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**Passive Globalization and  
the Failure of the European Union's Lisbon Strategy, 2000-2010:  
Some New Cross-National Evidence**

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*Abstract*

The current paper investigates the cross-national relevance of dependency theory and world systems theory for eight dimensions of development. The main emphasis is on indicators of sustainable development, and our essay comprises in all 36 main dependent variables. They are part of the dimensions of democracy, gender justice, high quality tertiary education, economic growth during the outgone economic cycle until 2008 and projected economic growth after 2009, the environment, human development, employment, and social cohesion on a global scale by a new. Our 175 nation analysis, using 20 main predictors of development tries to confront the very basic pro-globalist assumptions of the "Lisbon process", the policy target of the European leaders since the EU's Lisbon Council meeting in March 2000 to make Europe the leading knowledge-based economy in the world with a "globalization critical perspective". A realistic and politically useful analysis of the "Lisbon process" has to be a "Schumpeterian" approach. We analyze the "Lisbon performance" of the world economy by multivariate, quantitative means, looking into the possible contradictions that might exists between the dependent insertion into the global economy and other goals of the "Lisbon process". Lowering the comparative price levels and increasing the dependency from the large, transnational corporations, as correctly predicted by Latin American social science of the 1960s and 1970s, emerges as one of the most serious development blockades, confronting Europe. It also emerges that failing to develop Europe's own MNC headquarter status in the global economy has very negative effects on development performance. The increase in military expenditures, proposed in article 42,3 of the new EU Lisbon Treaty, is another stumbling block against development. We also present a concluding factor analytical perspective, which again re-iterates the importance of avoiding a "race to the bottom" as an "alternative" in Europe.

*Key words:* Lisbon process, European Union, Latin America, Dependency theory

## **Introduction**

Profound economic crises, like the current one, as the Great Depression of the 1930s and the “oil crisis” of the 1970s, seem to be an appropriate time for reconsidering some basic principles of economics and the upswing of “dependency theory” and globalization critical approaches. The “political class” seems to react more slowly. In a recent EU-Presidency country non-paper by the Swedish government, written in 2009, we read:

Trade and economic integration, combined with new technology, bring new markets, competitors and trade partners closer. They help to decrease poverty, promote democratic values and increase international stability. They bring enormous opportunities but also tougher global competition and make increased demands on European markets, companies and individuals to adapt to change. This holds true even more so today when facing global financial and economic unrest. Therefore, we need to take further action to reap the benefits from globalisation by strengthening Europe’s competitiveness.<sup>1</sup>

This paper will confront the basic underlying assumptions of this European political economic strategy with a “globalization critical perspective” and will perform one of the largest ever overall cross-national tests of the effects of globalization, culture, geography, human capital formation, militarization and recent world economic history on several dimensions of development (what we call here the “global Lisbon process”, consisting of the 8 dimensions: democracy, gender justice, high quality tertiary education, economic growth during the outgone economic cycle until 2008 and projected economic growth after 2009, the environment, human development, employment, and social cohesion) in a new 175 nation investigation. What lessons are then to be drawn for the basic assumptions of the “Lisbon process”, the policy target of the European leaders since the EU’s Lisbon Council meeting in March 2000 to make Europe the leading knowledge-based economy?

Globalization critics, like the platform “Attac”, undoubtedly play an ever larger role in the politics of several European Union countries and were instrumental in defeating the government in the French referendum on the European Constitution in 2005. But not only “Attac” but also serious hard-core social science increasingly blames the European Union with its unfettered policy of pushing globalization to be at the root of increasing inequality in Europe. Professor Jason Beckfield from the University of Chicago (2006), writing in the *American Sociological Review*, even says:

Globalization has attained a prominent place on the sociological agenda, and stratification scholars have implicated globalization in the increased income inequality observed in many advanced capitalist countries. But sociologists have given much less attention to a different yet increasingly prevalent form of internationalization: regional integration. Regional integration, or the construction of international economy and polity within negotiated regions, should matter for income inequality. Regional economic integration should raise income inequality, as workers are exposed to international competition and labor unions are weakened. Regional political integration should also raise income inequality, but through a different mechanism: political integration should drive welfare state retrenchment in market-oriented regional polities as states adopt liberal policies in a context of fiscal austerity. Evidence from random-effects and fixed-effects models of income inequality in Western Europe supports these arguments. The results show that regional integration explains nearly half of the increase in income inequality in the Western European countries analyzed in this article. The effects of regional integration on income inequality are net of several controls, including two established measures of globalization, suggesting that a sociological approach to regional integration adds to our understanding of rising income inequality in Western Europe. (Beckfield, 2006)

The new Commissioner for Social Policy Professor Laszlo Andor, in his famous 2004 article in the Guardian, said very defiantly and in the same spirit:

Is it that politicians and their advisers have looked at the income data and suddenly realised the wage gap between east and west has not narrowed in the last 15 years? Have they only now realised that the so-called market transition was not a great success - and concluded that people in the accession states cannot be anything but desperate to move to countries they have been unable to catch up with by embracing market forces? If so, they are about half right. The transition to democracy after the fall of the Berlin wall cast a veil over a ruthless economic transformation, known as “structural adjustment” in Latin America a decade earlier. The unparalleled peacetime contraction of post-communist economies can only be compared to the Great Depression of the 1930s. Luckier countries like Hungary lost only about 20% of their national income in the years after 1989, while the GDP of others fell by 30-40%. Poland was first to recover its 1989 output level, in 1997; the rest only managed to do so in 2000 or even later. Of course, this did not mean that consumption levels or average living standards had been restored with the same speed. (...) The next major challenge for the east-central bloc is the introduction of the euro. The Maastricht criteria caused long-term headaches for western governments in the 1990s, and macroeconomic adjustment can be expected to be even more painful in countries where economies are still catching up, and a rate of inflation that does not threaten economic growth is estimated to be higher than the western average. A forced

compliance with Maastricht and the EU's stability pact could easily produce economic breakdown in the region, with disastrous consequences for pro-European political forces and free ammunition for anti-European nationalists. Slovakia, promoted as a neo-liberal role model, may have shown the social and political costs of such policies for neighbouring countries, with riots among impoverished Roma groups and a recent presidential contest between rival rightwing populists.<sup>2</sup>

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 a consensus that the reform process was not going fast enough and that the ambitious targets were not reached a decade later, as foreseen at the March 2000 Lisbon Council<sup>3</sup>. 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 making<sup>4</sup>. 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 (to be maximized)
2. Labor productivity (to be maximized)
3. Employment rate (to be maximized)
4. Employment rate of older workers (to be maximized)
5. Educational attainment (20-24) (to be maximized)
6. Research and Development expenditure (to be maximized)
7. Comparative “price levels”<sup>5</sup> (to be minimized)
8. Business investment (to be maximized)
9. At risk-of-poverty rate (to be minimized)
10. Long-term unemployment rate (to be minimized)
11. Dispersion of regional employment rates (to be minimized)
12. Greenhouse gas emissions (to be minimized)
13. Energy intensity of the economy (to be minimized)
14. Volume of freight transport (to be minimized)<sup>6</sup>

The Commission (2005) classified 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 current paper will now confront the underlying, pro-globalist logic of the Lisbon strategy with what we perceive as the essence of a globalization-critical argument. Recent comparative sociological literature highlighted again the implications of foreign capital penetration for patterns of development (Cheol-Sung, Nielsen, and Alderson 2007, Crowley, Rauch, Seagrave and Smith 1998, Jorgenson 2006, 2006, Moran 2005, Nomiya 2007, Rennstich 2002, Sanderson and Kentor 2009, Shandra 2007, Tausch 2003, 2004, 2007). Especially we will analyze, whether the *dependent insertion into the global economy*, operationalized by

- ◆ comparative price levels (US=1.00)
- ◆ foreign savings rate
- ◆ FPZ (free production zones) employment as % of total population
- ◆ MNC outward investments (stock) per GDP
- ◆ MNC PEN - stock of Inward FDI per GDP
- ◆ MNC PEN: DYN MNC PEN 1995-2005
- ◆ Openness-Index, 1990 (export-share per GDP + import-share per GDP)

will offer better explanations of the five main dimensions of global development (democracy, gender justice, high quality tertiary education, economic growth during the outgone economic cycle until 2008 and projected economic growth after 2009, the environment, human development, employment, and social cohesion) than standard predictors of global development performance, like

- ◆ % women in government, all levels
- ◆ % world population
- ◆ 2000 Economic Freedom Score
- ◆ Absolute latitude
- ◆ Annual population growth rate, 1975-2005 (%)
- ◆ ln GDP per capita
- ◆ ln GDP per capita ^2

- ◆ Membership in the Islamic Conference
- ◆ Military expenditures per GDP
- ◆ Military personnel rate ln (MPR+1)
- ◆ Population density
- ◆ Public education expenditure per GNP
- ◆ UNDP education index

So, we analyze the “Lisbon performance” of the world economy by multivariate, quantitative means, looking into the possible contradictions that might exist between dependent insertion into the global economy and the goals of the “Lisbon process”.

At the time, Osvaldo Sunkel put the worldview of Latin American social science, which greatly influenced the course of globalization critical perspectives across the globe into prisma and correctly foresaw the current development crisis of the European continent:

The interpretation so far advanced suggests that the international capitalist system contains an internationalized nucleus of activities, regions and social groups of varying degrees of importance in each country. (...) The effects of the disintegration of each social class has important consequences for social mobility. The marginalized entrepreneur will probably add to the ranks of small or artisanal manufacture, or will abandon independent activity and become a middle class employee. The marginalized sectors of the middle class will probably form a group of frustrated lower middle class people trying to maintain middle class appearance without much possibility of upward mobility and terrorized by the danger of proletarianization. The marginalized workers will surely add to the ranks of absolute marginality, where, as in the lower middle class, growing pools of resentment and frustration of considerable demographic dimension will accumulate (...) Finally, it is very probable that an international mobility will correspond to the internal mobility, particularly between the internationalized sectors (...) The process of social disintegration which has been outlined here probably also affects the social institutions which provide the bases of the different social groups and through which they express themselves. Similar tendencies to the ones described for the global society are, therefore, probably also to be found within the state, church, armed forces, political parties with a relatively wide popular base, the universities etc. (Sunkel, 1973: 18-42)

That such a perspective is permitted, or even recommended in the scientific debate especially about the EU-27 is far from clear. Another Hungarian world intellectual, the economist Janos Kornai, not too distantly ago, pointed out that mainstream economics relinquishes the profound criticism of the capitalist economy to “*those professing radical views*” (Kornai,

2005, final Chapter, Presidential address, International Economic Association), Kornai went on to say that even when the economic profession accepts the fact that there may be problems, it lulls itself into believing that these problems can be reassuringly resolved by applying appropriate measures. It denies, Kornai says, that the system may have inborn, insurmountable genetic defects. Compared to the rapid political and human rights transformation, which the region experienced, and which Kornai continues to call an “unparalleled success”, all achieved in a climate of democracy and non-violence, one is at least permitted to speak about the negative sides as well – not in the form of a balance sheet, but as an agenda for future policy and research.

For Kornai, some of these main contradictions are:

1. The real income of a significant proportion of the population has remained unchanged, or even deteriorated
2. “A dramatic restructuring”, which has taken place in the area of income distribution
3. The employment rate has significantly declined and open unemployment has appeared, and job security disappeared
4. Public security was deteriorating
5. Corruption
6. Disorders in the political arena
7. “It can be stated with certainty that capitalism gives birth to disparity. But tax policies favoring the rich while afflicting the impoverished, or poorly distributed state subsidies, can make matters even worse.” (Kornai, 2005)

Applications of “dependency thinking”, world systems theory and globalization critical perspectives to the realities of East Central Europe were attempted, among others, by Batou and Szlajfer, 2009, Bernhard and Szlajfer; 1995, Foster and Szlajfer; 1984; and Szlajfer 1990. But also in Western Europe, and not only in the “old Europe”, such a perspective is necessary. Dissatisfaction with the “Lisbon process” of the European Union is widespread, relevant optimistic recent voices from the Commission notwithstanding.

Authors like Joseph Alois Schumpeter, and later world system and dependency writers like Samir Amin, Volker Bornschiefer, Fernando Henrique Cardoso, Raul Prebisch, and Osvaldo Sunkel, were always aware of the crises, cyclical imbalances, regional shifts, and of the rise and decline of entire regions and even continents in the process of capitalist development. Like many other development theorists of the first generation of development economists after the Second World War, whose stars began to rise long after Schumpeter

already went to America, Kurt Mandelbaum, Paul Narcoz Rosenstein-Rodan, and Hans Wolfgang Singer, all shared with Schumpeter the observation that capitalism never was a smooth equilibrium process. Mandelbaum, Rosenstein-Rodan and Singer, and the dependency theorists in Latin America, whom they so heavily influenced, were deeply convinced that capitalism is NOT crisis-free growth, full employment, environmental sustainability and the end to social exclusion.<sup>7</sup>

At the end of the day, a realistic and politically useful analysis of the “Lisbon process” has to be “Schumpeterian” in its question writing – not excluding the contradictions inherent in the process of capitalist development, which we witness since the year 1989 at the pan-European level.

The rest of this study is organized as follows. In Section 2 the main theories are outlined. Section 3 presents the data and research design. The results are presented in Section 4, and the factor analytical Lisbon comparisons in Section 5, while section 6 draws conclusions from the research results.

### **The main theories**

The question of geographic, demographic and other independent variables in econometric and politometric development accounting found more attention in the recent literature, just to mention Ciccone and Jarocinski, 2008, Gylfason, 2001, Hodler, 2004, Masters and McMillan, 2000, Sachs and Warner, 2001, and Sturm and de Haan, 2005. According to the research, presented by Ciccone and Jarocinski, 2008, Sala-I-Martin, Doppelhofer and Miller, 2004, and Sturm and de Haan, 2005, we currently are facing around 100 popular independent variables in current econometric literature on the determinants of economic growth. Sala-I-Martin, Doppelhofer and Miller, 2004, arrived then at the following list of robust growth predictors, which keep their significance after all possible relevant changes in the research design, applying a Bayesian estimation technique:

- ◆ East Asian dummy
- ◆ Primary schooling I960
- ◆ Investment price
- ◆ GDP 1960 (log)
- ◆ Fraction tropical area
- ◆ Population density coastal 1960's
- ◆ Malaria prevalence in 1960's
- ◆ Life expectancy in 1960
- ◆ Fraction Confucian
- ◆ African dummy
- ◆ Latin American dummy
- ◆ Fraction GDP in mining
- ◆ Spanish colony
- ◆ Years open
- ◆ Fraction Muslim
- ◆ Fraction Buddhist

◆ Ethnolinguistic fractionalization

◆ Government consumption share 1960's

The hitherto dominant development paradigm of course is the neo-liberal approach. On a global economy level, *neo-liberal authors* like Barro; Barro and associates; Crafts; Dadush and Brahmabatt; Dollar and Kraay and Weede generally tend to think that with the establishment of “economic freedom” positive patterns of development will prevail in practically all countries of the globe, irrespective of their development level. Especially the painful experience of the neo-liberal transformation process in Eastern Europe after the end of Communism is however a warning sign to decision-makers and scholars alike that “economic freedom” plus “world economic openness” alone cannot be for themselves the only necessary, let alone the sufficient condition for a successful capitalist development [for such a perspective, see, above all, Kornai 2005; furthermore Inotai, 2001a, 2001b, Inotai and Hettne, 1999, 2000, 2001]. Thus, selective intervention by the state seems to be the development lesson of East and South-East Asia as well as Scandinavia during the last decades.

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) maintained by contrast that globalization, especially openness to trade and foreign direct investment, lead towards

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

Analyzing world development on the basis of the main predictors, compatible with the majority of the more than 240 published studies on the cross-national determinants of the “human condition” around the globe, we present the results of our equations about development performance from 175 countries, which might in a way challenge the empirical consensus, presented by de Soysa and Gleditsch.

De Soysa and Gleditsch centered their analysis about globalization and the human condition on the indicator “world economic openness”, which in a way is biased. Conventional wisdom of the “Washington Consensus” has it that it is always the periphery or semi-periphery country that got it all wrong during a crisis, like in East Asia, Russia or recently in Turkey and that a good combination of economic freedom, privatization, tight

monetary policies and above all private foreign direct investment will “fix” it, once the forces of the market are properly at work (see also Raffer in Tausch, 2003), 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 [Barro 1991, 1994, 1996a, 1996b, 2000, 2001, 2003, 2004a, 2004b, Barro and Sala-i-Martin 1991, 1995/98; Dollar, 2005, Dollar and Kraay 2000, 2001, Weede 2002, 2003, 2004a, Weede E. 2004b, 2004c, 2004d].

But ever since Kurt Rothschild’s famous article in the *Economic Journal* in 1944, it is known that the share of imports – or also of exports - per GDP is a function of the size of nations. Per se, small and open economies tend towards social compromise, and are in fact the subject of an important, today mostly neglected debate about “small states in the International System”. To this one must add that corporatism, high union density, social coherence, and other characteristics of these small, world economically open democracies interact [Katzenstein, 1974, Rothschild, 1963, 1966, 1984, 1985]. Such characteristics would be assumed to be typical for countries like Austria, the Irish Republic, the Netherlands, and Switzerland, but certainly not all neo-liberally oriented countries of the world.

Even with adjustments, the *openness-indicator* is heavily dependent upon the *size of a nation*. It emerges from the Dollar/Kraay data set that the highest openness over the last decade was to be found in Estonia, Norway and Saint Lucia. From their data set it also emerges that among the 30 most open economies of the entire world economy were small territory and country cases like Hong Kong, Luxembourg, Saint Lucia, Slovenia and Switzerland. Also we find the two nations Communist Bulgaria before the transformation and Belarus under the Lukashenka regime. The heavily social democratic “Consociational Democracies” Austria, Denmark, the Netherlands and Sweden in the 1980s and 1990s, and social democratic Norway, are also all among this subgroup. If anything, thus the Dollar and Kraay results demonstrate either (what Kraay certainly did not intend) that Communism, Bulgarian (1964) or Lukashenka-style is *the* model of world economic openness, *or* that there is some truth in Professor Peter Katzenstein’s theory about small states, the need for social compromise and social partnership in such states, and redistribution and development in such nations and their ascent in the international system.<sup>8</sup>

For neo-liberal theories of development, *foreign investments* are also a solid *pre-condition of growth*. A *reliance on foreign savings* would *not necessarily exclude rapid economic growth and income redistribution* in a world of liberalized financial markets (for an overview of these debates, see Kendall, 2000; for a dependency-theory oriented counter-

position Ghose, 2005), Following the neo-liberal literature on the subject, there would be absolutely no need for “financial repression”. Shaw, 1973 and McKinnon, 1973 believed that “financial repression” [i.e. what neo-liberals term as such, for example capital convertibility controls etc.] had retarded the growth of many less developed countries (LDCs), Interest rate policy, which resulted in the imposition of below market rates, created a disincentive to save. The results, they say, are a shortage of investible resources and growth retardation. Shaw and McKinnon are thus in favor of interest rate liberalization. Roubini and Sala-i-Martin, 1992 as well as Barro, 1991 maintained that “financial repression” contributed to slow growth in Latin America during 1960 to 1985. The question whether or not foreign savings “crow out” domestic savings might be hotly contested (see Ghose, 2005), but for the neo-liberals it is certain that free flows of global savings and investments contribute to global and national economic and social well-being. Since capital is abundant in the centers and scarce in the periphery, the return on investment is much higher in the periphery than in the center, and capital should flow from the centers to the peripheries. In addition, neo-liberal authors, starting with Michael Lipton, have attacked “exchange rate overvaluation” in the developing countries, thus diametrically *contradicting* the approach by Yotopoulos and other adherents of theories of “unequal exchange”, presented above.

Price levels have risen faster than world price levels for the rich countries while the reverse has been the case for the poor countries. *Evidence over several decades thus fails to sustain, Rao says, the expectation of growing price convergence from growing globalization. However, neo-liberals would argue that the leveling of world price levels is beneficial for world system and country economic growth rates.*

By contrast, the “Keynesian” legacy should not be under-estimated. “Keynesians” would expect *positive trade-offs* to hold between “government intervention” and the *human condition*, and not the other way around. Major Keynesian analyses include nowadays Kalecki, 1972, 1979; Modigliani, 1987; Stack and Zimmerman 1982; Stack, 1978, 1980 and Vickrey, 1996.

*European Union policy making*, even today, makes *basic pro-globalist assumptions*, like the one that a low comparative international price level is absolutely necessary for socio-economic development. Comparative price levels depend on the relationship between tradables and non-tradables. Countries with low price levels in non-tradables generally have low comparative price levels. But does a haircut in France really have to be as inexpensive as in Bangladesh for the Lisbon process in Europe to be successful? For dependency and later world systems theory, going back to its four “founding fathers” Samir Amin (1976), Giovanni

Arrighi (1995), Andre Gunder Frank (1983, 1990 and 1998) and Immanuel Wallerstein (2000), 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,
- 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, and
- The monopoly of the military means of mass destruction.

*Dependency authors* in the traditions of Cardoso (1977), Furtado (1976), and Sunkel (1966, 1978, 1994 and 2003, for the later, European reception of dependency thought see also Murshed, 2002; Murshed and Raffer, 1993; Raffer, 1987; Raffer and Singer, 1996, 2001; Tausch and Ghymers, 2007; Tausch and Prager, 1993) generally explained backwardness and stagnation by the ever-growing dependent insertion of these countries into the world economy. Starting with the writings of Prebisch (1983, 1988) and Rothschild (1944), 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.

Dependency and world system theory has a disturbing message for the European integration process even today, some four decades after the first analyses by Cardoso, Furtado, Sunkel and many others were written in the late 1960s and early 1970s. Their perspective would generally hold that poverty and backwardness in semi-periphery countries like the new member states of the European Union, which joined the “club” in May 2004, are caused by the peripheral or quasi-peripheral 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 once, at the height of the debate, 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, and
- 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)

The writings of *Joseph Alois Schumpeter* (Schumpeter, 1908, 1912, 1939), and later world system and dependency analyses by Amin, 1976, 1994, 1997; Bornschier, 1982; Cardoso, 1979, Cardoso/Faletto, 1971; Prebisch, 1950, 1983, and Sunkel, 2003, as we already briefly pointed out, all highlight the crises, cyclical imbalances, regional shifts and their possible causes and consequences, as well as of the rise and decline of entire regions and even continents in the process of capitalist development. The world economy thus returns to the “old Galicia” of 1909, when and where the young Schumpeter started his job as a University Professor in Czernowitz (then a German-language university on the very eastern outer rim of the Austro-Hungarian Empire, now Chernivtsi University in Northern Bukovina, Ukraine), gaining valuable insights into the nature of world development in the Galician periphery of the Empire, with all the “creative destruction”, which surrounded him. Several of his major works, like “*The Nature and Essence of Theoretical Economics*” (1908, translated 2009) “*The Theory of Economic Development: An inquiry into profits, capital, credit, interest and the business cycle*” (1912, first translated 1934) were all heavily influenced by his early and short experience at the outer rim (1909-1911) of the Empire. As it is well-known, according to Schumpeter, 1913, 1939 the entrepreneur is the prime mover of economic development, which is cyclic in character, connecting innovations, cycles, and development. Schumpeter strongly believed in the very long, 50-60 year economic cycles, the Kondratiev waves (for empirical studies on Kondratiev waves, see the posthumous editions of Kondratiev’s works in Kondratiev, 1980, 1984, 1998; for a general analysis Devezas, 2006; furthermore Bornschier,

1996; Goldstein, 1988; Tausch, 2007, 2008; for a skeptical view also Kuznets, 1940), Capitalist development takes the form of “creative destruction” (Schumpeter, 1950), Innovation by entrepreneurs/companies is the force that sustains long-term economic growth, even as it destroys the value of established companies that enjoyed some degree of monopoly power. Successful innovation is a source of temporary market power, eroding the profits and position of old firms, yet ultimately losing to the pressure of the new inventions, championed by the competitors (for a formal model of Schumpeterian growth economics, see Aghion/Howitt, 1992). *In a nutshell, this is also the explanation why MNC penetration leads to short-term dynamism and long term inequality and stagnation.* Like many other development theories of the first generation of development economists after the Second World War, Mandelbaum, 1945; Rosenstein-Rodan, 1964; Rothschild, 1944, and Singer, 1975; Singer and Ansari, 1988; Singer and Roy, 1993 all shared with Schumpeter the observation that capitalism never was a smooth equilibrium process. Mandelbaum, Rosenstein-Rodan and Singer, and the early dependency theorists in Latin America, whom they so heavily influenced, were deeply convinced that capitalism is NOT crisis-free growth, full employment, environmental sustainability and the end to social exclusion.

The international system, more and more, seems to resemble such a perpetual rise and fall of companies, regions, sectors, even nations. Several world systems approaches have taken up the basic idea of the Schumpeterian competition and stipulated that even the international system itself since the 1450s is characterized by hegemonies, international system de-concentration, the de-legitimation of the international order, and recurrent global wars over the hegemony in the system (see Devezas, 2006; furthermore Arrighi, 1995; Goldstein, 1988; Tausch, 2007; Wallerstein, 2000), That currently economic growth dramatically shifts away from the North Atlantic arena and the states very closely linked to them to other regions of the world economy seems to indicate that such a major fundamental shift is taking place with the force of a real tsunami. Everywhere, the monopolies of power, which the old dominant transnational oligopolies wield, are eroding. Already the classics of political economy (Sweezy, 1971) provided a framework of quantifiable dependency theory. Class relationships of a rising power of labor in the centers determine that, in the end, long-term fluctuations notwithstanding, cheaper raw materials and exploitation of the periphery become one of the cornerstones of a strategy to halt the fall in the profit rate. Among others, mass migration, unequal exchange, and a new international division of labor are key elements to increase, at least temporarily, s'. The Polish economist Michal Kalecki, whose work was closely connected to the United Nations Economic Commission for Europe, adapted political

economy to the age of monopolization, relevant for our deeper understanding why MNC penetration leads towards long-term economic inequalities. A rising degree of monopolization in the leading center countries over time determines, that, in order to keep the share of wages at least constant, a rising exploitation of the raw material producers sets in to offset the balance.

Other formulations of dependency insisted on ‘unequal exchange’, which, according to one such formulation, hampers development if double factorial terms of trade of the respective country are  $< 1.0$  (Raffer, 1987, Amin, 1975), Labor in the export sectors of the periphery is being exploited, while monopolistic structures of international trade let the centers profit from the high prices of their exports to the world markets in comparison to their high labor productivity. Kohler/Tausch calculated the losses or gains from unequal transfer as the difference between a “fair value” of exports/imports and the “actual (unfair) value” of exports/imports. (See Kohler/Tausch, 2002; see also Raffer K., 1987; Sawada and Yotopoulos, 1999, 2002; Yotopoulos 1996-1997; Yotopoulos and Floro, 1992; Yotopoulos and Lin, 1993; Yotopoulos and Nugent, 1976; and Yotopoulos and Sawada, 2005)

Above, we already hinted at the fact that *low comparative price levels* are nothing but *unequal exchange*. A country, following the Commission’s price reform strategy, is a country with a low international price level and a high ERDI. It is now very tempting to look at the European realities with, so to speak, Latin American eyes. Our geographical presentation of our own variables used in the analysis will be kept to a minimum. Among the dependent variables, we just mention MNC penetration, MNC headquarter status, unequal transfer and the resource balance as the four “master variables” of dependency. Unequal transfer is strongest in the periphery, and weakest in the centers, with the semi-periphery showing medium levels of exposure to unequal transfer. In general terms, we observe today high levels of MNC penetration in the “dominion economies” like Australia and Canada, in Western Europe, in some parts of Eastern Europe, in Central Asia, other parts of the former USSR, in many parts of Latin America, Southern and Western Africa, in Egypt, in Tunisia, and in China and Southeast Asia.

*MNC penetration* received a vast attention in the published titles of the comparative research literature of the last three decades, above all in the writings of the Swiss sociologist Volker Bornschier (2002) and his associates (1977, 1979 and 1985), While different authors disagree on the direction of the influence of MNC penetration on the human condition, they’d all underline the strong influence of MNC penetration on employment, economic growth, income distribution and overall development. Herkenrath and Bornschier (2003), in their

article summarizing and updating the vast debate, which went on in the leading social science journals of the world since the 1970s, said:

Quantitative cross-national research on the topic started as early as 1975 with simultaneously published studies from authors in three different countries, Britain, US, and Switzerland (Stoneman 1975, Chase-Dunn 1975, Bornschier 1975). The three authors pioneered a novel approach. While acknowledging the immediate positive impact of foreign direct investment on economic growth they claimed that, in the longer run, development models based on a strong presence of TNCs would result in higher inequality and in under-utilization of growth potentials. Unfortunately, this view was sometimes misunderstood as claiming that the presence of TNCs prevents growth altogether (Firebaugh 1992), although none of the pioneering authors denied the fact that even dependent (semi-) peripheral economies are able to experience some economic success. By “reducing the growth potential” and “under-exploitation of convergence forces” the authors rather meant that TNCs prevent their host countries from growing as fast as possible and from climbing up in the worldwide division of labor (which, in turn, means that TNCs unwillingly perpetuate the status quo of an unequal and sharply stratified world). (Herkenrath and Bornschier, 2003)

*Foreign saving*, for its turn, is strongest in many parts of Latin America, Southern Africa, in the “new Europe” and in China and in several countries of Southeast Asia. In the classical dependency-oriented literature, it has been dealt with extensively, among others, in the works of Paul Israel Singer. Foreign savings measures size of the current account deficit, and is seen as a classic expression of long-term structural dependency ever since the discovery by Samir Amin in the 1970s that the world periphery suffers from a structural and long-term current account deficit. A negative resource balance will always be constraining the freedom of manouvre of periphery countries. Later, Giovanni Arrighi proposed in his provocative analysis of the *Long 20th Century* (1995) the thought that the logic of accumulation on a world-scale is governed by the ups and downs in the succession of regulation and deregulation, starting from the Venetian (regulatory) and Genoese (deregulated) era of capitalism, followed by the Dutch (regulatory) and British (deregulated) era, and the US hegemony, which -after 1945- was a regulatory model. From the late 1970s, however, we witness, Arrighi’s argument goes on, again the renewed rise of a deregulated model of world capitalism. The often-bemoaned end of the Keynesian era has its real basis; Arrighi’s argument goes, in the shifting accumulation pattern of world capitalism. We agree with Arrighi that the rise of financial capitalism and the decline of productive capitalism are always connected to major shifts in the location of the centers of world capitalism, first from

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Venice to Genoa, followed by the shift from Genoa to Amsterdam, from Amsterdam to London, from London to New York, and from there on to the capitalist archipelago of East Asia of yesterday, perhaps to be followed by South Asia today (Arrighi, 1995), Arrighi also introduced the important notion, that there is a certain coexistence in the time-perspective between the 'different logics', so that elements of the waning and elements of the emerging order might coincide for years. Arrighi's sequential model of world capitalism is also a historic interpretation of the old Marxist notion of

financial expansion -> material expansion->financial expansion (MCM'),

which moreover, as such radically challenges the notion of 'unchanging' general laws of rise and decline. Following Arrighi, we postulate that regulatory strategies might have been well compatible with growth under the rise of the Venetian, Dutch, and American era, while at the time of the rise of 'deregulation', such deregulatory strategies and not 'big government' will be conducive to economic growth.

Ever since the writings of Colemann (1965), also education should be mentioned among the determining variables of the development performance of a country. *Education and human capital formation* figure prominently in the *Human Development Reports* of the United Nations Development Programme as variables, which determine positively the development outcome. For the UNDP it has been self-evident over the last decade that gender empowerment and the re-direction of public expenditures away from defense will positively contribute to a positive development outcome. However, neo-liberal thought would caution against such premature conclusions. Erich Weede (2002) has shown that standard indicators of human capital endowment - like literacy, school enrollment ratios, or years of schooling - suffer from a number of defects. They are crude. Mostly, they refer to input rather than output measures of human capital formation. Occasionally, Weede and Kaempf believe, they produce implausible effects. They are not robustly significant determinants of growth. They replaced them by average intelligence. This variable consistently outperforms the other human capital indicators in spite of suffering from severe defects of its own. Weede and his associates maintain that the immediate impact of institutional improvements, i.e., more government tolerance of private enterprise or economic freedom, on growth is in the same order of magnitude as intelligence effects are. *Public education expenditures* are still public expenditures, and it is entirely conceivable that in the end public education expenditures might negatively affect the development chances of a society, not because they are education

expenditures, but because they are still public expenditures. For such a theoretical understanding, *University reform and University privatization* would be important political steps to achieve a more viable development. The UNDP has devoted considerable energies into developing its own kind of human capital and human development approach that quoted large amounts of statistics how much different countries devoted to their “unproductive” military efforts and how little they devoted to the “good” public education expenditures. Such number games, however much they were linked to the generally laudable effort to document world poverty and the lack of basic human needs satisfaction, suffered from a major scientific handicap by evading the vital question to statistically show that – development levels constant – high shares of public education expenditures contribute uniformly to a good development performance, measured by indicators of growth, human rights, social justice, gender empowerment and ecological well-being, while the “bad” military expenditures contribute to the opposite [see United Nations Development Programme HDR 1998, 2004, 2005].

In our macro-quantitative research design, we also include the well-documented “butter versus guns” dimension of *militarization as a development blockade* [see also Tausch 1986, 1989; Tausch and Herrmann, 2001].

The well-known *acceleration* and *maturity* effects of development have to be also 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).

Our essay does not only take the world economic integration/globalization dimension as a determinant of development performance into account, but also duly considers the dimensions of *feminism*, *culture* (membership of a country in the Islamic Conference), *demography*, the *economic size of nations*, and geography (absolute latitude) into account. Such control variables are standard practice in cross-national development research and for

reasons of space need not be further presented here. Interested readers are referred to the works of Easterly, Heshmati and Tausch for further reference.

### **Data and developing the research design<sup>9</sup>**

In their *American Economic Review* article 2004, Sala-i-Martin and associates highlight the point that the strongest effects on growth are found for good primary schooling enrollment, the low price of investment goods and a low initial level of income where the latter reflects the concept of conditional convergence. Other important variables, according to this study, include regional dummies (such as East Asia, Sub-Saharan Africa, or Latin America), some measures of human capital and health (.such as life expectancy, proportion of a country lying in the tropics, and malaria prevalence), religious dummies, and some sectoral variables such as mining. Interestingly enough, and in contrast to current contemporary islamophobic reasoning, Sala-I-Martin and his team found quite strong and positive effects of the predominance of the Islamic faith on economic growth, with a likewise positive effect of Buddhist and Confucian cultures on economic growth, while the initial income levels and government consumption levels also quite strongly affect the growth rate. Our investigation duly acknowledges several of the key determinants of economic growth, mentioned in the economic literature, like % world population; 2000 Economic Freedom Score; Absolute latitude; Annual population growth rate, 1975-2005 (%); conditiona convergence (ln GDP per capita; ln GDP per capita ^2); Membership in the Islamic Conference; population density; public education expenditure per GNP; and the UNDP education index; but we also take into account military expenditures per GDP and the military personnel rate ln (MPR+1), which are key variables of contemporary political science international relations theory and peace research.

In this essay, we will duly take into account not only these dimensions, but also the indicators of globalization and dependency, which are being measured by the following different variables of “(in)/dependent development”:

- **MNC penetration** (MNC PEN) 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. This research tradition has been especially developed by the Swiss sociologist Volker Bornschieer and his school. Bornschieer and his school predicted a strong negative determination of development by a high MNC penetration, due to the negative consequences, monopolies have on the long term development trajectory of countries

- We also ascertain the **growth of MNC penetration over time (DYN MNC PEN)**, from 1995 to 2005. The Bornschier school expected short-term dynamic effects from such MNC penetration increases
- Equally, Bornschier and his school already developed a high theoretical and empirical awareness about the long-term consequences of the presence or absence of “**MNC headquarter status**” (**MNC HEADQU**), measured in our analysis by the indicator MNC outward investments (stock) per GDP. Bornschier and his school expected that a high headquarter status mitigates against the long-term negative effects of MNC penetration
- **FPZ (free production zones)** employment as % of total population is the indicator, best suited to measure what the so-called “NIDL” (new international division of labour) school. Early on, Froebel/Heinrichs and Kreye (1980) already predicted the unfettered rise of the model of “export processing zones”, especially in China and Southeast Asia. This first major international study by Froebel/Heinrichs/Kreye, 1980 was followed, among others, by Ross, 2004; and Singa-Boyenge, 2007. Export Processing Zones (EPZ) – or „*Free Production Zones*” today already account for some 80 percent of the merchandise exports of countries like China, Kenya, the Philippines, Malaysia, Mauritius, Mexico, Senegal, Tunisia, Vietnam. 3500 EPZs in 130 countries of the world now employ 66 Million people, among these 40 million employees in China. The tendency, correctly foreseen by Froebel/Heinrichs/Kreye, 1980 towards this total global re-location of world industries continues unabated. In the current paper, we try to determine the quantitative weights, which free production zones have in the determination of development performance (% of the population working in export processing zones versus MNC penetration versus the other dependency/globalization indicators).
- What current European policy-making calls “**low comparative price levels**” but what dependency theories call “unequal exchange/unequal transfer” (Kohler/Tausch, 2003, furthermore Raffer, 1987, Yotopoulos, 1996, and Yotopoulos/Sawada, 2005) is operationalized here simply by ERD or ERDI, the exchange rate deviation index, which 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 dependent insertion into the global economy. 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.

The choice of a country to be included in the final analysis (175 countries<sup>10</sup>) was determined by the availability of a complete data series for these independent variables (if not mentioned otherwise, UNDP data), The data for this study were described and presented in great detail in the analysis , so our description will be kept to a minimum here.<sup>11</sup>

So, in this study we utilize data from 175 countries. For each we have information about 20 independent variables which are grouped into six dimensions. The number of the main dependent variables is 36, divided into eight dimensions.

The design of our study is based on usual, SPSS XV ordinary least square standard regression of the “**kitchen sink type**” (Durlauf *et al.*, 2008) of economic growth and economic performance in the research tradition of Barro, 2003. The main **independent** variables of our model for around the year 2000 or later comprised the following list. As we said, we used this list also to construct a single “global Lisbon process” indicator. Surveying the vast econometric literature on the subject, one indeed finds support for the inclusion of the geographic and demographic variables in our investigation (Ades and Glaeser, 1999, Alesina and La Ferrara, 2005, Barro and Sala-i-Martin, 2003, Barro 1991, 1996, 1998, Bloom and Sachs, 1998, Chanda and Putterman, 2007, Dowrick and Quiggin, 1997, Easterly and Levine 1997, Frankel and Romer, 1999, Gallup and Sachs, 1999, Grier and Tullock, 1989, Hall and Jones, 1999, Kamarck, 1976, Kormendi and Meguire, 1985, Levine and Renelt, 1992, Limongi and Przeworski, 1993, Mankiw, Romer and Weil, 1992, Rodriguez and Rodrik, 2001).

Our main independent variables finally are:

- ◆ % women in government, all levels
- ◆ % world population
- ◆ 2000 Economic Freedom Score
- ◆ Absolute latitude
- ◆ Annual population growth rate, 1975-2005 (%)
- ◆ comparative price levels (US=1.00)
- ◆ foreign savings rate
- ◆ FPZ (free production zones) employment as % of total population
- ◆ ln GDP per capita
- ◆ ln GDP per capita ^2
- ◆ Membership in the Islamic Conference
- ◆ military expenditures per GDP
- ◆ military personnel rate ln (MPR+1)
- ◆ MNC outward investments (stock) per GDP
- ◆ MNC PEN - stock of Inward FDI per GDP

- ◆ MNC PEN: DYN MNC PEN 1995-2005
- ◆ Openness-Index, 1990 (export-share per GDP + import-share per GDP)
- ◆ Population density
- ◆ Public education expenditure per GNP
- ◆ UNDP education index

The main *dependent* variables for this analysis correspond to standard knowledge in comparative political science and sociology. An ever-growing number of more recently published investigations not only looks into the effects of MNC penetration on economic growth, but into the more social and ecological conditions in general (Beckfield, 2006, de Soysa, I and Neumayer E. 2005, Jenkins and Scanlan 2001, Jorgensen 2003 and 2005, Kentor 2001, Kentor and Boswell 2003, Lee 2005, Li and Resnick 2003, Meyer 2003, Reuveny and Thompson 2004, Richards, Gelleny, and Sacko 2001, Schofer, Ramirez and Meyer, 2000, Shandra, London and Williamson 2003, Sumner 2005). Although we presume all the indicators as to be known generally, we refer our readers to a brief summary of the Happy Planet Indicator, available from <http://www.happyplanetindex.org/list.htm>, and the Yale/Columbia environmental data series, available at <http://sedac.ciesin.columbia.edu/es/esi/> and <http://epi.yale.edu/Home>, which might be perhaps not so well-known to the readers. The dependent variables were measured, if not specified otherwise, by around the middle of the first decade of the new Millennium. The list of the dependent variables, finally also be projected selectively onto a combined and single final indicator, comprises:

1. Closing the economic gender gap
2. Closing the educational gender gap
3. Closing the Gender Gap
4. Closing the health gender gap
5. Closing the political gender gap
6. Corruption avoidance measure
7. Country share in top 500 world universities
8. Crisis performance Index (factor analytical)
9. Democracy Measure
10. Economic Growth 1990-2005
11. Economic Growth 2009
12. Economic Growth 2010
13. Environment Performance Index
14. ESI Index (Environment Sustainability Index)
15. Female survival at age 65
16. Gender empowerment measure
17. Global tolerance index
18. Happy Life Years
19. Happy Planet Index
20. Human Development Index (UNDP)
21. Labour force participation rate of migrants (both sexes)
22. Life Expectancy
23. Life satisfaction
24. Low Carbon emissions per capita
25. Low carbon emissions per million US dollars GDP

- |  |  |
|--|--|
| 26. Low civil and political liberties violations   | 31. Low quintile ratio inequality top 20% bottom 20% |
| 27. Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)] | 32. Low unemployment                                 |
| 28. Low ecological Footprint   | 33. Per capita world class universities              |
| 29. Low infant mortality rate  | 34. Rule of law                                      |
| 30. Low net exports of ecological footprint gha per person   | 35. Tertiary enrollment                              |
|  | 36. Total low unemployment rates, immigrants         |

The development performance model is specified as a function of the determinants of growth written as:

$$(1) \quad DevPerform_i = \beta_0 + \sum_{j=1}^J \beta_j X_{ji} + \varepsilon_i$$

where *DevPerform* represents each of the six development performance variables listed above for country *i* and *X* is *J* vector of determinants of development performance listed above, some of which are logarithmic, while others expressed in level or percentages. The  $\beta_0$  and  $\beta_j$  are unknown parameters to be estimated to infer about the association and impact of the determinant of the development indicator. The  $\varepsilon$  is a random error term assumed to have a mean zero and constant variance. It captures the measurement error in the dependent variable and the effects of left out explanatory variables.

In the literature we find both of quantitative and a qualitative methods to measure outcomes of activities. Outcomes are often multidimensional and are represented by multiple indicators with both positive and negative effects on the outcomes. However, our objective here is not to evaluate effects of certain policy programs, but rather to quantify the state of an object to be studied. The multidimensionality of outcomes requires the creation of composite indices to have a single measure and to be able to aggregate indicators in a satisfactory way. Here the focus is on the construction of an index that is multidimensional and decomposable to use it in describing the Lisbon process. Such an index will be a useful tool in the evaluation of the outcome of the member countries efforts, the policy impacts on development in the region and in the quantification of the progress in achieving the stated goals. In this section, we introduce a a parametric approach to compute composite indices frequently used in the evaluation of outcomes of policies and for the ranking of countries.

The literature on index numbers is diverse and volumes. There are at least two alternatives to the usual non-parametric indices, so common in the literature. These are the principal component (PC) analysis and factor analysis (FA) which can be also used in the computation of an index for the Lisbon process.<sup>12</sup> The basic idea with these methods is to combine several variables into a smaller set of independent variables without losing the essential information from the original data. Thus, the issue first was how to combine different indicators related to the Lisbon process into a *single* measure of its progress. In this study, we adopt the factor analysis approach. Since the two methods in normalized form give principal component scores with unit variance, we use only the factor analysis results in the analysis of the Lisbon process.

Factor analysis is a multivariate technique for examining relationships within a set of interrelated quantitative variables or a common factor. The common factors are not observable and assumed by construction to be independent from each other. The explanatory variables or indicators, which are related to each other, are combined within a single common factor. The correlation between the explanatory variables is explained by the common factors, while the remaining variance of a variable is attributed to a unique factor. The factors are derived in such a way that each maximizes the percentage of total variance attributed to each of the successive factors. The greater the variance share of the variables explained by the common factors, the better is the fit of the factor model and the more accurate is the composite index and the rank of countries.

Given a dataset with  $j$  numeric variables or indicators, at most  $p$  factor components can be computed, each being a linear combination of the original indicators with coefficients equal to the eigenvectors of the correlation of the covariance matrix. Mathematically the factor model is written as: (See also Andersen and Herbertsson, 2003)

$$(2) \quad Y_{ji} = A_{jp} X_{pi} + B_j E_{ji}$$

where  $Y_{ji}$  is a  $j \times n$  matrix of the measure of the centered variable  $j$  for country  $i$  in period  $t$ ,  $X_{pi}$  is the  $p \times j$  matrix of the value of the common factors for each country estimated,  $E_{ji}$  is  $j \times n$  matrix of the unique factor, the coefficients  $A_{jp}$  are a matrix of  $j \times p$  weights called factor loadings, representing weights attached to the explanatory variables and are in proportion of the cross-country variance of the variable that is explained by the factor and  $B_j$  is a vector of  $n \times 1$  weights of the unique factor.

The estimated factor scores can be used to rank the countries according to the respective factors. In our case, the factor scores are used to rank the countries with respect to the Lisbon process, i.e. a relative measure of the member countries progress. The factor components are sorted according to the descending order of the Eigenvalue, which are equal to the variance of the components. Unlike in a traditional least squares estimation method case, where the vertical distance to the fitted line is minimized, here the sum of the squared residuals is measured as distances from the point to the first principal axis. We require the model to extract only one factor – the Lisbon factor.

The method of principal component analysis was originated by Pearson (1901) and further developed by Hotelling (1933), The method, as we already stated, has been employed in many areas including the computation of an environmental index (Kang, 2002) and in the computation of a simple globalization index using trade and financial openness by Agénor (2003), Heshmati and Oh (2007) used the method for the computation of a Lisbon Development Strategy Index.

Each of the parametric and non-parametric (weighted or un-weighted) indices has their own advantages and disadvantages. In this study, they are used to measure the state of the Lisbon process among the countries of the EU and the world system and attribute it to the possible underlying sources of progress (or “drivers” of growth, as modern Western growth theory increasingly calls them). To this end, we also factor-analyse the independent variables of the model, requiring the model to extract eigenvalues which are greater than the number 2.

The Global Lisbon Process (GLP), combining the development performance of all the variables, is corresponding to the following equation:

$$(3) \quad GLP = \alpha + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_j X_{ji} + \varepsilon_i$$

where  $\alpha$  is the intercept,  $\beta$  is a vector of unknown parameters to be estimated,  $\varepsilon$  is an error term, and  $X$  a vector of  $j$  indicator of progress for country  $i$ . The vector  $X$  includes: the first part of the curvilinear function of development level, the second part of the curvilinear function of development level, % women in government, all levels; % world population; 2000 Economic Freedom Score; Absolute latitude; Annual population growth rate, 1975-2005 (%); comparative price levels (US=1.00); foreign savings rate; FPZ (free production zones) employment as % of total population; Membership in the Islamic Conference; military expenditures per GDP; military personnel rate ln (MPR+1); MNC outward investments (stock) per GDP; MNC PEN - stock of Inward FDI per GDP; MNC PEN: DYN MNC PEN

1995-2005; Openness-Index, 1990 (export-share per GDP + import-share per GDP); population density; public education expenditure per GNP; and the UNDP education index.

GLI = is a single principal component, was finally extracted from the following 27 variables, whose factor loadings indicated a single, positive development process

- |   |  |
|---|--|
| 1. Avoiding a high infant mortality 2005  | 14. Economic growth in real terms pc. per annum, 1990-2005     |
| 2. Avoiding a high quintile share income difference between richest and poorest 20% | 15. Environmental Performance Index (EPI)                      |
| 3. Avoiding a high total unemployment rate of immigrants (both sexes)               | 16. ESI-Index Environment Sustainability Index (Yale Columbia) |
| 4. Avoiding a high unemployment rate  | 17. Female survival probability of surviving to age 65 female  |
| 5. Avoiding civil and Political Liberties violations                                | 18. Gender empowerment index value                             |
| 6. Closing economic gender gap  | 19. Global tolerance index                                     |
| 7. Closing educational gender gap   | 20. Happy life years   |
| 8. Closing health and survival gender gap   | 21. Happy Planet Index, HPI                                    |
| 9. Closing of global gender gap overall score 2009                                  | 22. Human development index (HDI) value 2004                   |
| 10. Closing political gender gap  | 23. Life Expectancy (years)                                    |
| 11. Corruption avoidance measure  | 24. Life Satisfaction (0-10)                                   |
| 12. Country share in top world 500 Universities                                     | 25. Per capita world class universities                        |
| 13. Democracy measure   | 26. Rule of law  |
|   | 27. Tertiary enrollment  |

### **The main multiple regression results**

First of all, we present the adjusted  $R^2$ , the degrees of freedom according to the SPSS output (the number of observations is the number 1 plus the degrees of freedom), the F-tests and the error probabilities of the 36 equations. Only the equation, explaining net exports of ecological footprint, is not significant, while all the other 35 equations are passing well the test of statistical significance.

### **Table 1: The predictive power of the models**

	<b>dependent variable</b>	<b>adj R<sup>2</sup></b>	<b>df</b>	<b>F</b>	<b>p entire equation</b>
1	Human Development Index (UNDP)	91,9	87	50,160	.000
2	Corruption avoidance measure	84,0	87	23,820	.000
3	Low ecological Footprint	83,0	82	21,073	.000
4	Gender empowerment measure	83,0	56	14,649	.000
5	Closing the educational gender gap	77,8	83	15,580	.000
6	Low infant mortality rate	77,3	87	15,845	.000
7	Environment Performance Index	76,7	83	14,634	.000
8	Low Carbon emissions per capita	76,4	86	14,909	.000
9	Rule of law	73,3	87	12,961	.000
10	Low civil and political liberties violations	73,1	87	12,840	.000
11	Tertiary enrollment	73,0	80	11,816	.000
12	Happy Life Years	70,6	82	10,866	.000
13	Global tolerance index	70,3	48	6,685	.000
14	Crisis performance Index (factor analytical)	70,1	84	10,869	.000
15	Democracy Measure	67,0	80	9,129	.000
16	Closing the Gender Gap	66,6	83	9,290	.000
17	Life satisfaction	65,8	82	8,903	.000
18	Life Expectancy	64,9	82	8,572	.000
19	Per capita world class universities	63,0	87	8,395	.000
20	Female survival at age 65	60,7	87	7,707	.000
21	Closing the economic gender gap	60,2	83	7,288	.000
22	Economic Growth 2009	58,3	85	6,936	.000
23	ESI Index (Environment Sustainability Index)	51,1	79	5,125	.000
24	Economic Growth 2010	49,6	85	5,185	.000
25	Low carbon emissions per million US dollars GDP	48,7	86	5,089	.000
26	Economic Growth 1990-2005	47,8	86	4,941	.000
27	Closing the health gender gap	46,5	83	4,604	.000
28	Low quintile ratio inequality top 20% bottom 20%	44,5	74	3,967	.000
29	Total low unemployment rates, immigrants	39,9	87	3,888	.000
30	Low unemployment	35,7	81	3,250	.000
31	Closing the political gender gap	33,4	83	3,084	.000
32	Country share in top 500 world universities	33,1	87	3,151	.000
33	Happy Planet Index	30,1	82	2,767	.001
34	Low disaster risk in the world system [ln (number	29,7	84	2,774	.000

	of people killed by natural disasters per year+1)]				
35	Labour force participation rate of migrants (both sexes)	25,1	87	2,458	.003
36	Low net exports of ecological footprint gha per person	11,1	80	1,499	.116

It seems to be important to recall here what Herkenrath and Bornschieer (2003) correctly emphasized at the time of writing their article:

Following the initial studies from 1975, many other researchers who also distrusted the supposedly beneficial effects of TNCs began testing their assumptions by means of quantitative cross-national research as well. Despite some minor quarrels on specific findings they all came to the same empirical conclusion— they again found that TNC presence retards development. Accordingly, the school or paradigm these authors represent is usually termed the “critical” school. This name may be misleading, though. Since the early scholars mainly theorized power relations and conflicting interests, it would be more correct to call them “realists.” Not believing in the classical formula according to which “capital is capital,” they insisted that the institutional sources of capital and the corresponding interests matter. Explicitly or implicitly, these researchers were the pioneers of the renewal of economic sociology within the framework of the political world-economy. According to this critical, or realistic, school, the basic problem with TNCs in world development is that two different institutional agendas collide: the agenda of global capital accumulation followed by the system of TNCs on the one hand and the agenda of national needs of development on the other. (Herkenrath and Bornschieer, 2003)

However, it is the Kalecki/Schumpeter dimension of the process of monopolization and stagnation, which, in our view, makes the difference. It is not the different institutional agendas, which collide, and cause stagnation. Predictably, Dutch investments in Belgium and Belgian investments in the Netherlands do not cause as much harm to long-term development of the host countries as dominant and monopolistic Dutch and Belgian investments in Indonesia or Zaire.

Herkenrath and Bornschieer think that the agenda of global capital accumulation followed by the system of TNCs is on the one hand, and the agenda of national needs of development on the other. But the following significant positive development effects clearly contradict this neo-Listean, economic nationalist interpretation:

**Scheme 1: results contradicting the hypothesis that two different institutional agendas collide: the agenda of global capital accumulation followed by the system of TNCs on the one hand and the agenda of national needs of development on the other**

<b>Variable with a positive influence</b>	<b>Dependent variable</b>	<b>Size of the standardized effect</b>
<b>Foreign savings rate</b>	Country share in top 500 world universities	0,308
	low net exports of ecological footprint gha per person	0,306
	Economic Growth 2009	0,237
	Closing the health gender gap	0,215
	Crisis performance Index (factor analytical)	0,174
<b>FPZ (free production zones) employment as % of total population</b>	Economic Growth 2009	0,215
	Happy Planet Index	0,191
	Happy Life Years	0,138
	Life satisfaction	0,133
<b>MNC PEN - stock of Inward FDI per GDP</b>	Economic Growth 1990-2005	0,195
<b>Openness-Index, 1990 (export-share per GDP + import-share per GDP)</b>	low net exports of ecological footprint gha per person	0,398
	Economic Growth 1990-2005	0,373
	Economic Growth 2010	0,305
	Closing the economic gender gap	0,295
	low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	0,280
	low Carbon emissions per capita	0,207
	<b>MNC PEN: DYN MNC PEN 1995-2005</b>	low quintile ratio inequality top 20% bottom 20%

We think that the *monopolization and market saturation* aspect of Kalecki's and Schumpeter's theory, together with an emphasis on the world system position, in which MNC penetration takes place, far better captures the real causes of stagnation, associated with MNC penetration and its dynamics over time.

First of all, *economic freedom*, which is a core neoliberal predictor, indeed is robustly associated with development success, and on the other hand, it is only *aging monopoly power*,

which is associated with stagnation and inequality. In addition, *passive globalization* and *low comparative price levels* are a leading cause for stagnation, maldevelopment and inequality.

### Scheme 2: The dynamism brought about by economic freedom

Variable with a positive influence	Dependent variable	Size of the standardized effect
2000 Economic Freedom Score	Low carbon emissions per million US dollars GDP	0,423
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	0,305
	ESI Index (Environment Sustainability Index)	0,284
	Low unemployment	0,269
	Economic Growth 1990-2005	0,237
	Rule of law	0,231
	Tertiary enrollment	0,167

From this perspective, we now present the main results of our essay in a more coherent fashion. **Needless to say that all effects are measured “*ceteris paribus*”, and independent of the effects of all the other predictors in our investigation.**

We will start our short explanation of the significant main results of this study by first presenting the most obvious, i.e. the significant effects of **development level**, i.e. **“modernization”** (ln GDP per capita) and “maturity” or **“modernity”** (ln GDP per capita<sup>2</sup>).

Let us start first by analyzing the immediate and positive effects of “modernization”:

- Closing the educational gender gap
- Environment Performance Index
- Female survival at age 65
- Happy Life Years
- Happy Planet Index
- Human Development Index (UNDP)
- Life Expectancy
- Life satisfaction
- Low Carbon emissions per capita
- Low ecological Footprint

- Low infant mortality rate

These are the indicators, where economic growth has the most immediate and positive effects. The pessimistic views of the modernization process, so prominent in the early writings of Huntington, however receive a qualified support by the **negative** and significant effects of the modernization process. These phenomena suffer under the “onslaught” of the modernization process:

- Corruption avoidance measure
- Country share in top 500 world universities
- Low carbon emissions per million US dollars GDP
- Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]
- Low quintile ratio inequality top 20% bottom 20%
- Low unemployment
- Per capita world class universities

As Nobel Laureate Simon Kuznets foresaw correctly, there is a crisis of modernization, manifesting itself with rising inequalities, associated also with rising corruption, a lowering of the level of the Universities, rising environmental strains from CO<sub>2</sub>-emissions and disaster risk, and rising unemployment. These significant hypotheses support the thesis that there are several and very powerful processes at work, which underline the dark and negative sides of the modernization process. Only at mature stages of development, in the phase of **modernity**, the following **positive** effects set in:

- Corruption avoidance measure
- Country share in top 500 world universities
- Low carbon emissions per million US dollars GDP
- Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]
- Low quintile ratio inequality top 20% bottom 20%
- Per capita world class universities

However, there are also very powerful forces at work, which are revealed by the **negative** and significant effects of modernity. They imply very strong forces of **social and ecological**

**decay at work** in the most industrialized countries of the world system, indicating rising gender disempowerment, a lowering of the environmental performance, lower survival rates, less happiness and life satisfaction, more carbon emissions and ecological footprint, and – finally – higher infant mortality rates. These are the darkest sides of capitalist modernity:

- Closing the educational gender gap
- Environment Performance Index
- Female survival at age 65
- Happy Planet Index
- Human Development Index (UNDP)
- Life Expectancy
- Life satisfaction
- Low Carbon emissions per capita
- Low ecological Footprint
- Low infant mortality rate

Our *ceteris paribus* OLS multiple regression research design has it that we can better grasp the importance of free markets under such conditions. As a shock to certain sectors in the the social science profession, very critical of the dominant neo-liberal paradigm in economics, the key neo-liberal explanatory variable **economic freedom** has only the following significant **positive effects** and not a single negative effect on our 36 chosen, very broad indicators of development

- Economic Growth 1990-2005
- ESI Index (Environment Sustainability Index)
- Low carbon emissions per million US dollars GDP
- Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]
- Low unemployment
- Rule of law
- Tertiary enrollment

This result suggests the importance of the structural, or if you wish “CEPALISTA”, classic strain of dependency theory in the tradition of Prebisch and Sunkel against the more radical versions of dependency theory in the tradition of Marxist political economy thereafter. The

early “structuralist” classics never were against markets, but only showed the importance of unequal power relationships, which blocked the development of the countries of the semi-periphery and periphery. Dependency and world systems research oriented development theory also often overlooks the **effects of geography**, so well known to econometricians, on the development process. To simply overlook geography is inadmissible; econometrics does not commit such an error, while quantitative social science often does. In our case, we selected the key indicator “**absolute latitude**” as the decisive variable.

The **positive** significant effects of latitude on the development process are:

- Closing the Gender Gap
- Closing the political gender gap
- ESI Index (Environment Sustainability Index)

These variables are the “comparative societal advantages” of the “North” and the “far South” with its temperate climate zones in the global system. However, the following significant **negative** effects hold as well:

- Closing the health gender gap
- Country share in top 500 world universities
- Economic Growth 2009
- Labour force participation rate of migrants (both sexes)
- low carbon emissions per million US dollars GDP

In an age of shrinking populations in many industrially advanced countries of the North and the “far South” of the global system, it would be also absolutely unacceptable to exclude the **demographic process** from the horizon of our theories. We start our analysis of the effects of the demographic process by looking at the significant beta-weights of the variable “**annual population growth rate**”, 1975-2005 (%)”. Annual population growth has the following significant **positive** effect:

- Closing the educational gender gap

The **negative** significant effects of annual population growth, vindicating the logic of neo-Malthusianism, are:

- Closing the economic gender gap
- Closing the health gender gap
- low civil and political liberties violations
- low quintile ratio inequality top 20% bottom 20%
- rule of law
- tertiary enrollment

The next predictor in our list of demographic variables is the indicator **“country population as % of world population”**, reflecting the **demographic weight and the market size** of a nation in world society. The undoubtable **positive** effects of a large demographic base in the current phase of global capitalist world development are:

- Country share in top 500 world universities
- Crisis performance Index (factor analytical)
- Economic Growth 1990-2005
- Economic Growth 2009
- Economic Growth 2010

However, there are also **negative** significant effects, favouring the smaller states in the international system:

- Closing the educational gender gap
- Closing the health gender gap
- Democracy Measure
- Environment Performance Index
- ESI Index (Environment Sustainability Index)
- low carbon emissions per million US dollars GDP
- low civil and political liberties violations

Next, we also look at the effects of the factor “population density”. The **positive** significant effects of **population density** are

- Democracy Measure
- Happy Planet Index
- low ecological Footprint

However, population density not only has these three, mentioned blessings. The **negative** significant effects of population density are:

- Closing the health gender gap
- ESI Index (Environment Sustainability Index)
- low disaster risk in the world system [ $\ln$  (number of people killed by natural disasters per year+1)]

The next building block in our explanatory variables is the proper consideration of the effects of **feminism** and gender empowerment on a global scale. We have chosen to use here the variable **“women in government, all levels (in %)”**, because it is far better available than the UNDP’s famous “gender empowerment index” and it also clearly reflects a feminist change of the overall power structure of a nation not at the level of ministerial posts in the government, but also at the lower, top bureaucratic levels. The **clear blessings** of the feminist changes in the last decades were:

- Closing the economic gender gap
- Closing the Gender Gap
- Corruption avoidance measure
- Country share in top 500 world universities
- Gender empowerment measure
- per capita world class universities

However, under the constraints of the “fordist” capitalist model, we are confronted with the following **negative** significant trade-offs of feminism in power as well:

- low ecological Footprint
- low net exports of ecological footprint gha per person

Potentially controversial as our presentation of the effects demography, economic freedom, feminism, and geography are our results about **human capital formation**. We have chosen here two indicators, public education expenditure per GNP for the government input side and the UNDP education index for the “output” side of the human capital formation process. The

**positive** and beneficial effects of **public education expenditure** on the development process are:

- Corruption avoidance measure
- low disaster risk in the world system [ $\ln$  (number of people killed by natural disasters per year+1)]
- per capita world class universities
- rule of law

There are, however, also quite **negative effects** of the public education effort, supporting those voices, which are in favour of privatizing education, especially in advanced industrial countries. In addition, there seems to be a pretty strong crowding-out mechanism to be in place between the public education expenditure effort on the part of national governments and the efficiency of the health sector:

- Democracy Measure
- female survival at age 65
- Human Development Index (UNDP)
- Life Expectancy
- low infant mortality rate
- low unemployment

Equally surprising, the **UNDP education index**, *ceteris paribus*, does not have only a positive balance sheet. This finding will be perhaps as controversial as the one, referred to above, about the effects of public education expenditures. The **positive effects** of the UNDP education index on the development process are:

- Closing the educational gender gap
- Environment Performance Index
- Human Development Index (UNDP)
- tertiary enrollment

However, these positive effects have to be contrasted by the following **negative impacts** on the development process:

- Corruption avoidance measure
- Economic Growth 1990-2005
- Economic Growth 2010
- low carbon emissions per million US dollars GDP
- low civil and political liberties violations
- rule of law

Development theory is also well advised to take the different effects of state strength, and indirectly, the **military sector**, into account. We will deal with different aspects of “Keynesianism” and state strength in the next chapter. Here, we would like to draw, first of all, a clear distinction between capital intensive militarization, manifesting itself in the share of military expenditures per GDP, and log-transformed military personnel rates, reflecting the level of world political threats a society is facing, as well as the societal traditions of conscript armies. The predictable and only significant **positive effect** of **military expenditures per GDP** on the development process is:

- low disaster risk in the world system [ $\ln(\text{number of people killed by natural disasters per year}+1)$ ]

This effect is mainly due to the fact that militarized societies are much better prepared to react to natural disasters than societies with an under-funded military apparatus. Supporting the expectations of the critics of high military expenditures, there are the following clear **negative effects** of high military expenditures, especially on democracy and the environment:

- Democracy Measure
- Environment Performance Index
- ESI Index (Environment Sustainability Index)
- Happy Planet Index
- low Carbon emissions per capita
- low carbon emissions per million US dollars GDP
- low ecological Footprint

High **military personnel rates** have the following significant **positive effects** on the development process:

- Crisis performance Index (factor analytical)
- Economic Growth 2009
- Economic Growth 2010
- per capita world class universities
- tertiary enrollment

By contrast, the following **negative effects** of high military personnel rates hold:

- Closing the economic gender gap
- Closing the educational gender gap
- Closing the Gender Gap
- low civil and political liberties violations

Ever since the writings of Huntington on the subject, “Islam” received a large share of the global social science debate. But this debate was largely a qualitative one, and in contrast to econometrics, there was hardly any hard-core evidence made available. The overlooking of this factor in much of the published quantitative social science literature on the subject of MNC penetration and other drivers and blockades of development performance is all too evident. **Membership in the Organization of the Islamic Conference** however has the following significant and **positive** effects:

- Country share in top 500 world universities
- Crisis performance Index (factor analytical)
- Economic Growth 2009
- low quintile ratio inequality top 20% bottom 20%

The **Achilles heels** of today’s Muslim countries are:

- Closing the economic gender gap
- Closing the educational gender gap
- Closing the Gender Gap
- Closing the political gender gap
- Democracy Measure
- Gender empowerment measure
- Global tolerance index

- low civil and political liberties violations
- low unemployment
- total low unemployment rates, immigrants

In the following, we will now analyze the **effects of globalization** on the socio-economic development process. First of all, we analyze the **time-lagged effects of world economic openness**. *Ceteris paribus*, we can observe the following significant **positive** effects, largely vindicating the neo-liberal approach to economic growth and the environment:

- Closing the economic gender gap
- Economic Growth 1990-2005
- Economic Growth 2010
- low Carbon emissions per capita
- low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]
- low net exports of ecological footprint gha per person

However, it also has to be stated that there are the following significant time-lagged **negative** effects of world economic openness:

- Country share in top 500 world universities
- Economic Growth 2009
- Happy Life Years
- Happy Planet Index
- Human Development Index (UNDP)
- Life satisfaction
- per capita world class universities
- tertiary enrollment

Secondly, our investigation clearly shows that Pan Yotopoulos is completely right in warning about the negative effects of pushing downwards the comparative price levels of countries. It is unequal exchange and low comparative price levels, which decides on very relevant social indicators, and not so much MNC penetration and its movements over time, when directly compared with the effects of comparative price levels and the other relevant variables. There are **no positive** and quite robust and powerful **negative effects** of a **low comparative price**

**level** on the following development indicators, showing again that recent apprehensions against a policy of low comparative price levels are justified (Kohler/Tausch, 2003):

- female survival at age 65
- Happy Life Years
- Human Development Index (UNDP)
- Life Expectancy
- Life satisfaction

**Free production zones** and **foreign savings** can be part and parcel of a strategy of “successfully seizing the chance”, and only partially confirming, partially contradicting Froebel/Heinrichs and Kreye (1980) with their prediction about the effects of the unfettered rise of the model of “export processing zones”, especially in China and Southeast Asia. Export Processing Zones (EPZ), which account for some 80 percent of the merchandise exports of countries like China, and are a relevant factor in 130 countries of the world, now globally employing 66 million people, do not uniformly contribute to the stagnation and the pauperization of the host countries concerned. Also, dependency thinking on foreign savings, championed by Paul Israel Singer, has to be re-formulated in a decisive way. There are clear positive and clear negative effects on development performance. The **positive, rather Keynesian effects** of foreign savings are:

- Closing the health gender gap
- Country share in top 500 world universities
- Crisis performance Index (factor analytical)
- Economic Growth 2009
- low net exports of ecological footprint gha per person

On the **negative** side, and correctly implied by Paul Israel Singer, we find the following significant effects:

- low ecological Footprint
- low quintile ratio inequality top 20% bottom 20%
- low unemployment

For Froebel/Heinrichs/Kreye, it was unthinkable that the **“export processing zones”** have positive effects beyond the sphere of capitalist accumulation and economic growth. However, the following **positive effects** do hold, supporting rather a neo-liberal reading of events:

- Economic Growth 2009
- Happy Life Years
- Happy Planet Index
- Life satisfaction

On the **negative balance sheet**, we find the following effects:

- Environment Performance Index
- low Carbon emissions per capita
- low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]

Once going back to the roots of quantitative dependency and world systems literature of the last decades, we nowadays have to distinguish clearly between the three main features of **penetration** of host countries by **transnational corporations**. First, we are confronted by the effects of **MNC penetration** proper, i.e. MNC PEN - stock of Inward FDI per GDP, showing the monopolistic control of the markets by foreign transnationals. Secondly, we must analyze the effects of the increases of this MNC penetration over time, i.e. MNC PEN: DYN MNC PEN 1995-2005. Classic quantitative dependency theory in the tradition of the early writings of Bornschier expected that first of all, DYN MNC dynamizes the host countries. But in addition, we have to be aware of the fact that MNC penetration will lead to especially negative long term consequences, when the host country does not have a transnational corporate power-base of its own transnationals, investing in turn in other foreign countries. Such an absence of MNC headquarter status in the host countries will have, classic dependency theory argues, very negative societal consequences. The mutual penetration of, say, Dutch companies in Belgium, and Belgian companies in the Netherlands, will be clearly the “normal case” in highly developed countries, especially in today’s European Union, which we have to distinguish from the effects of Dutch MNC penetration in, say, Suriname, and Belgian MNC penetration in Zaire/Congo. This is all because “MNCs” from Suriname or Zaire/Congo will hardly be existent, let alone penetrate the economy of their former colonizing countries! Headquarter status and its absence is best measured by low

MNC outward investments (stock) per GDP. **Low MNC headquarter status** has **no positive effects** and the following **negative effects** on socio-economic development:

- Crisis performance Index (factor analytical)
- Economic Growth 2009
- Economic Growth 2010
- per capita world class universities

**MNC Penetration** was at the center of the vast empirical dependency-oriented research literature in the major international social science journals. By mid 2009, an analysis, based on Reuters/Thomson ISI Web of Science, revealed that 328 major international studies quoted the path-breaking empirical dependency analysis by Galtung, 1971, which links dependency measured by trade partner concentration and the concentration of export products to the inequality of income distribution. Further 74 major international studies were based on the Sunkel essay, 1973, which is more directly linked to the concept of MNC penetration than the Galtung essay, 1971. Galtung, 1971 and Sunkel, 1973, in turn must be regarded as the catalyst essays for the two follow-up pioneering quantitative dependency studies, authored by Chase Dunn, 1975 [which had in turn 213 follow-up studies], and Rubinson, 1976 [which yielded 170 follow-up studies in the major social science journals of the world to date]. Bornschier/Chase-Dunn/Rubinson, based on Chase-Dunn, 1975, and Rubinson, 1976, later became the most important study in the field, systematizing research based on the concept of MNC penetration. This essay initiated 185 follow-up studies, while Bornschier/Ballmer-Cao, devoted to the issue of economic inequality as a consequence of MNC penetration, originated 74 follow-up studies. Later tests of the Bornschier hypotheses could nothing but support and refine the original argument, independently of the research design, for different indicators and different time periods and different samples and different methods (see inter alia Beer, 1999; Bornschier, 1982, 2002; Dutt, 1997; Heshmati, 2006b; Kentor, 1998; Klitgaard R. and Fedderke J., 1995; Tausch, 2003; Tausch and Prager, 1993; Tsai 1995, just to mention a few samples from this vast literature). Compared to this massive scientific attention over the last decades, the effects are not as impressive, as one might think when the effects of the other important variables are being controlled for. The only **positive effect** of MNC penetration is:

- Economic Growth 1990-2005

The **negative effects** of MNC penetration are:

- Economic Growth 2010
- low quintile ratio inequality top 20% bottom 20%

Increases of MNC penetration over time **(DYN MNC PEN)** will have the following **positive effect on development:**

- low quintile ratio inequality top 20% bottom 20%

There will be the following **negative effects on development:**

- Closing the economic gender gap
- Economic Growth 1990-2005
- Economic Growth 2010
- low Carbon emissions per capita
- low carbon emissions per million US dollars GDP
- rule of law
- 

Table 2 gives the final overview of the results of this work:

**Table 2: An overview of the main regression results – vested power interests and monopolies block development**

independent variable	dependent variable	Beta	error p	dependency theory, world systems theory and globalization critical theories expect the following effect
<b>2000 Economic Freedom Score</b>	Low carbon emissions per million US dollars GDP	0,423	0,002	<b>negative effect</b>
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	0,305	0,064	
	ESI Index (Environment Sustainability Index)	0,284	0,043	
	Low unemployment	0,269	0,081	
	Economic Growth 1990-2005	0,237	0,080	
	Rule of law	0,231	0,018	
	Tertiary enrollment	0,167	0,099	
<b>Absolute latitude</b>	Closing the political gender gap	0,445	0,023	<b>no particular effect</b>
	ESI Index (Environment Sustainability Index)	0,322	0,070	
	Closing the Gender Gap	0,261	0,058	
	Low carbon emissions per million US dollars GDP	-0,317	0,064	
	Closing the health gender gap	-0,346	0,048	
	Economic Growth 2009	-0,358	0,022	
	Labour force participation rate of migrants (both sexes)	-0,372	0,069	
	Country share in top 500 world universities	-0,433	0,027	
<b>Annual population growth rate, 1975-2005 (%)</b>	Closing the educational gender gap	0,288	0,016	<b>no particular effect</b>
	Rule of law	-0,242	0,063	
	Closing the economic gender gap	-0,280	0,079	
	Low civil and political liberties violations	-0,291	0,027	
	Closing the health gender gap	-0,334	0,071	
	Tertiary enrollment	-0,345	0,013	

	Low quintile ratio inequality top 20% bottom 20%	-0,486	0,025	
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	-0,584	0,007	
<b>country population as % of world population</b>	Economic Growth 1990-2005	0,536	0,000	<b>no particular effect</b>
	Country share in top 500 world universities	0,383	0,000	
	Crisis performance Index (factor analytical)	0,376	0,000	
	Economic Growth 2010	0,333	0,000	
	Economic Growth 2009	0,285	0,001	
	Closing the educational gender gap	-0,138	0,025	
	Low civil and political liberties violations	-0,142	0,030	
	Environment Performance Index	-0,152	0,016	
	ESI Index (Environment Sustainability Index)	-0,161	0,084	
	Low carbon emissions per million US dollars GDP	-0,182	0,046	
	Democracy Measure	-0,185	0,017	
	Closing the health gender gap	-0,592	0,000	
<b>foreign savings rate</b>	Country share in top 500 world universities	0,308	0,010	<b>negative effect</b>
	Low net exports of ecological footprint gha per person	0,306	0,054	
	Economic Growth 2009	0,237	0,015	
	Closing the health gender gap	0,215	0,050	
	Crisis performance Index (factor analytical)	0,174	0,035	
	Low ecological Footprint	-0,115	0,085	
	Low quintile ratio inequality top 20% bottom 20%	-0,275	0,019	
	Low unemployment	-0,393	0,002	
<b>FPZ (free production zones) employment as % of total population</b>	Economic Growth 2009	0,215	0,031	<b>negative effect</b>
	Happy Planet Index	0,191	0,090	
	Happy Life Years	0,138	0,060	
	Life satisfaction	0,133	0,091	
	Environment Performance Index	-0,111	0,085	
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	-0,281	0,012	
	Low Carbon emissions per capita	-0,337	0,000	
<b>ln GDP per capita</b>	Happy Planet Index	8,714	0,000	<b>no particular effect</b>
	Closing the educational gender gap	5,621	0,000	
	Low infant mortality rate	5,362	0,000	

	Environment Performance Index	5,158	0,000	
	Low ecological Footprint	4,052	0,000	
	Female survival at age 65	3,880	0,010	
	Life satisfaction	3,659	0,011	
	Low carbon emissions per capita	3,467	0,004	
	Life Expectancy	3,357	0,021	
	Human Development Index (UNDP)	3,019	0,000	
	Happy Life Years	2,860	0,031	
	Corruption avoidance measure	-2,616	0,007	
	Low unemployment	-3,306	0,094	
	Per capita world class universities	-3,466	0,017	
	Low quintile ratio inequality top 20% bottom 20%	-4,088	0,056	
	Low carbon emissions per million US dollars GDP	-4,805	0,006	
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	-5,864	0,005	
	Country share in top 500 world universities	-6,649	0,001	
<b>ln GDP per capita ^2</b>	Country share in top 500 world universities	7,435	0,000	<b>no particular effect</b>
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	5,701	0,008	
	Low carbon emissions per million US dollars GDP	5,163	0,005	
	Low quintile ratio inequality top 20% bottom 20%	3,880	0,084	
	Per capita world class universities	3,519	0,021	
	Corruption avoidance measure	3,283	0,001	
	Human Development Index (UNDP)	-2,348	0,001	
	Life Expectancy	-2,627	0,083	
	Life satisfaction	-3,021	0,044	
	Female survival at age 65	-3,277	0,036	
	Low carbon emissions per capita	-4,043	0,001	
	Environment Performance Index	-4,697	0,000	
	Low ecological Footprint	-4,773	0,000	
	Low infant mortality rate	-4,831	0,000	
	Closing the educational gender gap	-5,153	0,000	
	Happy Planet Index	-8,598	0,000	
<b>low comparative price levels (US=1.00)</b>	Human Development Index (UNDP)	-0,161	0,031	<b>negative effect</b>
	Life Expectancy	-0,293	0,078	
	Female survival at age 65	-0,299	0,067	
	Happy Life Years	-0,347	0,024	

	Life satisfaction	-0,367	0,026	
<b>low MNC outward investments (stock) per GDP</b>	Economic Growth 2009	-0,222	0,035	<b>negative effect</b>
	Economic Growth 2010	-0,240	0,038	
	Crisis performance Index (factor analytical)	-0,255	0,005	
	Per capita world class universities	-0,382	0,000	
<b>Membership in the Islamic Conference</b>	Low quintile ratio inequality top 20% bottom 20%	0,429	0,004	<b>no particular effect or positive effect</b>
	Economic Growth 2009	0,367	0,003	
	Country share in top 500 world universities	0,366	0,017	
	Crisis performance Index (factor analytical)	0,293	0,005	
	Low unemployment	-0,266	0,072	
	Closing the political gender gap	-0,279	0,071	
	Low civil and political liberties violations	-0,323	0,001	
	Closing the educational gender gap	-0,346	0,000	
	Gender empowerment measure	-0,384	0,001	
	Total low unemployment rates, immigrants	-0,386	0,008	
	Closing the economic gender gap	-0,410	0,001	
	Global tolerance index	-0,415	0,013	
	Closing the Gender Gap	-0,433	0,000	
	Democracy Measure	-0,531	0,000	
<b>military expenditures per GDP</b>	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	0,205	0,084	<b>negative effect</b>
	Environment Performance Index	-0,185	0,008	
	Democracy Measure	-0,221	0,010	
	Low ecological Footprint	-0,222	0,000	
	Low carbon emissions per million US dollars GDP	-0,243	0,017	
	Happy Planet Index	-0,274	0,024	
	ESI Index (Environment Sustainability Index)	-0,303	0,004	
	Low carbon emissions per capita	-0,326	0,000	
<b>military personnel rate ln (MPR+1)</b>	Per capita world class universities	0,258	0,005	<b>negative effect</b>
	Crisis performance Index (factor analytical)	0,219	0,009	
	Economic Growth 2010	0,209	0,049	
	Economic Growth 2009	0,185	0,055	
	Tertiary enrollment	0,150	0,059	
	Closing the educational gender gap	-0,140	0,055	

	Closing the economic gender gap	-0,165	0,091	
	Closing the Gender Gap	-0,201	0,026	
	Low civil and political liberties violations	-0,208	0,007	
<b>MNC PEN - stock of Inward FDI per GDP</b>	Economic Growth 1990-2005	0,195	0,073	<b>Long-term negative effect</b>
	Economic Growth 2010	-0,219	0,041	
	Low quintile ratio inequality top 20% bottom 20%	-0,219	0,090	
<b>MNC PEN: DYN MNC PEN 1995-2005</b>	Low quintile ratio inequality top 20% bottom 20%	0,230	0,050	<b>Short-term positive effect</b>
	Low carbon emissions per capita	-0,159	0,048	
	Closing the economic gender gap	-0,168	0,095	
	Rule of law	-0,185	0,025	
	Economic Growth 1990-2005	-0,233	0,044	
	Low carbon emissions per million US dollars GDP	-0,250	0,036	
	Economic Growth 2010	-0,270	0,025	
<b>Openness-Index, 1990 (export-share per GDP + import-share per GDP)</b>	Low net exports of ecological footprint gha per person	0,398	0,055	<b>negative effect</b>
	Economic Growth 1990-2005	0,373	0,012	
	Economic Growth 2010	0,305	0,041	
	Closing the economic gender gap	0,295	0,023	
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	0,280	0,077	
	Low carbon emissions per capita	0,207	0,037	
	Human Development Index (UNDP)	-0,096	0,095	
	Happy Life Years	-0,211	0,053	
	Life satisfaction	-0,236	0,045	
	Economic Growth 2009	-0,300	0,028	
	Happy Planet Index	-0,303	0,071	
	Tertiary enrollment	-0,357	0,001	
	Per capita world class universities	-0,381	0,002	
	Country share in top 500 world universities	-0,421	0,012	
<b>population density</b>	Happy Planet Index	0,182	0,090	<b>no particular effect</b>
	Democracy Measure	0,150	0,045	
	Low ecological Footprint	0,136	0,011	
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	-0,212	0,046	

	ESI Index (Environment Sustainability Index)	-0,258	0,007	
	Closing the health gender gap	-0,267	0,006	
<b>public education expenditure per GNP</b>	Per capita world class universities	0,230	0,011	<b>positive effect</b>
	Low disaster risk in the world system [ln (number of people killed by natural disasters per year+1)]	0,230	0,067	
	Rule of law	0,211	0,006	
	Corruption avoidance measure	0,156	0,009	
	Human Development Index (UNDP)	-0,115	0,007	
	Low infant mortality rate	-0,136	0,052	
	Democracy Measure	-0,164	0,084	
	Life Expectancy	-0,198	0,028	
	Female survival at age 65	-0,257	0,006	
	Low unemployment	-0,305	0,019	
<b>UNDP education index</b>	Closing the educational gender gap	0,439	0,000	<b>positive effect</b>
	Tertiary enrollment	0,266	0,008	
	Environment Performance Index	0,204	0,031	
	Human Development Index (UNDP)	0,152	0,005	
	Low civil and political liberties violations	-0,179	0,066	
	Rule of law	-0,183	0,060	
	Low carbon emissions per million US dollars GDP	-0,228	0,093	
	Economic Growth 2010	-0,246	0,074	
	Corruption avoidance measure	-0,287	0,000	
	Economic Growth 1990-2005	-0,390	0,004	
<b>women in government, all levels (in %)</b>	Closing the economic gender gap	0,287	0,003	<b>positive effect</b>
	Closing the Gender Gap	0,243	0,006	
	Country share in top 500 world universities	0,239	0,049	
	Gender empowerment measure	0,211	0,010	
	Per capita world class universities	0,167	0,064	
	Corruption avoidance measure	0,109	0,065	
	Low ecological Footprint	-0,122	0,049	
	Low net exports of ecological footprint gha per person	-0,274	0,073	

### Factor analytical results about the global Lisbon competition

Now it is time to arrive at some more generalized perspectives on our results. To this end, we also ran a standard SPSS orthogonal factor analysis about the Lisbon process. Predictably, the

United Nations Human Development Index again emerges as a unique master variable for an overall best assessment of the development performance of a country:

**Table 3a: The Global Lisbon Index – a 27 variable model, based on principal component analysis – the loadings on the component**

		<b>Global Lisbon Development Index</b>
Human development index (HDI) value 2004	VAR00042	0,894
Happy life years	VAR00040	0,884
Environmental Performance Index (EPI)	VAR00035	0,837
Life Expectancy (years)	VAR00045	0,836
Life Satisfaction (0-10)	VAR00046	0,832
Tertiary enrollment	VAR00051	0,809
Corruption avoidance measure	VAR00027	0,800
Female survival probability of surviving to age 65 female	VAR00037	0,793
Rule of law	VAR00050	0,751
Per capita world class universities	VAR00048	0,676
Closing of global gender gap overall score 2009	VAR00025	0,648
Closing educational gender gap	VAR00023	0,596
ESI-Index Environment Sustainability Index (Yale Columbia)	VAR00036	0,593
Democracy measure	VAR00030	0,586
Gender empowerment index value	VAR00038	0,558
Global tolerance index	VAR00039	0,556
Closing political gender gap	VAR00026	0,487
Country share in top world 500 Universities	VAR00028	0,360
Closing economic gender gap	VAR00022	0,329
Happy Planet Index, HPI	VAR00041	0,326
Closing health and survival gender gap	VAR00024	0,269
Economic growth in real terms pc. per annum, 1990-2005	VAR00034	0,247
Unemployment rate	VAR00053	-0,144
Quintile share income difference between richest and poorest 20%	VAR00049	-0,202
Total unemployment rate of immigrants (both sexes)	VAR00052	-0,542

Civil and Political Liberties violations	VAR00021	-0,684
Infant mortality 2005	VAR00043	-0,814

Note: we specified that only one factor should be extracted. Mean substitution of missing values. 40,402% of total variance is explained.

The results for a Global Lisbon Index are the following. Especially the poorer EU-27 countries are ranked very low on the global Lisbon scale, while the Scandinavian countries and the Netherlands head the international league:

**Table 3c: The Global Lisbon Index – a 27 variable model, based on principal component analysis – the country results**

	Global Lisbon Factor	Rank
<b>Sweden</b>	<b>2,5950</b>	<b>1</b>
<b>Finland</b>	<b>2,5229</b>	<b>2</b>
Norway	2,4777	3
New Zealand	2,2123	4
Iceland	2,1004	5
<b>Denmark</b>	<b>2,0598</b>	<b>6</b>
United States	2,0593	7
Switzerland	2,0185	8
Canada	1,9871	9
<b>Netherlands</b>	<b>1,9525</b>	<b>10</b>
Australia	1,9026	11
<b>Ireland</b>	<b>1,8785</b>	<b>12</b>
<b>Austria</b>	<b>1,8638</b>	<b>13</b>
<b>United Kingdom</b>	<b>1,8168</b>	<b>14</b>
<b>Germany</b>	<b>1,7647</b>	<b>15</b>
<b>Belgium</b>	<b>1,5631</b>	<b>16</b>
<b>Spain</b>	<b>1,5614</b>	<b>17</b>
<b>France</b>	<b>1,5418</b>	<b>18</b>
Israel	1,3415	19
Costa Rica	1,2632	20
Japan	1,2437	21
<b>Italy</b>	<b>1,1832</b>	<b>22</b>
<b>Slovenia</b>	<b>1,1735</b>	<b>23</b>
<b>Portugal</b>	<b>1,0709</b>	<b>24</b>

Chile	0,9369	25
<b>Luxembourg</b>	<b>0,9363</b>	<b>26</b>
<b>Greece</b>	<b>0,8878</b>	<b>27</b>
<b>Latvia</b>	<b>0,8794</b>	<b>28</b>
Argentina	0,8600	29
Uruguay	0,8457	30
Panama	0,8049	31
<b>Poland</b>	<b>0,7967</b>	<b>32</b>
<b>Cyprus</b>	<b>0,7875</b>	<b>33</b>
<b>Estonia</b>	<b>0,7540</b>	<b>34</b>
<b>Lithuania</b>	<b>0,7458</b>	<b>35</b>
Singapore	0,7415	36
Hong Kong, China (SAR)	0,7243	37
<b>Hungary</b>	<b>0,7213</b>	<b>38</b>
<b>Czech Republic</b>	<b>0,7155</b>	<b>39</b>
Barbados	0,6747	40
Croatia	0,6419	41
<b>Slovakia</b>	<b>0,5389</b>	<b>42</b>
Bahamas	0,4846	43
Mexico	0,4659	44
<b>Malta</b>	<b>0,4519</b>	<b>45</b>
Brazil	0,4452	46
Colombia	0,4104	47
Dominican Republic	0,3994	48
<b>Bulgaria</b>	<b>0,3989</b>	<b>49</b>
Cuba	0,3831	50
Trinidad and Tobago	0,3671	51
Ecuador	0,3669	52
Thailand	0,3604	53
Malaysia	0,3493	54
Peru	0,3444	55
Jamaica	0,3281	56
Korea (Republic of)	0,3166	57
Philippines	0,3165	58
Dominica	0,3154	59
Belize	0,2992	60
Nicaragua	0,2871	61
Saint Lucia	0,2750	62
Saint Kitts and Nevis	0,2675	63

Sri Lanka	0,2458	64
Antigua and Barbuda	0,2404	65
Venezuela (Bolivarian Republic of)	0,2142	66
El Salvador	0,2040	67
Mauritius	0,2038	68
Suriname	0,1999	69
Cape Verde	0,1691	70
Guyana	0,1404	71
Saint Vincent and the Grenadines	0,1309	72
<b>Romania</b>	<b>0,1309</b>	<b>73</b>
Paraguay	0,1308	74
Belarus	0,1245	75
Russian Federation	0,1228	76
Fiji	0,1184	77
Grenada	0,1181	78
Seychelles	0,1051	79
Honduras	0,0985	80
Bahrain	0,0931	81
Albania	0,0765	82
Mongolia	0,0513	83
Samoa	0,0419	84
Kuwait	0,0251	85
Timor-Leste	0,0181	86
Macedonia (TFYR)	0,0032	87
Moldova	0,0018	88
Brunei Darussalam	-0,0211	89
Sao Tome and Principe	-0,0382	90
China	-0,0585	91
Guatemala	-0,0664	92
Tunisia	-0,0911	93
United Arab Emirates	-0,0954	94
Ukraine	-0,0984	95
Bolivia	-0,1129	96
Viet Nam	-0,1195	97
Bosnia and Herzegovina	-0,1294	98
South Africa	-0,1534	99
Vanuatu	-0,1599	100
Lebanon	-0,1747	101
Libyan Arab Jamahiriya	-0,1759	102

Oman	-0,1821	103
Jordan	-0,1966	104
Bhutan	-0,2095	105
Maldives	-0,2300	106
Armenia	-0,2766	107
Lesotho	-0,2897	108
Kazakhstan	-0,2982	109
Indonesia	-0,2998	110
Papua New Guinea	-0,3327	111
Qatar	-0,3409	112
Saudi Arabia	-0,3507	113
Solomon Islands	-0,3539	114
Kyrgyzstan	-0,3658	115
Gabon	-0,4236	116
Syrian Arab Republic	-0,4416	117
Namibia	-0,4914	118
Georgia	-0,4931	119
Lao People's Democratic Republic	-0,4932	120
Egypt	-0,5272	121
Iran (Islamic Republic of)	-0,5430	122
Eritrea	-0,5536	123
India	-0,5648	124
Uzbekistan	-0,5720	125
Ghana	-0,6012	126
Turkey	-0,6219	127
Algeria	-0,6219	128
Morocco	-0,6262	129
Comoros	-0,6309	130
Nepal	-0,6377	131
Gambia	-0,6525	132
Equatorial Guinea	-0,6529	133
Myanmar	-0,6647	134
Botswana	-0,6652	135
Tajikistan	-0,6948	136
Turkmenistan	-0,7612	137
Azerbaijan	-0,7633	138
Senegal	-0,7866	139
Madagascar	-0,8526	140
Swaziland	-0,8752	141

Côte d'Ivoire	-0,9206	142
Bangladesh	-0,9553	143
Guinea-Bissau	-0,9678	144
Uganda	-1,0460	145
Haiti	-1,0477	146
Cambodia	-1,0552	147
Djibouti	-1,0633	148
Malawi	-1,1158	149
Congo	-1,1190	150
Mauritania	-1,1658	151
Mozambique	-1,1683	152
Pakistan	-1,1695	153
Kenya	-1,1879	154
Tanzania (United Republic of)	-1,1905	155
Sudan	-1,2200	156
Togo	-1,2321	157
Guinea	-1,2638	158
Benin	-1,4715	159
Zambia	-1,4858	160
Central African Republic	-1,4952	161
Niger	-1,5064	162
Ethiopia	-1,5084	163
Cameroon	-1,5249	164
Rwanda	-1,5316	165
Burkina Faso	-1,5483	166
Nigeria	-1,5619	167
Mali	-1,5722	168
Congo (Democratic Republic of the)	-1,5880	169
Burundi	-1,7065	170
Yemen	-1,7218	171
Zimbabwe	-1,7353	172
Sierra Leone	-1,8167	173
Angola	-1,8398	174
Chad	-1,8526	175

Interestingly enough, the factor analysis of the main independent variables of our investigation also confirms the importance of high military outlays and low comparative price levels among the 20 independent variables of our model:

**Table 4: Orthogonal standard SPSS factor analysis of the 20 main explanatory variables)**

Current EU-policies, defined by the **14 structural Lisbon indicators (lowering comparative price levels), and increasing military spending** (article 43 of the Lisbon treaty, now in force) are marked in blue colours)

xx	xx	development level	MNC penetration	militarization	foreign savings rate	public education expenditure	FPZ (free production zones)
% women in government, all levels	VAR00001	0,333	-0,152	-0,565	0,109	0,344	-0,120
% world population	VAR00002	-0,086	-0,207	0,007	-0,464	-0,433	0,235
2000 Economic Freedom Score	VAR00003	0,685	0,115	0,004	-0,276	0,145	-0,171
Absolute latitude	VAR00004	0,594	-0,464	0,136	0,112	-0,199	0,069
Annual population growth rate, 1975-2005 (%)	VAR00005	-0,611	0,348	0,381	-0,136	0,319	-0,163
comparative price levels (US=1.00)	VAR00006	0,726	-0,115	0,253	-0,124	0,157	-0,297
foreign savings rate	VAR00007	-0,321	0,104	-0,234	0,628	-0,235	-0,093
FPZ (free production zones) employment as % of total population	VAR00008	0,128	0,273	0,305	-0,150	0,297	0,708
ln GDP per capita	VAR00009	0,918	-0,143	0,187	-0,043	0,011	-0,010
ln GDP per capita ^2	VAR00010	0,923	-0,141	0,186	-0,059	0,016	-0,031
Membership in the Islamic Conference	VAR00011	-0,442	0,167	0,551	0,014	0,118	-0,048
military expenditures per GDP	VAR00012	0,018	0,021	0,595	0,274	0,048	-0,355
military personnel rate ln (MPR+1)	VAR00013	0,218	0,013	0,607	0,429	-0,253	0,053
MNC outward investments (stock) per GDP	VAR00014	0,542	0,416	-0,080	-0,310	-0,026	-0,275

MNC PEN - stock of Inward FDI per GDP	VAR00015	0,289	0,700	-0,218	0,051	0,061	-0,064
MNC PEN: DYN MNC PEN 1995-2005	VAR00016	0,442	0,465	-0,182	0,317	-0,355	0,005
Openness-Index, 1990 (export-share per GDP + import-share per GDP)	VAR00017	0,418	0,608	0,010	0,291	0,166	0,302
population density	VAR00018	0,316	0,661	0,008	-0,227	-0,323	-0,046
public education expenditure per GNP	VAR00019	0,364	-0,176	-0,148	0,333	0,515	0,085
UNDP education index	VAR00020	0,750	-0,233	0,041	0,158	-0,113	0,221

Note: we specified that only factors, whose Eigenvalue is greater than 2.0 should be extracted. Mean substitution of missing values

The dependency-oriented and world systems theory oriented conclusions of Chapter 4 of this essay are again confirmed, this time by the factor analytical model. MNC penetration, militarization and a heavy reliance on foreign savings block the Lisbon performance in a significant way:

**Table 5: Multiple regression results about how the the combined predicting factors extracted from the main 20 variables of our investigation explain the single Lisbon process, based on 27 variables**

		B	Standard error	Beta	t	Error p
1	(Constant)	0,000	0,031		0,000	1,000
<b>development level</b>	<b>REGR factor score 1 for analysis 1</b>	<b>0,871</b>	<b>0,031</b>	<b>0,871</b>	<b>28,201</b>	<b>0,000</b>
<b>MNC penetration</b>	<b>REGR factor score 2 for analysis 1</b>	<b>-0,268</b>	<b>0,031</b>	<b>-0,268</b>	<b>-8,676</b>	<b>0,000</b>
<b>militarization</b>	<b>REGR factor score 3 for analysis 1</b>	<b>-0,069</b>	<b>0,031</b>	<b>-0,069</b>	<b>-2,223</b>	<b>0,028</b>
<b>foreign savings rate</b>	<b>REGR factor score 4 for analysis 1</b>	<b>-0,060</b>	<b>0,031</b>	<b>-0,060</b>	<b>-1,936</b>	<b>0,055</b>
public education expenditure	REGR factor score 5 for analysis 1	0,004	0,031	0,004	0,114	0,909
FPZ	REGR factor score 6 for analysis 1	-0,024	0,031	-0,024	-0,771	0,442

### **Perspectives and conclusions**

A thorough re-thinking of basic premises of policy-making in Europe is thus necessary. The Swedish EU-Presidency in its non-paper on the post-2010 Lisbon strategy proposed that the EU and the Member States should focus on and deliver in the following areas in 2010–2020:

- Promoting external and internal openness, sound competition and a well-functioning single market.
- Ensuring macroeconomic stability and sustainable public finances.
- Making full use of the labor supply potential and fulfilling the target of full employment, while strengthening social cohesion.
- Promoting investment in human capital and research.
- Creating an eco-efficient business society and improving the innovation and business climate.
- Developing a sustainable energy supply and curbing climate impact

Our analysis, by contrast, showed that the ultra-liberal strategy of opening markets is not the solution, but very much part of the problem of the European *malaise*. Fernando Henrique Cardoso was absolutely right in predicting the following processes to happen:

- 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, and
- 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).

Lowering **comparative international price levels**, part and parcel of the 14 main structural EU-Commission Lisbon indicators, negatively and notably affects the development balance of countries. Also, the often-hailed beneficial effects of **foreign capital penetration** do not materialize, or materialize completely. As correctly predicted by the dependency literature in the tradition of Osvaldo Sunkel, social polarization dramatically increases by a development model, based on a very high foreign capital penetration.

Our preliminary recommendation to the policy maker would be thus to **increase**:

- ♦ Economic Freedom Score
- ♦ foreign savings rate
- ♦ country population as % of world population
- ♦ women in government, all levels (in %)

- ◆ military personnel rate ln (MPR+1)
- ◆ population density
- ◆ FPZ (free production zones) employment as % of total population
- ◆ UNDP education index

Certainly, the following options under current world systemic conditions are not a strategy of ascent in the global system:

- ◆ low comparative price levels (US=1.00)
- ◆ military expenditures per GDP
- ◆ Membership in the Islamic Conference
- ◆ Annual population growth rate, 1975-2005 (%)
- ◆ low MNC outward investments (stock) per GDP
- ◆ Absolute latitude
- ◆ Openness-Index, 1990 (export-share per GDP + import-share per GDP)
- ◆ public education expenditure per GNP
- ◆ MNC PEN: DYN MNC PEN 1995-2005
- ◆ MNC PEN - stock of Inward FDI per GDP

There are some historical considerations that must be taken into account as well, which strongly speak in favor of our quantitative analysis, presented in this essay. Europe is not engaged in the first Lisbon race of its kind to catch up with America. Much of the 19<sup>th</sup> Century and the first half of the 20<sup>th</sup> Century witnessed a European decline *vis-à-vis* the US, and only the post-war period after 1945 saw a relative closing of the gap, that began to widen again after 1973.

Andre Gunder Frank has implied for a long time that Europe's quest has to be seen in the larger perspective of Asia's re-ascent in the world system. The United Nations Economic Commission for Latin America, ECLAC/CEPAL, in its path-breaking essay "*Globalización y desarrollo*" (2002)<sup>13</sup> provided estimates that dramatically support such a view that stresses the simultaneousness of the ascent of Asia from the 1950s onwards with the decline of Europe after 1973 in the world system.

One further important consequence of this analysis is the re-discovery of the issue of European industrial policy in the framework of an otherwise relatively free economy, which determines in the end the coefficients of MNC penetration. Thus the old critical questions addressed in the direction of neo-classical theory by such economists as Celso Furtado, Michal Kalecki, Gunnar Myrdal, Francois Perroux, Raul Prebisch, Paul Rosenstein-Rodan, *Alternatives: Turkish Journal of International Relations, Vol. 9, No. 1, Spring 2010*

Kurt Rothschild, Dudley Seers, Hans Singer and others can be taken up anew. De-regulation helps, but it helps the dominant center to maintain and even increase its leading position, and certainly not the technologically and politically weaker nations of the periphery and semi-periphery. So, it is French former EU-Commission President Jacques Delors (1992) and not economics Nobel laureate Prof. Krugman, who seems to have gained the upper hand in the debate started by Professor Paul Krugman in *Foreign Affairs* in 1994 (<http://www.foreignaffairs.org/19940301faessay5094/paul-krugman/competitiveness-a-dangerous-obsession.html>)

In our opinion, European policy-making finally should dare to take the globalization-critical organizations of “civil society” seriously (Brand, 2005; Brand and Raza, 2003; Brand *et al.*, 2000; Brand *et al.*, 2001), According to our analysis, industrial policy is the *sine qua* of a real European answer to United States Keynesian global power strategy that always put the well-being of the US transnational corporation ahead of ideology.

## Appendix 1: The sources for the cross-national data collection

All the variables are contained in:

<http://www.hichemkaroui.com/?p=1317>

This data set combines the most up-to-date data on globalization and gender relations (combining these with data from the World Values Survey). The dataset in EXCEL format is freely available and draws on the following sources:

Variable	Source
% women in government, all levels	UNDP HDR 2000 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
% world population	calculated from UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
2000 Economic Freedom Score	Heritage Foundation <a href="http://www.heritage.org/Index/">http://www.heritage.org/Index/</a>
Absolute latitude	Easterly, William, New York University – Stern School of Business, Department of Economics, May 2000 “The Middle Class Consensus and Economic Development”, World Bank Policy Research Working Paper No. 2346, available at: <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract_id=630718">http://papers.ssrn.com/sol3/papers.cfm?abstract_id=630718</a> . Data in EXCEL-format still retrievable best from a “google” search, entering the words “easterly POLRIGHTS98” at the site of the <a href="http://www.cgdev.org/">http://www.cgdev.org/</a> . The address of the site is given as <a href="http://www.cgdev.org/doc/.../easterly/easterly_consensusdata.xls">www.cgdev.org/doc/.../easterly/easterly_consensusdata.xls</a> . Alternatively, a “google search” using the search profile words “easterly_consensusdata.xls” also yields the data set
Annual population growth rate, 1975-2005 (%)	calculated from UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Budget surpluses or budget deficits per GDP	World Bank Global Development Network Growth Data Base, Government Finance <a href="http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20701055~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html">http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20701055~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html</a>
Carbon emissions per capita	ESI Yale Columbia Index <a href="http://sedac.ciesin.columbia.edu/es/esi/">http://sedac.ciesin.columbia.edu/es/esi/</a>
Carbon emissions per million US dollars GDP	ESI Yale Columbia Index <a href="http://sedac.ciesin.columbia.edu/es/esi/">http://sedac.ciesin.columbia.edu/es/esi/</a>
Civil and political liberties violations	ESI Yale Columbia Index

	<a href="http://sedac.ciesin.columbia.edu/es/esi/">http://sedac.ciesin.columbia.edu/es/esi/</a>
Closing economic gender gap	World Economic Forum Global Gender Gap Report <a href="http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm">http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm</a>
Closing educational gender gap	World Economic Forum Global Gender Gap Report <a href="http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm">http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm</a>
Closing health and survival gender gap	World Economic Forum Global Gender Gap Report <a href="http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm">http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm</a>
Closing of global gender gap overall score 2009	World Economic Forum Global Gender Gap Report <a href="http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm">http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm</a>
Closing political gender gap	World Economic Forum Global Gender Gap Report <a href="http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm">http://www.weforum.org/en/Communities/Women%20Leaders%20and%20Gender%20Parity/GenderGapNetwork/index.htm</a>
Comparative price levels (US=1.00)	calculated from UNDP (GDP curr/GDP PPP) UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Corruption avoidance measure	ESI Yale Columbia Index <a href="http://sedac.ciesin.columbia.edu/es/esi/">http://sedac.ciesin.columbia.edu/es/esi/</a>
Country benefitting (+) or suffering (-) from unequal exchange (Kohler operationalization) (per GDP)	Gernot Kohler and Arno Tausch (2000), 'Global Keynesianism. Unequal Exchange and Global Exploitation' Huntington NY: Nova Science Publishers
Country share in top world 500 Universities	University of Shanghai <a href="http://www.arwu.org/">http://www.arwu.org/</a>
Crisis performance Index	calculated from IMF and UNDP. IMF prognosis April 2009. The index compares economic growth 1990-2005 to economic growth in the slump 2009 (residuals from the linear OLS regression) and the predicted recovery in 2011 compared to the predicted slump in 2010 (again residuals from the linear OLS regression). Additional components of the factor analytical weightings for the crisis performance factor are predictions of economic growth, 2009, and 2010.
Cyclones - average number of tropical cyclones per year	<a href="http://www.undp.org/cpr/disred/rdr.htm">http://www.undp.org/cpr/disred/rdr.htm</a>
Democracy measure	ESI Yale Columbia Index <a href="http://sedac.ciesin.columbia.edu/es/esi/">http://sedac.ciesin.columbia.edu/es/esi/</a>
Droughts - average number of droughts per year	<a href="http://www.undp.org/cpr/disred/rdr.htm">http://www.undp.org/cpr/disred/rdr.htm</a>
Earthquakes - average number of	<a href="http://www.undp.org/cpr/disred/rdr.htm">http://www.undp.org/cpr/disred/rdr.htm</a>

earthquakes per year	
Ecological footprint (g ha /cap)	Happy Planet Index website <a href="http://www.happyplanetindex.org/learn/download-report.html">http://www.happyplanetindex.org/learn/download-report.html</a>
Economic growth IMF prediction growth rate in 2009	IMF <a href="http://www.imf.org/external/datamapper/index.php">http://www.imf.org/external/datamapper/index.php</a>
Economic growth IMF prediction growth rate in 2010	IMF <a href="http://www.imf.org/external/datamapper/index.php">http://www.imf.org/external/datamapper/index.php</a>
Economic growth in real terms pc. per annum, 1990-2005	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Environmental Performance Index (EPI)	EPI Yale Columbia Index <a href="http://epi.yale.edu/Home">http://epi.yale.edu/Home</a>
ESI-Index Environment Sustainability Index (Yale Columbia)	Yale/Columbia ESI Index (Environment Sustainability Index) website <a href="http://sedac.ciesin.columbia.edu/es/esi/">http://sedac.ciesin.columbia.edu/es/esi/</a>
Ethnic linguistic fractionalization ELF85	Philipp Roeder, Dep Political Science, University of California, San Diego <a href="http://weber.ucsd.edu/~proeder/elf.htm">http://weber.ucsd.edu/~proeder/elf.htm</a>
Female survival probability of surviving to age 65 female	calculated from UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Foreign savings rate	UNDP HDR 2000 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
FPZ (free production zones) employment as % of total population	calculated from ILO <a href="http://www.ilo.org/public/english/dialogue/sector/themes/epz/epz-db.pdf">http://www.ilo.org/public/english/dialogue/sector/themes/epz/epz-db.pdf</a>
Gender empowerment index value	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Global tolerance index	calculated from World Values Survey <a href="http://www.worldvaluessurvey.org/">http://www.worldvaluessurvey.org/</a> Documented in A. Tausch, with M. Moaddel (2009), 'What 1.3 Billion Muslims Really Think' Hauppauge, NY: Nova Science Publishers
GOV EXPENDITURE (B.I; OR C.II; OR C.III + C.IV) (% of GDP) 1995	World Bank Global Development Network Growth Data Base, Government Finance <a href="http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20701055~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html">http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20701055~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html</a>
HLY (Happy Life Years)	Happy Planet Index website <a href="http://www.happyplanetindex.org/learn/download-report.html">http://www.happyplanetindex.org/learn/download-report.html</a>
HPI (Happy Planet Index)	Happy Planet Index website <a href="http://www.happyplanetindex.org/learn/download-report.html">http://www.happyplanetindex.org/learn/download-report.html</a>
Human development index (HDI) value 2004	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Immigration - Share of population 2005 (%)	UNDP HDR 2009

	<a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
Infant mortality 2005	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Labour force participation rate of migrants (both sexes)	UNDP HDR 2009 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
Life Expectancy (years)	Happy Planet Index website <a href="http://www.happyplanetindex.org/learn/download-report.html">http://www.happyplanetindex.org/learn/download-report.html</a>
Life Satisfaction (0-10)	Happy Planet Index website <a href="http://www.happyplanetindex.org/learn/download-report.html">http://www.happyplanetindex.org/learn/download-report.html</a>
ln (number of people killed by natural disasters per year+1)	<a href="http://www.undp.org/cpr/disred/rdr.htm">http://www.undp.org/cpr/disred/rdr.htm</a>
ln GDP per capita	UNDP HDR 2000 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
ln GDP per capita ^2	UNDP HDR 2000 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
Membership in the Islamic Conference	OIC <a href="http://www.oic-oci.org/">http://www.oic-oci.org/</a>
Military expenditures per GDP	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Military personnel rate ln (MPR+1)	US CIA <a href="https://www.cia.gov/library/publications/the-world-factbook/geos/us.html">https://www.cia.gov/library/publications/the-world-factbook/geos/us.html</a>
MNC outward investments (stock) per GDP	UNCTAD <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . In addition: <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . Furthermore <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . In addition <a href="http://www.unctad.org/Templates/Page.asp?intItemID=3198&amp;lang=1">http://www.unctad.org/Templates/Page.asp?intItemID=3198&amp;lang=1</a> and <a href="http://www.unctad.org/en/docs/wir2008_en.pdf">http://www.unctad.org/en/docs/wir2008_en.pdf</a> and <a href="http://www.unctad.org/Templates/Page.asp?intItemID=3277&amp;lang=1">http://www.unctad.org/Templates/Page.asp?intItemID=3277&amp;lang=1</a>
MNC PEN - stock of Inward FDI per GDP	UNCTAD <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . In addition: <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . Furthermore <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . In addition <a href="http://www.unctad.org/Templates/Page.asp?intItemID=3198&amp;lang=1">http://www.unctad.org/Templates/Page.asp?intItemID=3198&amp;lang=1</a> and <a href="http://www.unctad.org/en/docs/wir2008_en.pdf">http://www.unctad.org/en/docs/wir2008_en.pdf</a> and

	<a href="http://www.unctad.org/Templates/Page.asp?intItemID=3277&amp;lang=1">http://www.unctad.org/Templates/Page.asp?intItemID=3277&amp;lang=1</a>
MNC PEN: DYN MNC PEN 1995-2005	UNCTAD <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . In addition: <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . Furthermore <a href="http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls">http://www.unctad.org/sections/dite_dir/docs/wir2007_instock_gdp_en.xls</a> . In addition <a href="http://www.unctad.org/Templates/Page.asp?intItemID=3198&amp;lang=1">http://www.unctad.org/Templates/Page.asp?intItemID=3198&amp;lang=1</a> and <a href="http://www.unctad.org/en/docs/wir2008_en.pdf">http://www.unctad.org/en/docs/wir2008_en.pdf</a> and <a href="http://www.unctad.org/Templates/Page.asp?intItemID=3277&amp;lang=1">http://www.unctad.org/Templates/Page.asp?intItemID=3277&amp;lang=1</a>
Muslim population share per total population	Nationmaster Sydney <a href="http://www.nationmaster.com/index.php">http://www.nationmaster.com/index.php</a>
Net exports of ecological footprint gha per person	Global footprint network at <a href="http://www.footprintnetwork.org/images/uploads/Ecological_Footprint_Atlas_2009.pdf">http://www.footprintnetwork.org/images/uploads/Ecological_Footprint_Atlas_2009.pdf</a>
Net international migration rate, 2005-2010	UNDP HDR 2009 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
Openness-Index, 1990 (export-share per GDP + import-share per GDP)	calculated from UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Per capita world class universities	Calculated from the data of this work
Population density	<a href="https://www.cia.gov/library/publications/the-world-factbook/">https://www.cia.gov/library/publications/the-world-factbook/</a>
Public education expenditure per GNP	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Quintile share income difference between richest and poorest 20%	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Rule of law	Yale/Columbia ESI Index (Environment Sustainability Index) website
Social security expenditure per GDP average 1990s (ILO)	ILO <a href="http://www-ilo-mirror.cornell.edu/public/english/protection/socfas/research/stat/table14.htm">http://www-ilo-mirror.cornell.edu/public/english/protection/socfas/research/stat/table14.htm</a>
TAXES ON INCOME, PROFITS, & CAPITAL GAINS (A1) (% of GDP)1995	World Bank Global Development Network Growth Data Base, Government Finance <a href="http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20701055~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html">http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/0,,contentMDK:20701055~pagePK:64214825~piPK:64214943~theSitePK:469382,00.html</a>
Tertiary emigration rate	UNDP HDR 2009 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
Tertiary enrollment	Nationmaster Sydney <a href="http://www.nationmaster.com/index.php">http://www.nationmaster.com/index.php</a>

Total unemployment rate of immigrants (both sexes)	UNDP HDR 2009 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
UNDP education index	UNDP Human Development Report Office <a href="http://hdr.undp.org/en/statistics/data/">http://hdr.undp.org/en/statistics/data/</a>
Unemployment rate	United Nations Statistics <a href="http://unstats.un.org/unsd/Demographic/Products/socind/unemployment.htm">http://unstats.un.org/unsd/Demographic/Products/socind/unemployment.htm</a>
Worker remittance inflows as % of GDP	UNDP HDR 2009 <a href="http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=">http://hdr.undp.org/xmlsearch/reportSearch?y=*&amp;c=g&amp;t=*&amp;k=</a>
Years of membership in the EU	United States Department of State <a href="http://www.state.gov/r/pa/ei/bgn/">http://www.state.gov/r/pa/ei/bgn/</a>

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## NOTES

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<sup>1</sup> Eco-efficient Growth in the Age of Globalisation. Swedish non-paper on the Lisbon Strategy post-2010, Stockholm, 2009

<sup>2</sup> <http://www.guardian.co.uk/world/2004/apr/28/eu.politics5>

<sup>3</sup> Available freely on the Internet at [http://epp.eurostat.ec.europa.eu/portal/page/portal/structural\\_indicators/indicators/short\\_list](http://epp.eurostat.ec.europa.eu/portal/page/portal/structural_indicators/indicators/short_list). For a short survey of the Lisbon process, see also: <http://www.euractiv.com/Article?tcaturi=tcu:29-117510-16&type=LinksDossier>

<sup>4</sup> [http://epp.eurostat.cec.eu.int/portal/page?\\_pageid=1133,1403427,1133\\_1403432&\\_dad=portal&\\_schema=PORTAL](http://epp.eurostat.cec.eu.int/portal/page?_pageid=1133,1403427,1133_1403432&_dad=portal&_schema=PORTAL)

<sup>5</sup> For a neo-classical critique of this concept see also Yotopoulos, 1996, and Yotopoulos and Sawada, 2005. From the viewpoint of neo-dependency theory see Kohler/Tausch, 2003. It is interesting how little debate on this politically binding concept exists in Europe.

<sup>6</sup> The Commission maintaining that a low value of indicators 7-14 is a good result.

<sup>7</sup> For a selection of such studies see: Mandelbaum (1945), and Rosenstein-Rodan (1964)

<sup>8</sup> See especially: “Corporatism and Change: Austria, Switzerland and the Politics of Industry” (Ithaca: Cornell University Press, 1984; paperback edition 1987; Spanish translation 1987), In that context, it is worthwhile to analyze the top 30 “globalizers” according to Dollar and Kraay. We showed in a recent book (Tausch and Ghymers, 2007) the results of sorting their original data with the EXCEL “sort” routine. It seems that except for the cases of communist Bulgaria in the 1980s and postcommunist Belarus, and the then Crown Colony Hong Kong, all other “top globalizers” support rather Katzenstein’s small state theory and not Dollar and Kraay’s own interpretation. The top globalizers according to Kraay and associates in alphabetical order are (at given years in their development history): Austria, Bulgaria, Belarus, Switzerland, Denmark, Estonia, Hong Kong, Ireland, Saint Lucia, Luxemburg, Netherlands, Norway, Slovenia, Sweden. The top anti-globalizers according to Kraay and associates are: Argentina, Burundi, Bangladesh, Brazil, China, Ethiopia, India, South Korea, Mozambique, Nepal, Pakistan, and Rwanda at given years in their development history.

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<sup>10</sup> Albania; Algeria; Angola; Antigua and Barbuda; Argentina; Armenia; Australia; Austria; Azerbaijan; Bahamas; Bahrain; Bangladesh; Barbados; Belarus; Belgium; Belize; Benin; Bhutan; Bolivia; Bosnia and Herzegovina; Botswana; Brazil; Brunei Darussalam; Bulgaria; Burkina Faso; Burundi; Cambodia; Cameroon; Canada; Cape Verde; Central African Republic; Chad; Chile; China; Colombia; Comoros; Congo; Congo (Democratic Republic of the); Costa Rica; Côte d'Ivoire; Croatia; Cuba; Cyprus; Czech Republic; Denmark; Djibouti; Dominica; Dominican Republic; Ecuador; Egypt; El Salvador; Equatorial Guinea; Eritrea; Estonia; Ethiopia; Fiji; Finland; France; Gabon; Gambia; Georgia; Germany; Ghana; Greece; Grenada; Guatemala; Guinea; Guinea-Bissau; Guyana; Haiti; Honduras; Hong Kong, China (SAR); Hungary; Iceland; India; Indonesia; Iran (Islamic Republic of); Ireland; Israel; Italy; Jamaica; Japan; Jordan; Kazakhstan; Kenya; Korea (Republic of); Kuwait;

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Kyrgyzstan; Lao People's Democratic Republic; Latvia; Lebanon; Lesotho; Libyan Arab Jamahiriya; Lithuania; Luxembourg; Macedonia (TFYR); Madagascar; Malawi; Malaysia; Maldives; Mali; Malta; Mauritania; Mauritius; Mexico; Moldova; Mongolia; Morocco; Mozambique; Myanmar; Namibia; Nepal; Netherlands; New Zealand; Nicaragua; Niger; Nigeria; Norway; Oman; Pakistan; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Poland; Portugal; Qatar; Romania; Russian Federation; Rwanda; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Samoa; Sao Tome and Principe; Saudi Arabia; Senegal; Seychelles; Sierra Leone; Singapore; Slovakia; Slovenia; Solomon Islands; South Africa; Spain; Sri Lanka; Sudan; Suriname; Swaziland; Sweden; Switzerland; Syrian Arab Republic; Tajikistan; Tanzania (United Republic of); Thailand; Timor-Leste; Togo; Trinidad and Tobago; Tunisia; Turkey; Turkmenistan; Uganda; Ukraine; United Arab Emirates; United Kingdom; United States; Uruguay; Uzbekistan; Vanuatu; Venezuela (Bolivarian Republic of); Viet Nam; Yemen; Zambia; Zimbabwe.

<sup>11</sup> The results in Tausch (2008) are based on Microsoft EXCEL multiple regressions. The SPSS XV regressions reported in the present study are a continuation and refinement of the earlier research results, reported in Tausch, 2008. On the reliability problems of common statistical software programs, like Microsoft EXCEL, especially when collinearity of the predictor variables is higher (as is the case in the present regression equations), see Altman and McDonald (2001). Our tests revealed the basic validity of the argument, put forward by Altman and McDonald, which has vast and serious implications for the entire social science profession. SPSS and Microsoft EXCEL regressions reveal, our tests showed, the same R<sup>2</sup>, regression constants, and overall F-tests, but the significance of the predictors changes in Microsoft EXCEL regressions is not stable, depending on the ordering of the independent variables, while SPSS results are stable, regardless of the ordering of the independent variables.

<sup>12</sup> For recent surveys on the literature on the use of composite indices in different development research context see also Archibugi and Coco (2004), Grupp and Mogege (2004), Heshmati (2003) and Andersen and Herbertsson (2003).

<sup>13</sup> <http://www.eclac.cl/cgi-bin/getProd.asp?xml=/publicaciones/xml/6/10026/P10026.xml&xsl=/tpl/p9f.xsl&base=/MDG/tpl/top-bottom.xsl>