Abstract

In this paper we analyze the Lisbon performance of the countries of the European Union from a long-term, structural perspective.

It again turns out that first of all things get worse, before they get better – the old wisdom of classical development economics (Kuznets) and political science modernization theory of the postwar period. In addition, it emerges that foreign savings, “economic freedom”, low comparative international price levels, and World Bank type pension reforms are not compatible with a solid and long-run development path, based on our knowledge of 17 component variables, integrating the dimensions growth, environment, human rights, basic human needs satisfaction, and gender equality. In addition, European Union membership (EU-15, “old Europe”) has the numerically highest negative effect on the global Lisbon process; while Muslim population shares in no way block the development process, on the contrary. Neo-liberal globalization strategies are condemned to failure; while European decision makers in particular would be strongly advised to re-think their Lisbon strategy, which pushes countries towards accepting strategies, which, inter alia, lower instead of increase the comparative international price level. Is a price level of say, the Congo’s dimension, really the aim of the Lisbon process?

Balassa and Samuelson assumed that rising international price levels for the periphery country are a precondition of positive development. Falling relative price levels would suggest in the neo-classical argument that the price of the non-tradables in the European economy decreased dramatically over time. Structuralist economists, like Stanford Professor emeritus Pan Yotopoulos, usually warn the weaker countries of the periphery that: “Currency substitution represents an asymmetric demand from Mexicans to hold dollars as a store of value, a demand that is not reciprocated by Americans holding pesos as a hedge against the devaluation of the dollar!” (Yotopoulos and Sawada, 2005).

In addition to the above specified dependency theory and world systems theory arguments, urbanization positively affects Lisbon Process Index Indicator. Ceteris paribus, World Bank pension reforms will be negatively related to the
process: Pushing Europe downwards the path of falling comparative prices will only increase the growth impediments of the growingly multicultural Europe.

**Keywords:** Index Numbers and Aggregation, Cross-Sectional Models, Spatial Models, Economic Integration, Regional Economic Activity, Growth, Development, and Changes, International Factor Movements and International Business, International Relations and International Political Economy.

**JEL Classification:** C43, C21, F15, R11, F2, F5.

**Introduction**

Is globalization a general receipt for a sound and successful development, especially of the new member states of the European Union? Or is there a lesson to be learnt from the experience of the world periphery and semi-periphery, and from dependency research, which – like the works of Osvaldo Sunkel – is generally critical about the long-term polarizing social effects of relations of dependency?

As it is well known, in March 2000, the EU Heads of States and Governments agreed to make the EU "the most competitive and dynamic knowledge-driven economy by 2010". Although some progress was made on innovating Europe's economy, there is growing concern that the reform process is not going fast enough and that the ambitious targets will not be reached². As it is also widely known, the 14 main structural “Lisbon” agenda indicators, created to measure progress in meeting the Lisbon targets, play an important role in European policy making³. The Lisbon lists of indicators, apart from the highly publicized debt-related Maastricht criteria of the European Monetary Union, are perhaps the most important checklists for government success or failure in Europe today. They are omni-present in the public political as well as scientific debate and are defined by Eurostat as:

List of Lisbon indicators:

1. GDP per capita in PPS
2. Labor productivity
3. Employment rate
4. Employment rate of older workers
5. Educational attainment (20-24)
6. Research and Development expenditure

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² For a short survey of the Lisbon process, see also: http://www.euractiv.com/Article?tcmuri=tcm:29-117510-16&type=LinksDossier
³ http://epp.eurostat.cec.eu.int/portal/page?_pageid=1133,1403427,1133_1403432&__dad=portal &__schema=PORTAL
7. Comparative “price levels” (developed on the basis of the ERD-Index Yotopoulos et al.)\(^5\) (the Commission maintaining that a low value is a good result)

8. Business investment

9. At risk-of-poverty rate (low value = good result)

10. Long-term unemployment rate (low value = good result)

11. Dispersion of regional employment rates (low value = good result)

12. Greenhouse gas emissions (low value = good result)

13. Energy intensity of the economy (low value = good result)

14. Volume of freight transport (low value = good result)

It is assumed that a good performance on one indicator is causally linked to a good performance on the other indicators. Or in the words of Professor Romano Prodi, the former Commission President: “The Lisbon Strategy remains the right course for an enlarged European Union. It is the best way of delivering what concerns our citizens most - prosperity, more and better jobs, greater social cohesion and a cleaner environment - and making sure that they are achieved sustainably for future generations.” (http://www.socialdialogue.net/en/en_lib_068.htm)

But a recent study by the European Commission (2005a) warns that it is very difficult to quantify the impact of the reforms because of the "heterogeneity" of individual reform measures, time lags in implementation and complementarities and trade-offs between reforms. The Commission classifies the Lisbon reforms into five categories:

1. product and capital market reforms;
2. investments in the knowledge-based economy;
3. labor market reforms;
4. social policy reforms;
5. environmental policy reforms.

**The main theories and the research design**

European Union policy making nowadays makes basic neo-liberal assumptions, like the one that a low comparative international price level is good for socio-economic development. Dependency and later world systems theory, going back to its four “founding fathers” Samir Amin, Giovanni Arrighi, Andre Gunder Frank and Immanuel Wallerstein, ascent and decline in world society is largely being determined in our age by the following ‘five monopolies’:

- the monopoly of technology, supported by military expenditures of the dominant nations

\(^{4}\) It can be shown that the Eurostat data series GDP PPP per capita/GDP exchange rate per capita (EU-25=100), used for the ‘price level’, in reality measure GDP exchange rate per capita/GDP PPP per capita (EU-25=100).
• the monopoly of control over global finances and a strong position in the hierarchy of current account balances
• the monopoly of access to natural resources
• the monopoly over international communication and the media
• the monopoly of the military means of mass destruction.

Let us also recall, that for Amin (1975), there are four main characteristics of the peripheral societal formation:

• the predominance of agrarian capitalism in the ‘national’ sector
• the formation of a local bourgeoisie, which is dependent from foreign capital, especially in the trading sector
• the tendency of bureaucratization
• specific and incomplete forms of proletarization of the labor force.

In partial accordance with liberal thought, (i) and (iii) explain the tendency towards low savings; thus there will be:

• huge state sector deficits and, in addition, their ‘twin’:
• chronic current account balance deficits in the peripheral countries.

High imports of the periphery, and hence, in the long run, capital imports, are the consequence of the already existing structural deformations of the role of peripheries in the world system, namely by:

• rapid urbanization, combined with an insufficient local production of food
• excessive expenditures of the local bureaucracies
• changes in income distribution to the benefit of the local elites (demonstration effects)
• insufficient growth of and structural imbalances in the industrial sector
• and the following reliance on foreign assistance

The history of periphery capitalism, Amin argues, is full of short-term ‘miracles’ and long-term blocks, stagnation and even regression. While mass demand and reforms in the agricultural structures were responsible for the transition from the tributary mode of production in Western Europe to capitalism from the Long 16th Century onwards, periphery capitalism was and is characterized by the following main tendencies (Amin, 1973 - 1997):

• regression in both agriculture and small scale industry characterizes the period after the onslaught of foreign domination and colonialism
• unequal international specialization of the periphery leads to the concentration of activities in export oriented agriculture and or mining. Some industrialization of the periphery is possible under the condition of low wages, which, together with rising productivity, determine that
unequal exchange sets in (double factorial terms of trade < 1.0; see Raffer, 1987)

- these structures determine in the long run a rapidly growing tertiary sector with hidden unemployment and the rising importance of rent in the overall social and economic system
- the development blocks of peripheral capitalism (chronic current account balance deficits, re-exported profits of foreign investments, deficient business cycles of the periphery, which provide important markets for the centers during world economic upswings)
- structural imbalances in the political and social relationships, *inter alia* a strong ‘compradore’ element and the rising importance of state capitalism and an indebted state class.

The dependency and world system paradigm of course does not go uncontested. A recent very thorough liberal globalist flagship synopsis of the quantitative peace- and development research evidence over the last decades by de Soysa and Gleditsch (2002) maintains however that globalization, especially openness to trade and foreign direct investment, leads towards

a) increased democracy  
b) development  
c) less inequality  
d) a better environment  
e) peace.

De Soysa and Gleditsch would say: the *banlieues* in France and countries like Madagascar in Africa or Myanmar in Asia remained so poor because France – or Madagascar and Myanmar – did not sufficiently open up to the world economy, while countries like Singapore did. World market open capitalism is compatible with social cohesion, indeed it would be one if it’s main preconditions.

The "Washington Consensus", which indeed is the policy consensus of leading Western nations after the downfall of Communism, has been summarized by Raffer (pp. 305 - 323 in Tausch, 2003) as to represent the following policy priorities:

1. Fiscal discipline: a primary budget surplus of several percent of GDP  
2. Public expenditure priorities: defined as re-directions of public expenditures towards fields with high economic returns such as primary health and education  
3. Tax reform: cutting marginal tax rates  
4. Financial liberalization: moderately positive real interest rates and the abolition of preferential interest rates (such as for developmentally useful or socially demanded projects)  
5. Exchange rates: unified and competitive  
6. Trade liberalization: abolishing quotas (replacing them by tariffs) and reducing tariffs to a uniform low level within three to ten years.
7. Foreign direct investment: equal treatment with domestic firms. The World Bank calls this the elimination of barriers. This principle is also enshrined in the WTO treaties.
8. Privatization
9. Deregulation: abolishing regulations aiming at achieving developmental or social aims

Literature, supporting the “Washington Consensus” now abounds, highlighting pro-market policies and world economic openness as strategies for social and economic well-being, social justice and economic growth, and a peaceful world [for a survey, see Tausch and Ghymers, 2007].

The counter-position, advanced by globalization critics, environmentalists, liberation theologians of all denominations, and - most recently - dissidents from the once homogeneous neo-liberal camp would hold that unfettered globalization increases the social gaps between rich and poor both within countries as well as on a global scale. Most of the adherents of this camp would share the view that income distribution in the world system has worsened during the period of globalization. Indeed, the challenge by dependency theory to the neo-classical consensus is a real one – especially in a time of relative stagnation in the centers and social polarization in many countries of the periphery.

Dependency authors generally explain backwardness and stagnation by the ever-growing dependent insertion of these countries into the world economy. Starting with the writings of Prebisch, Rothschild and Sunkel, their leading spokespersons all would stress the unequal and socially imbalanced nature of development in regions that are highly dependent on investment from the highly developed countries, even in the richer countries of the European Union. Short-term spurts of growth notwithstanding, long-term growth will be imbalanced and unequal, and will tend towards high negative current account balances.

Later world system analyses – that started with the writings of the Austro-Hungarian socialist Karl Polanyi after the First World War - tended to confirm and expand this dependency argument. Capitalism in the periphery, like in the center, is characterized by strong cyclical fluctuations, and there are centers, semi-peripheries and peripheries. The rise of one group of semi-peripheries tends to be at the cost of another group, but the unequal structure of the world economy based on unequal transfer tends to remain stable.

So is, then, the poverty, in say, the „banlieues“ in today’s France an immediate consequence of industrial restructuring, which takes place, and transfers jobs in an increasing number to the new member countries of the European East? Authors from the world system approach tended to discard the “culturalist” explanations of the malaise in the „banlieues“ offered by Huntington, and rather would support the argument that world economic position, and not culture, determines conflict. The massive world systems literature continues to be a stream of the scientific debate subsisting at the major Universities, publishing houses and scholarly journals around the world, the near
complete global triumph of the neo-liberal theory notwithstanding [for an exhaustive bibliography on the subject, see, again Tausch and Ghymers, 2006].

Dependency and world system theory generally hold that poverty and backwardness in poor countries and in poor regions of rich countries are caused by the peripheral or quasi-position that these nations or regions have in the international division of labor. Ever since the capitalist world system evolved, there is a stark distinction between the nations of the center and the nations of the periphery. Fernando Henrique Cardoso summarized the quantifiable essence of dependency theories as follows:

- there is a financial and technological penetration by the developed capitalist centers of the countries of the periphery and semi-periphery
- this produces an unbalanced economic structure both within the peripheral societies and between them and the centers
- this leads to limitations on self-sustained growth in the periphery
- this favors the appearance of specific patterns of class relations
- these require modifications in the role of the state to guarantee both the functioning of the economy and the political articulation of a society, which contains, within itself, foci of inarticulateness and structural imbalance (Cardoso, 1979)

It seems to be important at this point to emphasize that our three indicators of dependency measure three different types of “dependent development”:

- MNC penetration measures the different degrees of weight that foreign capital investments have in the host countries, i.e. the UNCTAD percentages of the stocks of multinational corporation investments per total host country GDP
- Unequal exchange (ERD or ERDI) measures the degree, to which globalization has contributed to lowering the international price level of a country; i.e. it is an indicator about the openness of the price system vis-à-vis the pressures of globalization. The result of this is an unequal transfer from the peripheries to the centers, which used to be high-price countries until very recently. ERD is calculated by the ratio between GDP at purchasing power parities, divided by GDP at current exchange rates
- For dependency authors, foreign savings show the weight that foreign savings, mostly from the centers and richer semi-peripheries, have in the accumulation process of the host countries in the periphery and semi-periphery. It is calculated by the difference between the share of investments per GDP and the share of savings per GDP.

Our theoretical survey should include two processes, being of great importance especially to the European continent and the amount of social cohesion or social exclusion, with which Europe is confronted. One is the obvious argument about the European Union as a determining factor of European development patterns, for good or for bad. There are very diverse views nowadays on the European Union. As a research paper, published in the journal “Parameters” of the US Army, maintains (Wilkie, 2003): “Still, there are those
on both sides of the Atlantic who believe that the European Union, as an old-fashioned socialist bureaucracy, is “fundamentally unreformable” and also culturally hostile to the United States” (Wilkie, 2003: 46)

The well-known acceleration and maturity effects of development have to be qualified in an important way. Ever since the days of Simon Kuznets, development researchers have applied curve-linear formulations in order to capture these effects. The curve-linear function of growth, being regressed on the natural logarithm of development level and its square, is sometimes called the 'Matthew's effect' following Matthew's (13, 12): 'For whosoever hath, to him shall be given, and he shall have more abundance: but whosoever hath not, for him shall be taken away even that he hath'

Social scientists interpreted this effect mainly in view of an acceleration of economic growth in middle-income countries vis-à-vis the poor countries and in view of the still widening gap between the poorest periphery nations ('have-nots') and the 'haves' among the semi-periphery countries (Jackman, 1982). Kuznets was the first to introduce a “light at the end of the tunnel” vision on the development of inequality: first things get worse, before they become better at later “stages” of development.

We also should mention here the variable “pension reform.” Proponents and critics of fully funded, three-pillar pension models alike agree on the fact that pension reform policy is one of the biggest challenges that especially advanced democracies with their age structure are facing in world society. To neglect pension funds in investigations about the capitalist world economy would be misleading. Private pension funds already amount to 44 % of current world GDP, with countries like the United States; Japan; United Kingdom; Netherlands; Canada; Switzerland; Australia; Sweden; Ireland; Finland; and Denmark taking the lead in fund development either via the introduction of a “World Bank” three pillar pension model or simply via a strong element of private pensions (“the third pillar”) besides the first, traditional PAYGO pillar (like presently in the United States of America). Slow pension fund development in most countries of the €-zone determines that the overall share of private pension funds from the €-zone is just over 2 % of world GDP. If Europe wants to fulfill its Lisbon agenda of catching up with the United States, it must, the argument runs, overhaul its pension systems and introduce some form or other of private pension funds, which are a major force in financing technological advance in the capitalist world economy today [see Tausch, 2003].

In the following, we will present quantitative research, which will present results which could be of importance for the future of the political strategy debate in Europe in the context of the “Lisbon agenda”. Is ultra-capitalism and ultra-neoliberalism the only policy option left for the European continent?

The independent variables of our model for around the year 2000 or later comprised the following list.

- development level ln (GDP PPP pc). This variable should control for the effects of rising incomes on development (UNDP HDR, 2000)

http://carlisle-www.army.mil/usawc/Parameters/02winter/wilkie.htm
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- development level, square (maturity effects) $\ln (\text{GDP PPP pc})^2$. This variable should control for the effects of economic maturity on development (UNDP HDR, 2000)
- Dummy: landlocked country\(^6\) (Easterly, 2002)
- Dummy: transition country\(^7\) (Easterly, 2002)
- EU-15-membership (EU member by the year 2000, dummy variable)
- Foreign saving (I-S)/GNP (calculated from UNDP 2000)
- MNC PEN 1995 (UNCTAD World Investment Report, current issues)
- Percentage of Muslims per total population (Nationmaster\(^8\))
- state interventionism (absence of economic freedom; Heritage Foundation and Wall Street Journal website for economic freedom, by around 2000)
- unequal transfer (calculated from UNDP, concept: ERDI, reciprocal value of comparative “price levels” (developed on the basis of the ERD-Index Yotopoulos et al.)\(^9\) (the Commission maintaining that a low value is good result) (UNDP HDR, 2000)
- Urbanisation\(^11\) (Easterly 2002).
- World Bank pension reform\(^12\) (World Bank sources, quoted in Tausch (Ed.), 2003)

The dependent variables for this analysis correspond to standard knowledge in comparative political science and sociology. Although we presume the indicators as to be known generally, we present for our readers a brief summary of the Happy Planet Indicators, available from http://www.happyplanetindex.org/list.htm, the UNDP indicators and the Yale/Columbia environmental data series. We used this list to construct a single “global Lisbon process” indicator.

\(^6\) Taken from William Easterly, EXCEL data file freely available at http://www.cgdev.org/doc/expert%20pages/easterly/easterly_consensusdata.xls
\(^7\) Taken from William Easterly, EXCEL data file freely available at http://www.cgdev.org/doc/expert%20pages/easterly/easterly_consensusdata.xls
\(^8\) See nationmaster.com at http://www.nationmaster.com/graph/rel_isl_per_mus-religion-islam-percentage-muslim
\(^9\) These data are contained in http://www.freetheworld.com/; also:
http://www.heritage.org/research/features/index/. We used the latter website as the source of our data. It has to be kept in mind that the “worst” countries on the economic freedom scale have the numerically highest values, while the best countries have the numerically lowest values. Lao People's Dem. Rep. – the economically “unfreest” country in our sample, has the numerical value 4.6, while the economically freest country, Singapore, scores 1.45. We thus decided to call our indicator “state interventionism”
\(^10\) it can be shown that the Eurostat data series GDP PPP per capita/GDP exchange rate per capita (EU-25=100), used for the “price level”, in reality measure GDP exchange rate per capita/GDP PPP per capita (EU-25=100).
\(^11\) Taken from William Easterly, EXCEL data file freely available at http://www.cgdev.org/content/expert/detail/2699/
\(^12\) Argentina; Australia; Bolivia; Chile; Colombia; Croatia; Denmark; El Salvador; Hungary; Kazakhstan; Mexico; Netherlands; Peru; Poland; Sweden; Switzerland; United Kingdom; Uruguay
The dependent variables were measured, if not specified otherwise, by around 2000. The list of the dependent variables, to be projected onto a combined and single indicator, comprises

2. eco-social market economy (GDP output per kg energy use) (UNDP HDR 2000)
3. female economic activity rate as % of male economic activity rate (UNDP HDR 2000)
4. freedom from % people not expected to survive age 60 (UNDP HDR 2000)
5. freedom from a high ecological Footprint, 204 (Happy Planet Organization)
6. freedom from a high quintile ratio (share of income/consumption richest 20% to poorest 20%) (UNDP HDR 2005)
8. freedom from high CO2 emissions per capita (UNDP HDR 2000)
10. freedom from unemployment, 2003 (UN statistical system website, social indicators)
11. Gender development index 2004 (UNDP HDR, 2006)
13. Happy Planet Index, 2004 (Happy Planet Organization)
16. Life Satisfaction, 2004 (Happy Planet Organization)
17. the Yale/Columbia\textsuperscript{13} environmental sustainability index (ESI-Index), 2005

The choice of a country to be included in the final analysis (134 countries\textsuperscript{14}) was determined by the availability of a complete data series for these independent variables (if not mentioned otherwise, UNDP data).

\textsuperscript{13} http://sedac.ciesin.columbia.edu/es/esi/. The EXCEL spreadsheet for 2005 is freely available from this site
\textsuperscript{14} Albania; Algeria; Angola; Argentina; Armenia; Australia; Austria; Azerbaijan; Bahrain; Bangladesh; Belarus; Belgium; Belize; Benin; Bolivia; Botswana; Brazil; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Chad; Chile; China; Colombia; Congo; Congo, Dem. Rep. of the; Costa Rica; Côte d'Ivoire; Croatia; Cyprus; Czech Republic; Denmark; Dominican Republic; Ecuador; Egypt; Estonia; Ethiopia; Fiji; Finland; France; Gabon; Gambia; Georgia; Germany; Ghana; Greece; Guatemala; Guinea; Guinea-Bissau; Guyana; Haiti; Honduras; Hungary; Iceland; India; Indonesia; Iran; Islamic Rep. of; Ireland; Israel; Italy; Jamaica; Japan; Jordan; Kazakhstan; Kenya; Korea, Rep. of; Kyrgyzstan; Lao People's Dem. Rep.; Latvia; Lebanon; Lesotho; Lithuania; Luxembourg; Madagascar; Malawi; Malaysia; Mali; Mauritania; Mauritius; Mexico; Moldova, Rep. of; Mongolia; Morocco; Mozambique; Namibia; Nepal; Netherlands; New Zealand; Niger; Nigeria; Norway; Pakistan; Panama; Papua New
These variables correspond to the following dimensions:

<table>
<thead>
<tr>
<th>World economic openness and globalization</th>
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<tr>
<td>foreign saving [(I-S)/GNP]</td>
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<tr>
<td>low comparative international price level [ERD]</td>
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<tr>
<td>state interventionism (absence of economic freedom)</td>
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<tr>
<td>transnational capital penetration [MNC PEN 1995]</td>
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</tbody>
</table>

<table>
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<tr>
<th>Percentage of the population adhering to the Muslim faith</th>
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<table>
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<tr>
<th>Membership in the European Union</th>
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<tr>
<th>Geography</th>
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<tbody>
<tr>
<td>Dummy for being landlocked</td>
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<tr>
<td>Urbanization ratio, 1990</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Recent world economic history</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dummy for transition economy</td>
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</tbody>
</table>

| Development level and development level squared [ln(GDP PPP pc) and ln (GDP PPP pc)^2] |

<table>
<thead>
<tr>
<th>Pension Reform efforts</th>
</tr>
</thead>
</table>

| World Bank pension reform |

The list of our core dependent variables is multidimensional.

<table>
<thead>
<tr>
<th>Democracy and human rights</th>
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</thead>
</table>

| Absence of democracy: political rights and civil rights violations (based on Freedom House, 2000, reported in Easterly, 2002 and Freedom House, 2007) |

Guinea; Paraguay; Peru; Philippines; Poland; Portugal; Romania; Russian Federation; Rwanda; Saudi Arabia; Senegal; Singapore; Slovakia; Slovenia; South Africa; Spain; Sri Lanka; Swaziland; Sweden; Switzerland; Syrian Arab Republic; Tajikistan; Tanzania, U. Rep. of; Thailand; Togo; Trinidad and Tobago; Tunisia; Turkey; Uganda; United Kingdom; United States; Uruguay; Uzbekistan; Venezuela; Viet Nam; Yemen; Zambia; Zimbabwe
Environment

CO2 emissions per capita
ESI-Index ((Yale/Columbia environment sustainability index project website)
GDP output per kg energy use (“eco-social market economy”)
Ecological Footprint
Happy Planet Index

Human development and basic human needs satisfaction

% people not expected to survive age 60
human development index
life expectancy, 1995-2000
Life Satisfaction

Gender justice

Gender development index 2004 (UNDP HDR, 2006)
Gender empowerment index, 2004 (UNDP HDR, 2006)
female economic activity rate as % of male economic activity rate (UNDP HDR, 2000)

Redistribution, growth and employment policies

economic growth 1990-2003
share of income/consumption richest 20% to poorest 20%
unemployment 2003 (from United Nations statistical website)

In Graph 1, we summarize our vision of the “global Lisbon process” from what is known from the international indicators. The dimension of human rights and gender equality is conspicuously absent from the original Lisbon 14 list. Our list, by contrast, integrates the five dimensions growth, environment, human rights, basic human needs, and gender equality.

\[15\] This term is most probably an Austrian invention. The governing Conservative People’s Party – to be precise, its former Chairman Dr. Josef Riegler – seems to have invented this term in the late 1980s. For more on that debate: http://www.nachhaltigkeit.at/bibliothek/pdf/Factsheet11OekosozMarktw.pdf; and Michael Rösch, Tubingen University at http://tiss.zdv.uni-tuebingen.de/webroot/sp/spsba01_W98_1/germany1b.htm. As an indicator of the reconciliation between the price mechanism and the environment we propose the indicator GDP output per kg energy use; the term ‘eco-social market economy’ neatly grasps all the aspects of this empirical formulation.

\[16\] http://www.happyplanetindex.org/list.htm

\[17\] http://www.happyplanetindex.org/list.htm

\[18\] http://www.happyplanetindex.org/list.htm
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(Equation 1) Lisbon process, combining the development performance 1990-end 1990s of all the variables, mentioned in Graph 1 = $a_1 + b_1 \times \text{first part curvilinear function of development level} + b_2 \times \text{second part curvilinear function of development level} + b_3 \times \text{stock of transnational investment per GDP (UNCTAD)}$

mid 1990s $+ b_4 \times \text{comparative price levels (ERDI)} + b_5 \times \text{foreign saving} + b_6 \times \text{dummy transition economy} + b_7 \times \text{percentage of the population adhering to the Muslim faith} + b_8 \times \text{European Union membership} + b_9 \times \text{state interventionism} + b_{10} \times \text{urbanisation} + b_{11} \times \text{dummy landlocked country} + b_{12} \times \text{dummy World Bank pension reform} + b_{13} \times \text{net migration rate per total population, 1950 - 2000}$

The “Lisbon process” for us is constituted in the following way:

**Graph 1:** the “global Lisbon process”

To evaluate the global Lisbon indicators at once, we constructed a UNDP-type index from the data. Such UNDP type indicators are based on a simple principle, designed in the 1990s by Nobel laureate Amartya Sen: if you want to combine 2 or more variables to an indicator, calculate for each of the variables a dimension index, using the formula (UNDP, 2005):

$$\text{Dimension index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

Calculating the famous “Human Development Index” of the United Nations Human Development Programme, one is supposed to proceed in the following way. According to formula (1), one first has to calculate a life expectancy component, called “life expectancy index”. Then, the same formula is used for an “education index”, based on the figures for adult literacy and gross
enrollment (the weight for adult literacy is $2/3$, and $1/3$ for gross enrollment). The “GDP index” is now based on a small alteration of formula (1), working with the log GDP. In earlier years, the UNDP worked exactly with formula (1). Today, the UNDP calculates according to the following formula:

(2a) GDP index = \( \frac{\log (\text{actual value GDP PPP per capita}) - \log (100)}{\log (\text{maximum value GDP PPP per capita}) - \log (100)} \)

The UNDP HDI then will be the combined result of

(3) Human development index = \( \frac{1}{3} * \text{(life expectancy index)} + \frac{1}{3} * \text{(education index)} + \frac{1}{3} * \text{(GDP index)} \)

In our case, we calculated, the 17 different dimension indices for the global Lisbon process, using formula 1. Due to missing values, we were satisfied with simply calculating the means from the 17 available different components:

- (4a) Global Lisbon Index = the means from

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Index</th>
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<tbody>
<tr>
<td>Economic growth</td>
<td>component index for the dimension economic growth, 1990-2003 (UNDP HDR, 2005)</td>
</tr>
<tr>
<td>Eco-social market economy</td>
<td>component index for the dimension eco-social market economy (GDP output per kg energy use) (UNDP HDR 2000)</td>
</tr>
<tr>
<td>Female economic activity rate</td>
<td>component index for the dimension female economic activity rate as % of male economic activity rate (UNDP HDR 2000)</td>
</tr>
<tr>
<td>Freedom from % people not expected to survive age 60</td>
<td>component index for the dimension freedom from % people not expected to survive age 60 (UNDP HDR 2000)</td>
</tr>
<tr>
<td>Freedom from a high ecological footprint</td>
<td>component index for the dimension freedom from a high ecological footprint, 204 (Happy Planet Organization)</td>
</tr>
<tr>
<td>Freedom from a high quintile ratio (share of income/consumption richest 20% to poorest 20%)</td>
<td>component index for the dimension freedom from a high quintile ratio (share of income/consumption richest 20% to poorest 20%) (UNDP HDR 2005)</td>
</tr>
<tr>
<td>Freedom from civil liberty violations</td>
<td>component index for the dimension freedom from civil liberty violations, 1998 (Easterly, 2002)</td>
</tr>
<tr>
<td>Freedom from high CO2 emissions per capita</td>
<td>component index for the dimension freedom from high CO2 emissions per capita (UNDP HDR 2000)</td>
</tr>
<tr>
<td>Freedom from political rights violations</td>
<td>component index for the dimension freedom from political rights violations, 1998 (Easterly, 2002)</td>
</tr>
<tr>
<td>Freedom from unemployment</td>
<td>component index for the dimension freedom from unemployment, 2003 (UN statistical system website, social indicators)</td>
</tr>
<tr>
<td>Gender development index</td>
<td>component index for the dimension Gender development index 2004 (UNDP HDR, 2006)</td>
</tr>
<tr>
<td>Gender empowerment index</td>
<td>component index for the dimension Gender empowerment index, 2004 (UNDP HDR, 2006)</td>
</tr>
<tr>
<td>Happy Planet Index</td>
<td>component index for the dimension Happy Planet Index, 2004 (Happy Planet Organization)</td>
</tr>
</tbody>
</table>
- component index for the dimension Human development Index, 2005 (UNDP HDR 2005)
- component index for the dimension Life Satisfaction, 2004 (Happy Planet Organization)
- component index for the dimension the Yale/Columbia environmental sustainability index (ESI-Index), 2005

Needless to say, that the global Lisbon indicator and the UNDP Human Development Indicator are closely interrelated. Our measure is also well interrelated with the Yale Columbia Environment Sustainability Index and also the Life Satisfaction Index:

*Graph 2: The Global Lisbon Process and its relationship with other important, combined international indicators*
The Global Lisbon Index and Life Satisfaction

\[ y = 6.7645x + 1.9135 \]

\[ R^2 = 0.5297 \]

Global Lisbon Process and the ESI Index

\[ y = 31.459e^{0.787x} \]

\[ R^2 = 0.366 \]

Conclusions

What are the significant predictors (error p equal or <.10) of the global Lisbon Process? It again turns out that first of all things get worse, before they get better – the old wisdom of classical development economics (Kuznets) and political science modernization theory of the postwar period. In addition, it
emerges that foreign savings, “economic freedom”, low comparative international price levels, and World Bank type pension reforms are not compatible with a solid and long-run development path, based on our knowledge of 17 component variables, integrating the dimensions growth, environment, human rights, basic human needs satisfaction, and gender equality. In addition, European Union membership (EU-15, “old Europe”) has the numerically highest negative effect on the global Lisbon process; while Muslim population shares in no way bloc the development process, on the contrary. Our regression analysis has excellent statistical properties; the F value is above 25.00; and the $R^2$ exceeds in each case 7/10. Neo-liberal globalization strategies are condemned to failure; while European decision makers in particular would be strongly advised to re-think their Lisbon strategy, which pushes countries towards accepting strategies, which, inter alia, lower instead of increase the comparative international price level. In our sample, the countries with the lowest comparative price level were the Congo (Dem. Rep. of the); Kyrgyzstan; Ethiopia; Nepal; Lao People's Dem. Rep.; Moldova, Rep. of; Cambodia; Viet Nam; Angola; India; Azerbaijan; while the classical high-price countries are: Switzerland; Japan; Denmark; Luxembourg; Norway; Singapore; Sweden; Germany; France; Finland; Austria; Netherlands; Iceland; Belgium; United Kingdom; United States; Italy; Israel; Australia; Ireland; Spain; New Zealand; Greece; Lebanon; Canada; and Portugal. Is a price level of say, the Congo’s dimension, really the aim of the Lisbon process?

Balassa and Samuelson assumed that rising international price levels for the periphery country are a precondition of positive development. The ultraliberal underlying assumptions of the current Commission, member governments and Eurostat on the subject were already implied by Rao, who mentioned in a UNDP paper, back in 1998 that neo-liberal economics sustain the expectation of a growing price convergence from growing globalization (Rao J. M., 1998: 14-15). Falling relative price levels in countries like Germany over the last years would suggest in the neo-classical argument that the price of the non-tradables in the German economy decreased dramatically over time. Structuralist economists, like Stanford Professor emeritus Pan Yotopoulos, usually warn the weaker countries of the periphery that: “Currency substitution represents an asymmetric demand from Mexicans to hold dollars as a store of value, a demand that is not reciprocated by Americans holding pesos as a hedge against the devaluation of the dollar!” (Yotopoulos and Sawada, 2005)

Their argument, which they established in a 1999 paper, refined in their 2005 analysis, was the so-called Y-Proposition, and this Y-position is very relevant today: “in free currency markets hard currencies fluctuate, while soft currencies depreciate systematically (...) The alternative scenario deprives devaluation of any of its remedial properties that in the conventional view lead to a process of stable interactions and equilibrium....”

Yotopoulos and other critics think that the basic problem of international currency markets is asymmetric reputation. This process of asymmetric reputation of the periphery deepens the cycle of underdevelopment: “Mexico cannot service its foreign debt from the proceeds of producing nontradables. These are traded in pesos. It has instead to shift resources away from the nontradable sector to
produce tradable output in order to procure the dollars for servicing the debt (...) The process (...) can create a negative feedback loop that leads to resource misallocation in soft-currency countries (...) This shift of resources represents misallocation and produces inefficiency and output losses (...) Distortions inherent in free currency markets lead to a systematic devaluation of soft currencies – to „high“ nominal exchange rates. Devaluation of the exchange rate means increasing prices of tradables and leads to increased exports. But not all exports are a bargain to produce compared to the alternative of producing nontradables (...) Countries graduate from being exporters of sugar and copra to exporting their teak forests, and on to systematically exporting nurses and doctors, while they remain underdeveloped all the same. If this happens, it may represent competitive devaluation trade as opposed to comparative advantage trade.“ (Yotopoulos and Sawada, 2005)

The authors further explain their ideas by an econometric analysis of economic growth rates in 62 countries from 1970 onwards that shows how this process of competitive devaluation trade leads to stagnation. They also present an economic model in the tradition of Paul Krugman that shows how currency substitution triggers financial crises. In their 2005 paper, the authors show the relevance of their theories with time series data from 153 countries. Thus, if they are correct, a high ratio between purchasing power and GDP at exchange rates, i.e. an under-valued currency, will lead to development stagnation. The countries with the strongest currencies, like Denmark, the UK, Sweden, are typical centers of the capitalist world economy with a favorable ratio of tradables to non-tradables, while the countries with a Eurostat “good” low price level, like Turkey, are countries with an unfavorable relation between tradables and non-tradables, suffering from what neo-Marxists like to call “unequal transfer” or “unequal exchange” (price reform/low international price level).

In addition to the above specified dependency theory and world systems theory arguments, urbanization positively affects Lisbon Process Index Indicator. Ceteris paribus, World Bank pension reforms will be negatively related to the process:

Table 1: the determinants of the global Lisbon process

<table>
<thead>
<tr>
<th>Global Lisbon Index (1)</th>
<th>Dummy for being landlocked</th>
<th>Dummy for transitioning economy</th>
<th>Urbanization ratio, 1990</th>
<th>(I-S)/GNP</th>
<th>state interventionism (absence of ec. freedom)</th>
<th>MNC PEN 1995</th>
<th>low comparative international price level (ERD)</th>
<th>EU-membership (EU-15)</th>
<th>Muslms as % of total population</th>
<th>ln(GDP PPP per)</th>
<th>ln (GDP PPP per)^2</th>
<th>world bank pension reform</th>
<th>constant</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
</tr>
<tr>
<td>0.0287</td>
<td>-0.006</td>
<td>0.1683</td>
<td>-</td>
<td>0.0004</td>
<td>0.0415</td>
<td>-0.0024</td>
<td>-0.001</td>
<td>0.0013</td>
<td>-0.0015</td>
<td>0.0384</td>
<td>-0.0443</td>
<td>-0.0919</td>
<td></td>
</tr>
<tr>
<td>0.0197</td>
<td>0.0058</td>
<td>0.0950</td>
<td>0.0001</td>
<td>0.0243</td>
<td>0.0076</td>
<td>0.0003</td>
<td>0.0149</td>
<td>0.0005</td>
<td>0.0005</td>
<td>0.0206</td>
<td>0.0163</td>
<td>0.3751</td>
<td></td>
</tr>
<tr>
<td>0.7197</td>
<td>0.0685</td>
<td>0.1214</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.895</td>
<td>121</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
The Failure of the EU in the Global “Lisbon Process”: A Cross-national, Quantitative Tribute to the Relevance of the Economic Theories of Professor Panayotopoulos

The causal links of the above Table can be further specified in the following graphs. They portray the determinants of the global Lisbon Process Indicator (Graph 3 and Graph 4)

Graph 3: the final causal model
The summarizing Table 2 finally shows the rankings of the highly developed countries in the global Lisbon process. European decision makers would be well advised to re-think their strategies, indeed. Not the United States (rank on the global Lisbon scale – 38) should be the target country, but the European welfare democracies Switzerland, Iceland, Austria, Sweden, Norway, Denmark, Finland, the Netherlands, and Ireland, who all maximized the Lisbon process, combining its 17 different components.

Pushing Europe downwards the path of falling comparative prices will only increase the growth impediments of the growingly multicultural Europe:

<table>
<thead>
<tr>
<th>Country code</th>
<th>Global Lisbon Index</th>
<th>world rank</th>
<th>country group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>0,82715</td>
<td>1</td>
<td>EEA/EFTA</td>
</tr>
<tr>
<td>Iceland</td>
<td>0,81502</td>
<td>2</td>
<td>EEA/EFTA</td>
</tr>
<tr>
<td>Austria</td>
<td>0,81147</td>
<td>3</td>
<td>EU-27</td>
</tr>
<tr>
<td>Sweden</td>
<td>0,807</td>
<td>4</td>
<td>EU-27</td>
</tr>
<tr>
<td>Norway</td>
<td>0,80098</td>
<td>5</td>
<td>EEA/EFTA</td>
</tr>
<tr>
<td>Denmark</td>
<td>0,79661</td>
<td>6</td>
<td>EU-27</td>
</tr>
<tr>
<td>Finland</td>
<td>0,77986</td>
<td>7</td>
<td>EU-27</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0,7726</td>
<td>8</td>
<td>EU-27</td>
</tr>
<tr>
<td>Ireland</td>
<td>0,76347</td>
<td>9</td>
<td>EU-27</td>
</tr>
</tbody>
</table>
The Failure of the EU in the Global “Lisbon Process”: A Cross-national, Quantitative Tribute to the Relevance of the Economic Theories of Professor Panayotopoulos

<table>
<thead>
<tr>
<th>Country</th>
<th>Value</th>
<th>Rank</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>0.76012</td>
<td>10</td>
<td>other OECD democracies</td>
</tr>
<tr>
<td>Canada</td>
<td>0.75274</td>
<td>13</td>
<td>other OECD democracies</td>
</tr>
<tr>
<td>Cyprus</td>
<td>0.75226</td>
<td>14</td>
<td>EU-27</td>
</tr>
<tr>
<td>Germany</td>
<td>0.75064</td>
<td>15</td>
<td>EU-27</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.74795</td>
<td>16</td>
<td>EU-27</td>
</tr>
<tr>
<td>Italy</td>
<td>0.74482</td>
<td>17</td>
<td>EU-27</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.74296</td>
<td>18</td>
<td>other OECD democracies</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.73988</td>
<td>19</td>
<td>EU-27</td>
</tr>
<tr>
<td>France</td>
<td>0.73665</td>
<td>21</td>
<td>EU-27</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.73603</td>
<td>23</td>
<td>EU-27</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.73226</td>
<td>24</td>
<td>EU-27</td>
</tr>
<tr>
<td>Spain</td>
<td>0.73157</td>
<td>25</td>
<td>EU-27</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.72986</td>
<td>26</td>
<td>EU-27</td>
</tr>
<tr>
<td>Australia</td>
<td>0.72463</td>
<td>27</td>
<td>other OECD democracies</td>
</tr>
<tr>
<td>Israel</td>
<td>0.69906</td>
<td>32</td>
<td>other OECD democracies</td>
</tr>
<tr>
<td>Greece</td>
<td>0.68434</td>
<td>34</td>
<td>EU-27</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.6801</td>
<td>36</td>
<td>EU-27</td>
</tr>
<tr>
<td>United States</td>
<td>0.6761</td>
<td>38</td>
<td>other OECD democracies</td>
</tr>
<tr>
<td>Poland</td>
<td>0.66212</td>
<td>42</td>
<td>EU-27</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.66206</td>
<td>43</td>
<td>EU-27</td>
</tr>
<tr>
<td>Latvia</td>
<td>0.66192</td>
<td>44</td>
<td>EU-27</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.6563</td>
<td>47</td>
<td>EU-27</td>
</tr>
<tr>
<td>Croatia</td>
<td>0.6423</td>
<td>49</td>
<td>EU-candidate</td>
</tr>
<tr>
<td>Romania</td>
<td>0.6406</td>
<td>51</td>
<td>EU-27</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.62485</td>
<td>60</td>
<td>EU-27</td>
</tr>
<tr>
<td>Estonia</td>
<td>0.62176</td>
<td>63</td>
<td>EU-27</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>0.61236</td>
<td>69</td>
<td>EU-27</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.5676</td>
<td>80</td>
<td>EU-candidate</td>
</tr>
</tbody>
</table>

Nota bene, our analysis shows that such a socio-liberal alternative is well compatible with the integration of Europe’s sizeable Muslim minorities.

Internet sources:

http://www.lalisio.com/members/m_TAUSCH/publications/114986208075/114986228444/?use_session=True&browser_type=Explorer-&C=&language=en

http://www.cgdev.org/content/expert/detail/2699/


http://laborsta.ilo.org/

http://utip.gov.utexas.edu/

Sources provided by the ILO, the UTIP project at the University of Texas, and the World Bank were used in this essay. These analyses of the dynamics in the world system calculated the time series correlations of globalization, economic growth (Global Development Network Growth Database, William Easterly and Mirvat Sewadeh, World Bank), unemployment (Laborsta ILO), and inequality (UTIP,
University of Texas Inequality Project, Theil indices of inequality, based on wages in 21 economic sectors) since 1980.

For bibliography and appendices please refer to the electronic version of the article available at www.ersj.eu.