwear).

As regards LAFAY’s analysis, the Portuguese economy should also consider proximity and, therefore, the Iberian market and the economic agents should privilege specialisation sectors such as tourism (in an expansion stage), electronic components (intra-sector based market), pulp (in a maturity stage), Health (in an expansion stage and with the possibility of converting itself into a top sector considering the proximity of the “fourth” industrial revolution and allowing the development of other activities such as those connected to tourism and to leisure activities for the elder), financial services (intra-sectorial specialization), wines of high quality (also intra-sectorial specialization), clothing, textiles and footwear (presently in decay and, therefore importance is given to the “design” and new international marketing policies, trying to maintain, as much as possible, market shares and take profit of new niches that may arise).

1.4 From the importance of cooperation policies as regards the globalization scene, to the Theory of the Three Well-Fare Diamonds, passing by a new Theory of Cooperation Policy

According to STIGLITZ, problems resulting from undevelopment, asymmetry and concentration are not connected to the globalization but with the way globalization has been managed by some international organisations such as IMF, WB and even WTO. According to this author, such organisations have been serving more the IC's interests than the PVD's interests.

Thus, the author explains and considers that IMF committed several mistakes during the last two decades:

- by preconizing, in multiple cases, the excess of austerity, economic growth was prejudiced, what contributed to the aggravation of asymmetries;
- the schedules suggested for the economic programmes were not always the best either in terms of opening markets abroad or in what regards privatization processes;
- the tendency for the emergence of perverse effects of policies preconized by IMF (and of the globalization itself), namely the effects resulting from the existing connection between "ruling classes" and "groups of interest" was not contradicted;
- a conjunctural perspective was privileged;
- as regards the development process, the State role was underestimated both in what regards public investment in framework infrastructures and the creation of conditions enabling a greater balance between BT and BNT sectors as well as the attainment of support policies to PME's³³ and micro-companies.

The absence of a World State, responsible for populations of all the countries, that supervises the globalization process in the same way the national States regulates the functioning of the corresponding economies, takes STIGLITZ to defend the reinforcement of the cooperation among the States as well as the deep analysis of integrating experiences.

For example, STIGLITZ criticizes the IMF's restrained position on privatizations: priority is given to the speed of their concretization, it is assumed that markets emerge spontaneously and the resolution of problems related to competition defence is left behind.

For the author, privatizations imply, in several situations, the previous outcome of a regulatory market entity as well as the preparation of a programme predicting the creation of employment.

On the other hand, corruption appears "hand-in-hand" with privatizations in various LDC's. Therefore, each transition process must assume the existence of "good governance", "transparency" and democracy with effective separation of powers (and, thus, with a strong and independent legal power).

STIGLITZ formulates a group of proposals with emphasis on the following:

- - the adoption by LDC's of an "export-led growth model" without forgetting the BNT's sector and the endogenous market;
- - the market gradual liberalization, as far as working places are being created in industry or in export sectors (increasing the BT's sector workforce mobility for the BNT's sector, the latter being in adequate expansion);
- - the conciliation of the privatization processes by national States with the approval of the competition defence legislation and with the creation of adequate conditions for the consolidation of national economic groups (and of PME's in market niches with the possibility of obtaining competitive advantages);
- - admissibility that the State shall not renounce from a global economic policy with particular emphasis on education/training policies, investment in framework infrastructures as well as on social policies (Health and Social Security);
- - the need of a financial policy which shall operate in contra-cycle and the need of strict policies that should not exceed certain limits (thus avoiding the risk of an excessive social political instability);
- - the need to compare a gradual strategy with a "shock therapy";
- - the introduction of adjustments to the applicable legislation in certain countries as regards situations such as a company's bankruptcy (in order to avoid distortions in market functioning mechanisms);
- - the implementation of adjustments as regards banking regulations (the credit being more oriented to medium and long terms);
- - WB and WTO's reform (with the view of conciliating the interests of great potencies with a more effective participation degree of the small countries) as well as the International Cooperation System's reform, including the multilateral cooperation organizations and the IFI's.

As regards the Portuguese cooperation policies (mainly PALOP-oriented) in particular, the desirable development would, in terms of "African Scenario System", consist of the Structural Adjustment Programmes Scenario" (as regards the concretization of the CDF approach) and, in terms of "Scenarios System for Africa", it would consist of the African development model" (as a permanent search for the application of global and sectorial policies adequate to the political-economic and social-cultural realities of the countries object of the cooperation policies).

The efficiency of the Portuguese cooperation policies is limited by numerous fac-

tors with emphasis on the following:

- the need to be developed as one of the relevant policies, coherent with the essential remaining options for the Government;
- the existence of a cooperation policy “strategic unit”, which implies a single coordinating entity with effective structures (able to conciliate “strategic action unit” with the decentralization in the “field intervention”);
- the sensible and wise definition of the guidelines and objectives which shall be followed by development help policies both in geographical and sectorial terms.
- The creation of conditions adequate to a business cooperation enabling the internationalization of a Portuguese economy which maximizes dynamic competitive advantages;
- The efficient use of tools such as the help credit, risk capital, micro-credit or micro-financing;
- The choice of more adequate partnerships within an internationalization perspective, with the view of maximizing the synergies resulting from complementarities existing between public and private entities;
- The existence of human, technical and financial means adequate to the objectives and strategies to follow (where business cooperation is clearly distinguished from institutional cooperation);
- Strict control and monitoring / legal control as regards the application of available resources and cooperation programmes to be achieved (the principle of concentration at the level of the number of countries object of help and of the number of projects should be adopted whenever necessary);
- The use of tools and efficient cooperation means / processes, with the aim of meeting the recipient countries’ needs and interests providing these with autonomy as regards the follow up and development of projects to Embassies and existing Agencies / Delegations, at a local level.

Considering that the cooperation policy is one of the economic internationalization and (strategic) development tools, it is important to emphasize that it is also one of the components of the New Diamond strategy (both at the strategic partnership and investigation levels) as well as of the New Entrepreneurial Diamond in micro-economic terms (thus, conditioning the business organization and business policies in various sectors).

Both the New Diamond strategy (in terms of economic policy for the development or simple business policies in various sectors) and the Entrepreneurial Diamond Strategy at a micro-economic level should be oriented to higher Welfare levels, that is, to higher human existence levels.

The achievement of such desideratum has to go through reforms, innova-

tions and “conflict of interests” in several domains of our societies. It is, therefore, necessary to consider not only the development pattern (in connection with the New Diamond, one of the components of the Economic Relativity Diamond) and the development dynamics (in connection with the New Entrepreneurial Diamond) but also the “Good Governance” / Stability, the dominant participative structures, the degree of social mobility and the structures existing in Health and Social Security sectors (Theory of Economic Relativity).

The Economic Relativity Diamond is only able to succeed in terms of well-being improvement, if there is development in terms of “Good-Governance” (effective and clear government), of the deep analysis of the democratic participative mechanisms, of a greater social mobility (including the opening to new cultural values), of the basic needs fulfilment, of a more intense development dynamics and of a higher development pattern.

The triangle Internationalization, Welfare and Competition must “succeed” in an articulated way – the three Diamonds (the New Diamond, the New Entrepreneurial Diamond – NED and the Economic Relativity Diamond – ERD) should be inter-connected (see Figure XIV).

The Theory of Economic Relativity is subjacent to ERD, what implies an improvement of the Welfare level, the adoption of effective development and macro-economic policies (ND) as well as the creation of adequate conditions for a dynamic business management (NED).

Not only a businessman but also people responsible for the definition and development of the economic-financial policy of a country must have the ability to preview the society’s tendency movements.

In order to achieve a balance in a world that is being globalised, it is extremely important to consider the Theory of the Three Well-Fare Diamonds, that means the Theory according to which the Theory of Economic Relativity (as theory with the aim of maximizing the Social Dynamic Welfare function, subject to the restrictions arising from the structural features of the Society in several domains) is inter-connected with the Macro-economic and Development Policies (ND) and with the business management development (NED).

The HDI-D (Human Development Index - Dynamic) concept must be considered within this context.

It is also in the light of the concepts mentioned above that it is possible to develop a new Cooperation Policy Theory based on the following fundamental vectors.

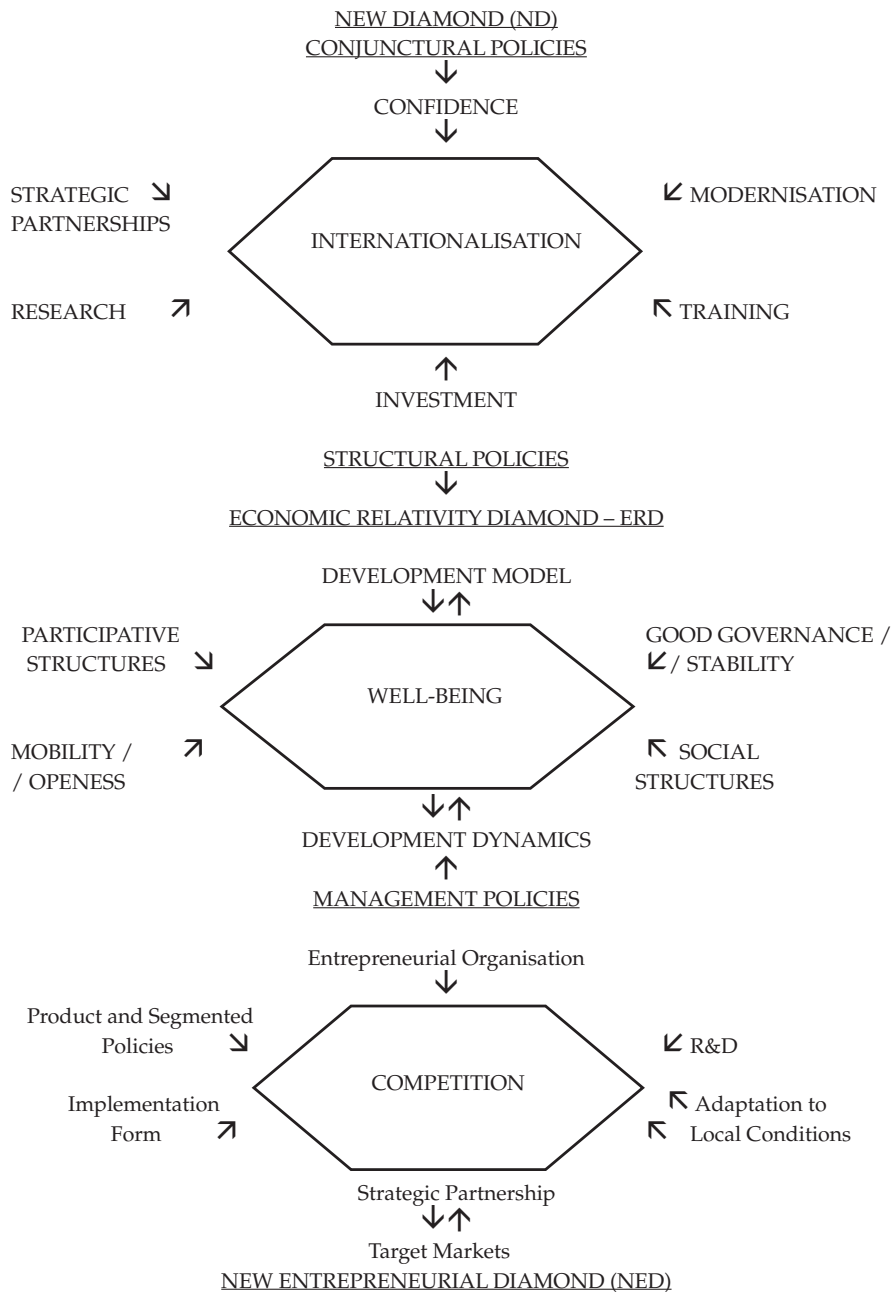
- the need to distinguish the cooperation policy / the tool of a “uninterested” development policy, fighting in favour of poverty reduction (or, according to some authors, a combat against globalization “perverse effects”) and of the cooperation policy / the tool of an international policy of the donor economies (“interested” bilateral cooperation);
- the need to adopt an integrated and integrating vision of help development policies (in order to meet CDF’s perspective)³⁴;
- the need to follow a diagnosis based on the starting point of the help beneficiary country, considering its own specificness, the regional perspective (or of potential regional integration) trying to conciliate universal development patterns with social welfare conceptions which result from special cultural nature considerations;
- the need to establish development objectives at the level of the three diamonds, that is, in terms of the welfare level, internationalization degree and effective and potential competitiveness.

Considering the theory of the Three Diamonds and always following a perspective that privileges the attainment of dynamic competitive advantages, it is possible to move successfully towards a new Cooperation Policy Theory as well as to create consistent development models simultaneously – just like the one preconized for the Portuguese economy.

It is in the light of the Theory of the Three Diamonds that a cooperation policy shall be implemented, which, as an instrument of a policy oriented to the maximization of the Welfare level, strengthens the Portuguese presence in the World we belong to.

³⁴ “Comprehensive Development Frame work”

FIGURE I
THE THREE WELFARE DIAMONDS



Biography

- SOUSA, António Rebelo de – “Da Teoria da Relatividade Económica Aplicada à Economia Internacional e às Políticas de Cooperação”, Univ. Lusíada Editora, 2004.
- SOUSA, António Rebelo de; QUINTINO, António Manuel – “Enquadramento Internacional da Economia Portuguesa: As Variáveis Explicativas do Crescimento Económico”, Revista Economia & Empresa, Univ. Lusíada Ed, 2006.
- SOUSA, António Rebelo de – “Do modelo neo-clássico de crescimento de Solow ao Modelo de Vantagens Competitivas Dinâmicas”, Revista de Ciências Sociais e Políticas, Instituto Superior de Ciências Sociais e Políticas, Universidade Técnica de Lisboa, n° 3, 2009.
- SOUSA, António Rebelo de; QUINTINO, António Manuel – “De uma Versão Actualizada da Explicação da Evolução da Economia Portuguesa”, Universidade Lusíada Editora, n° 11, 2009.
- MATEUS, Abel – “Do Ajustamento estrutural ao Relançamento do Crescimento”, in CABRAL, F. Sarsfield; TAVARES, L. Valadares; MATEUS, Abel – “Reformar Portugal – 17 Estratégias de Mudança”, Oficina do Livro, 2003.
- MATEUS, A; ANTUNES, A; MEDES, Maria F. – “Cenários Macroeconómicos” in “A Engenharia e a Tecnologia ao Serviço do Desenvolvimento de Portugal: Prospectiva e Estratégia, 2000 – 2020”, Editorial VERBO, 2000.
- CATROGA, Eduardo – “Políticas Estruturais e Estratégia de Desenvolvimento” in TAVARES, L V, Ob Cit.
- PINTO, Manuel – “Produtividade e Crescimento em Portugal”, Ed. Economia Pura, 2002.