

TECHNOLOGY GOVERNANCE

Working Papers in Technology Governance and Economic Dynamics no. 14

the other canon foundation, Norway Tallinn University of Technology, Tallinn

CONTACT: Rainer Kattel, kattel@staff.ttu.ee; Wolfgang Drechsler, drechsler@staff.ttu.ee; Erik S. Reinert, reinert@staff.ttu.ee

European Eastern Enlargement as Europe's Attempted Economic Suicide?¹

Erik S. Reinert 2 and Rainer Kattel 3

July 2007

¹ This article is drawn from our earlier research (Reinert and Kattel 2004; and Reinert 2006). For a full exposition of the history of economic policy, see Reinert 2007. Research for this article has been partially funded by Estonian Science Foundation, Grant No.6703.

² The Other Canon Foundation (Norway) and Tallinn University of Technology (Estonia).

³ Tallinn University of Technology, Estonia. Corresponding author email: kattel@staff.ttu.ee.

Abstract

We argue that the process of European economic integration has made a qualitative shift: from a Listian symmetrical economic integration to an integrative and asymmetrical integration. This shift started in the early 1990s with the integration of the former Soviet economies into the economies of Europe and the world as a whole, reached its climax with the Eastern enlargement of the Union in 2004, and now forms the foundation of the renewed Lisbon Strategy. This change is measurably threatening European welfare: the economic periphery in the first instance, and potentially the core countries as well. Two parallel processes aggravate this development: the timing of the enlargement at this particular phase of the evolving techno-economic paradigm; and the creation of the European Monetary Union along the so-called Maastricht route towards convergence and fiscal stability.

Keywords: economic integration, catching-up, industrial development

JEL-Code: 014, E61, F61.

1. Introduction

Economic integration can take many forms. Some are more conducive to wealth and freedom than others. Colonialism was probably the first form of international economic integration. Intuitively, we understand that what the European Union has attempted to achieve is something qualitatively very different from colonialism. Successful economic integrations are win-winsituations that extend and develop capitalism to new areas. On the other hand, unsuccessful ones are forms of integration where one or both parties lose, or are prevented from, dynamic economic structures conducive to wealth creation.

In this paper we argue that European economic integration has made a qualitative shift from one type of economic integration to another: from a Listian *symmetrical* economic integration to an integrative and *asymmetrical* integration. This shift started in the early 1990s with the integration of the former Soviet economies into the European and world economies, reached its climax with the Eastern enlargement of the Union in 2004, and currently forms the foundation of the renewed Lisbon Strategy. This change is measurably threatening European welfare: the economic periphery in the first instance, and potentially the core countries as well. Two parallel processes aggravate this development: first, the timing of the enlargement in the present phase of the techno-economic paradigm under conditions of normal circumstances characterised by deflationary and downward pressures on wages, like in the 1930s (Perez 2002, 2004, 2006); second, the creation of European Monetary Union along the so-called Maastricht route towards convergence and fiscal stability that brought not only price convergence and low inflation but also high levels of unemployment and stagnating domestic demand in leading European economies (Kregel 1999; Bibow 2001).⁴

The internal dynamics of Europe is a microcosm of the same type of problems confronting the entire global economy: the key problem of uneven development in the productive structure, especially of the de-industrialised or non-industrialised peripheries, is marginally, if at all, addressed. The poorly developed industrial structure in respective peripheries fails to create the necessary demand that would create a high value-added service sector. Economic problems in the peripheries are solved by the migration of labour, rather than by addressing their structural requirements for development. Contrary to mainstream discourse in economic integration that predicts a convergence towards 'factor-price equalization', asymmetrical integration may lead to 'factor-price polarization' - that is, increasing gaps in real wages. Take the case of Moldova, a country in Europe's periphery which shows very similar symptoms to Guyana, also a peripheral economy, but under the US influence. While more than 70% of Guyanese with university education work outside the country, a generation of children in Moldova is growing up separated from their parents who both have to work abroad. Some areas in the European periphery are threatened by the same sequential development as in a number of areas in Southern Mexico: de-industrialisation, de-agriculturalisation, de-population.

In the following section, we provide a brief taxonomy of economic integrations. We then delineate EU's Eastern enlargement through succeeding industrial and structural changes in Central and Eastern Europe from the 1990s to the mid 2000s. And, finally, we look at some policy responses in the EU, chiefly the Lisbon process.

2. Taxonomy of economic integrations

A key feature of pre-Smithian economics was a taxonomic understanding of the economic world of production. This taxonomy of economic activities, in turn, led to a taxonomy of types of international trade that could, respectively, benefit only one of the trading partners or both. The seeds of this taxonomy can be found already in the 1550s (Ortiz 1558); it solidified towards the end of the 1600s and was accepted across Europe as com-

⁴ Due to space limitations, the impact of techno-economic paradigms and EMU on EU's enlargement can only be mentioned in this article and not discussed with depth these issues would deserve.

mon sense in the early 1700s. The pre-Smithian taxonomy of 'good' and 'bad' trade was based on the observation of the obvious urban bias of economic development that was found everywhere in Europe. The taxonomy is based on the fundamental understanding that economic development is activity-specific, at any point in time available in some economic activities rather than in others. Development was seen as a goal created by increasing returns and innovations in manufacturing and not in agriculture, where stagnant productivity, diminishing returns and monoculture, and absence of synergies prevented growth. Furthermore, the targeting, support, and protection of manufacturing were argued in terms of [a] its ability to create wealth; [b] its ability to create employment; [c] its ability to solve balance of payment problems; [d] its ability to increase the velocity of circulation of money (see Botero 1590; Serra 1613; King 1721). Starting in the 1700s, areat emphasis was put on the beneficial synergies between manufacturing and agriculture: only where there was manufacturing, was there successful agriculture (Reinert 2007).

This accumulated wisdom was taken over in the economics of Friedrich List (1841), who was the theoretical economist behind the industrialization of continental Europe. List is conventionally regarded as a protectionist, but he was the first visionary of European economic integration once all nations had achieved a comparative advantage in manufacturing (increasing returns industries) (see Reinert 1998). List quotes Serra (1613), and sees manufacturing synergies as being the very basis for civilization, rather than trade:

Let us compare Poland with England: both nations at one time were in the same stage of culture; and now what a difference. Manufactories and manufactures are the mothers and children of municipal liberty, of intelligence, of the arts and scences, of internal and external commerce, of navigation and improvements in transport, of civilization and of political power. They are the chief way of liberating agriculture from itschains ... The popular school (i.e., Adam Smith and J. B. Say, authors' note) has attributed this civilizing effect to foreign trade, but in that it has confounded the mere exchanger with the originator. (List 1841: 142)

We argue that – regardless of what economic theory might have said – the practice and history of European economic integration has, until very recently, been based on the understanding expressed here by List: economic integration has essentially taken place between nations that already have achieved a comparative advantage in increasing returns activities (manufacturing) or, alternatively, as colonialism.

A theory of economic integration developed out of this understanding of economic development. This was the practice followed in Europe for centuries, including during the gradual build-up of what came to be the European Union over the decades following World War II. An essential feature of this type of economic theory is the understanding of the synergies between increasing return activities (urban/manufacturing activities) and the production of raw materials (rural activities). 5

The clearest early statement of this theory is found on the first pages of Charles King's three volume work (King 1721, vol. 1: 1-5), a compilation of works published in the previous decade, which was to enjoy unique authority for decades. It is important to note that his theory is based on a possible discrepancy between the interest of the merchant and the interest of the nation itself: 'There are general Maxims in Trade which are assented to by every body. That a Trade may be of Benefit to the Merchant and Injurious to the Body of the Nation, is one of these Maxims' (King 1721: 1). This is, of course, very different from the later teachings of Adam Smith, who assumes an automatic harmony of interest between merchant and nation. In King's scheme, the normal pre-Smithian scheme, the vested interests of some economic actors will coincide with those of the nation-state - mainly those of the manufacturers - while the vested interests of other economic actors will be at odds with the interests of the nation-state. Yet, it is precisely this crucial link between the interest of the state (higher wealth) and that of industry that is essential to the success of modern nation-states in Europe and North-America (a point made already by Schmoller in 1884; see also Backhaus 2001).⁶

As a continuation of King's principles, and with the experience of 300 more years of economic history, we can establish the taxonomy – based on 'ideal types' – of economic integrations.⁷ There are two main types: *symmetrical free trade areas* (i.e., integration among nations at a similar level of economic development and economic sophistication), and *asymmetrical free trade areas* (i.e. integration of nations with widely different economic structure at different levels of development). Our taxonomy may be seen as an evolutionary alternative to Balassa's taxonomy of regional trading arrangements as a sequence from free trade area through customs union and common market to economic union.

⁵ If increasing returns are attributed to manufacturing industries and diminishing returns are attributed to the production of raw materials, King's taxonomy is perfectly compatible with more recent trade theories (e.g. Graham 1923) and Krugman's 'new trade theory' (Krugman 1990).

⁶ It can be argued that early development economics started with very similar ideas, see, e.g., Rosenstein-Rodan 1943, Singer 1950, and Nurkse 1953.

⁷ We will not deal with monetary unions and integration; Priewe (2006) gives a very fruitful discussion of the European enlargement processes from a monetary union and optimum currency areas perspective; see also Kregel 1999 and Bibow 2001 on the role of Maastricht conditions in the convergence policies for the European monetary union.

2.1 Symmetrical free trade areas

2.1.1 Listian Integration (From Friedrich List)

Examples of Listian economic integration are 19th century Germany and the 'old' European Union. Listian economic integration is between nations on roughly similar levels of GDP per capita, that all have a comparative advantage in increasing return activities. This insures that economic integration will not de-industrialise, de-skill or create large-scale unemployment in any of the partner countries. Large Listian areas can, however, absorb small units of relatively more backward countries to the benefit of all parties. An example of this is the integration of Portugal in the old EU, where mature and labour intensive industries could be farmed out to Portugal, increasing real wages both in Portugal and in the rest of the EU (see also Priewe 2006: 160-162 on waves of European enlargement). In this case integration can be seen as a variant of the flying geese type (see below).

Two main variables determine the ability of a Listian integration to absorb poorer partner countries to mutual benefit. Firstly: the Schumpeterian dynamism of the core (wealthy) countries; i.e., the more dynamic the core countries, the more mature industries they can farm out to the poorer partners without hurting their own employment and wage level. The second variable is the size of the poorer country/countries to be integrated; i.e., the smaller the pool of people to be integrated, the easier the integration becomes.

A symmetrical Listian free trade area can be converted to an integrated welfare state at a relatively low cost. Listian integration is a typical win-win strategy if it does not deteriorate into a welfare colonialism (see 2.3 below).

2.1.2 Peripheral Symmetrical Integration

Examples of 'peripheral symmetrical integration' are Pacto Andino and Mercosur. These are cases of economic integration of peripheral nations whose international comparative advantage does not lie in increasing return industries, but that wish to grow such activities and need a bigger market. Included in successful schemes of this type are preferences for relative lagging countries, as was planned for Ecuador and Bolivia in the Pacto Andino. The Latin American Free Trade Association (LAFTA/ALALC) is an example of such an integration that failed. A problem with this type of integration is often that such nations have similar economic structures and relatively little to sell to each other. This type of regional integration is probably a necessary stepping stone before reaching global free trade (see also Jacobs 1984). Peripheral symmetrical integration is also a win-win strategy if the right dynamics are achieved.⁸

2.2 Asymmetrical free trade areas

2.2.1 'Colonial' and Non-Integrative

In the classical colonial relationship, a dynamic industrial nation integrates with a periphery that, whether explicitly stated or not, is not to specialise in innovation and increasing returns activities. Traditionally, 'colonies' specialised in supplying raw materials. With the current techno-economic paradigm that enables increasing specialization as well as outsourcing, a more sophisticated neo-colonial division of labour appears as both manufacturing and agriculture sectors split up in a high-tech/capital intensive/innovative/high wage segments, on the one hand, and a low-tech/low capital intensity/non-innovative/low wage segments, on the other hand. Mexico is the country where this development is most visible. The old manufacturing sector, containing 'complete' industries is shrinking and being replaced by the maquila sector consisting of unmechanisable fragments of a global value chain seeking low wage and low skilled labour. This development finds its parallel in the Mexican agricultural sector, where highly subsidised US imports of mechanisable grain - produced with exceptionally advanced technology including unmanned tractors using global positioning equipment - is replacing Mexican agriculture even in a traditional product like corn while Mexico specialises in exporting unmechanisable agricultural produce, e.g., strawberries and cucumbers. In effect, such developments bring in developed countries lower prices and higher gains to consumers and producers respectively. In financial terms we can indeed observe that capital tends flow from developing countries to developed countries, and not vice versa as much of economic mainstream assumes both in theory and in policy advice (see for an excellent overview of the issue, Kregel 2004). The Mexican national innovation system is deteriorating accordingly, and returning to a centre-periphery relationship with the United States (Cimoli 2000).

In asymmetrical trading areas the Vanek-Reinert Effect⁹ starts operating, and the least advanced nation concentrates in the low-skilled areas both in manufacturing and also in agriculture. In the worst case this can lead to rampant de-industrialisation and plummeting real wages (Reinert 2003 and

⁸ It can be argued that former Soviet economies (COMECON) fell into this symmetrical category because of the emphasis on distribution of increasing return activities. Of course, all trade was controlled and thus also, arguably, integration and its results.

⁹ In rapid liberalisation of trade and markets between countries/regions with strongly unequal levels of development, the first to suffer from competition are most developed industries of the less developed country/region, see Reinert 1980 and 2007 in detail.

2004). In Mexico a deteriorating sequence can be observed: first de-industrialization, subsequently de-agriculturalisation (even of the country's most traditional crop, maize) and finally de-population. In many areas of Southern Mexico only the population above 60 years old and below 12 years old is left. The others are working in the United States or further north in Mexico.

The success of this strategy from the colonising nation's point of view depends on the same variables as mentioned above. If the Schumpeterian dynamics in the rich country is high enough, and the supply of labour to be absorbed is not too big, or protection can be kept at a point securing employment, the rich country may have all the advantages of producing technologically mature and labour-intensive crops with cheap foreign labour, but not the disadvantages.

Classical colonialism is a win-lose strategy: the colonial power wins while the colony loses. However, this is potentially a lose-lose strategy if the colonial power loses control or loses dynamism. Potentially, Mexican real wages may fall while, at the same time, wages fall in the US, when the 'giant sucking sound' hits US employment and real wages as US 1992 presidential candidate Ross Perot used to talk about. If the world moves towards factor-prize equalisation, this may very well be downwards. (In this sense, David Ricardo may be right that the 'natural' price of labour is close to human subsistence.)

2.2.2 Flying Geese, or Sequential Technological Upgrading

The flying geese metaphor for economic integrations first appears in a 1935 article by Kaname Akamatsu published in Japanese. His views became known to the West in his 1961 article in *Weltwirtschaftliches Archiv*, and during the 1980s Japanese economist and foreign minister Saburo Okita propagated the concept.¹⁰ The essence of the flying geese pattern of economic integration is that nations upgrade and catch up technologically by sequentially riding the same technological wave. It essentially describes the way East Asian nations grew. The model builds on Friedrich List's stages of integration. Its dynamics are similar to Michael Porter's stages of national development (Porter 1990) and to Ray Vernon's life-cycle theory of international trade (Vernon 1966) and to Jane Jacobs' import-replacing development of cities (Jacobs 1984).

To illustrate the process, follow a product: a hairdryer is produced in Japan and exported to the rest of the world. When Japan upgrades its technolo-

¹⁰ As he readily admits, Akamatsu's theory rests on a Germanic conception of society and economy, references to Kant, List, Sombart and Schumpeter – as well as to Russian economist Nikolai Kondratiev – abound.

gy and wage level, the production of hairdryers passes on to Korea and is exported from that country. As Korean production after a while also gets more sophisticated, the production of simple hairdryers passes on to Taiwan, where the phenomenon is again repeated. Hairdryer production moves on to Malaysia and Thailand, and finally to Vietnam. On the way all nations have increased their wealth and upgraded technologically, based on the same product.

The flying geese strategy has proved spectacularly successful in East Asia – a true win-win form of economic integration – where Korea moved up from being poorer than Tanzania in 1950. However, the strategy was only possible because it was in the interest of the United States to build a *cor-don sanitaire* of well-to-do countries around the communist world. This strategy requires heavy-handed government intervention and is impossible to initiate today under the rule of the Washington Institutions. Latin American import-substitution initially contained strong elements of flying geese, creating a win-win situation where US companies prolonged the life cycle of their products by producing in Latin America. However, Latin America failed to move to the next Listian stage – into regional integration – through the failure of LAFTA/ALALC, and lost its dynamics. It should be noted however that even the inefficient manufacturing sectors built up in countries like Peru and Mongolia provided much higher real wages than does global capitalism today.

2.3. Welfare Colonialism

The term 'welfare colonialism' was coined by anthropologist Robert Paine (1977: 1-52) to describe the economic integration of the Arctic population into Canada, and may partly well be applied to the integration of the Saami people in Norway. The essential features of welfare colonialism are: [1] the classical colonial drain is reversed, the net flow of funds is to the colony rather than to the mother country; and [2] the native population is integrated in a way that destroys their previous livelihood, and they are put on the dole. Welfare colonialism identifies welfare as the potential vehicle for a stable internal 'governing at a distance' through the exercise of a particularly subtle, 'nondemonstrative' (Paine 1977: 3) and dependency-generating form of neo-colonial social control that pre-empts local autonomy through 'well-intentioned' and 'generous' - but ultimately 'morally wrong' - policies. Welfare colonialism creates paralysing dependencies on the 'centre' in a peripheral population, a centre exerting control through incentives that create total economic dependency thus preventing political mobilisation and autonomy.

Clearly welfare colonialism is a very expensive form of economic integration, essentially paying people not to work. Not unlike the religious missionary element in traditional colonialism, welfare colonialism is in a sense well-intended, but ends up being culturally destructive. Welfare colonialism is a lose-lose form of economic integration: the periphery loses its traditional livelihood and culture and becomes an economic burden to the colonial power.¹¹

2.4 Integrative and Asymmetrical Integration

'Integrative and Asymmetrical Integration' is a type of economic integration that differs from the classical colonial version above in that it attempts to integrate the asymmetrical partners – countries at different levels of economic development – into a welfare state. We see the present European Union enlargement as largely falling under this heading in terms of economic integration. However, the future quality of integration in the new Europe is by no means clear, it may well turn out to be a win-win integration or exactly the opposite, a lose-lose one. Europe does not start as *tabula rasa*. In particular, the new member states have experienced in 1990s unprecedented changes in economic and social terms. This decade of strong de-industrialisation and fall in GDP per capita in all new member states, with a possible exception of Hungary, is an important factor that needs to be taken into account. In what follows, we try to measure the development potential of the new Europe and sketch out the dynamics determining this development.

3. The New Europe: Cost and Nature of the Integration

The economic integration of countries in Central and Eastern Europe (CEE) and newly independent countries from the former Soviet Union (NIS) into world markets after the fall of Berlin Wall in 1989 was based on three basic assumptions shared by most of these countries: [1] economic liberalisation through the abolition of controls over prices and production; [2] macro-economic stabilisation through control of the money supply and balancing of the government budget; and [3] the sale of state property to private individuals (Kregel et al.1992:14; also King 2002).

The goal of this architecture of change was rapid transition to free market economy and, obviously, higher standard of living. However, in the aftermath of the fall of Berlin Wall and rapid liberalisation of trade and markets, Central and Eastern European industry collapsed. In a matter of few years, most CEE countries saw their GDP per capita drop in real terms one third

¹¹ See Reinert (2006b) for a European case study of welfare colonialism in Norway.

and more, and the NIS countries like Moldova, Ukraine and Russia have not reached the level of 1990 GDP per capita even by 2005 (see Figure 1).



Figure 1: GDP per capita in CEE and NIS countries 1990-2005 (constant 2000 USD), 1990 = 100.

For most CEE and NIS countries 1990s were in terms of GDP per capita lost decades, Hungary forming here a notable exception; the rest of CEE saw only with the arrival of the new century similar levels of GDP per capita as in 1990.

Similar picture emerges when we look at the development of value added in industry in CEE, NIS and other European countries (see Figure 2). Here the impact of transition can be seen even more clearly: most CEE and NIS countries saw steady growth in industry value added up to 1990, after which there was a dramatic drop and countries like Estonia, Romania and Czech Republic reached the level of 1990 only in 2004-2005.

Source: World Bank WDI online database.



Figure 2: Industry value added in selected CEE, NIS, European and Asian economies 1980-2005 (constant 2000 USD), 1990 = 100.¹²

Source: World Bank WDI online database.

It is also significant to note how different has been South Korea's and Singapore's development path in terms of industry value added since 1980. Also, in accordance with our arguments above about the EU enlargement in 1980s, Greece and Portugal saw steady growth in industry value added in 1990s.

In addition, World Bank data allows us to take a closer look at dynamics of industry value added per capita from 1971 (Figure 3).

¹² Data is not available for all CEE and NIS countries. Using per-1990 data for CEE and NIS economies can easily be criticised: these were not market economies, and military and strategic notions were key for development and policy interventions. However, the latter can also be said about East Asian economies and, in particular, also about US West Coast development after World War II.



Figure 3: International comparison of industry value added per capita (constant 2000 USD) 1971-2005.¹³

Perhaps the most striking feature of developments depicted on Figure 3 is the fact that in 1985 Latvia, Portugal and South Korea had all very similar figures for industry value added per capita.¹⁴ Again, 1990 marks the beginning of highly different development paths where Latvia, along with Romania and Hungary (the latter to a lesser extent) follow Latin America in falling behind not only South Korean, Nordic and 'old' European economies, but also Spain, Greece and Portugal. In addition, we can detect a slowdown of development in France and Germany, or, to put it differently, the Nordic countries are increasingly outperforming larger European economies.

It can be argue that the CEE industrial decline is, at least partially, part of a natural deindustrialization process where industry is gradually replaced by services, a process witnessed by most if not all countries in the last decades of 20th century. However, by and large, we see similar picture to industrial development in CEE also in services¹⁵ (Figures 4 and 5). This is what we have referred

Source: World Bank WDI online database; calculations by the authors.

¹³ Data is not available for all CEE and NIS countries.

¹⁴ In the extreme world periphery, Mongolia, most industrial sectors were virtually exterminated, and the only two growing industrial sectors are the collection of bird feathers to produce combed down and the production of alcohol (Reinert 2004).

¹⁵ We use here statistical definition given by World Bank WDI online database: services correspond to ISIC divisions 50-99. They include wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services.

to as 'primitivisation'. (Reinert 2007) As Hans Singer (1950) argues, innovation does not necessarily lead to higher standard of living: in raw materials it frequently leads to falling export prices rather than increasing national income.





Source: World Bank WDI online database.





Source: World Bank WDI online database; calculations by the authors.

¹⁶ Data is not available for all CEE and NIS countries.

¹⁷ Data is not available for all CEE and NIS countries.

We see that South Korea and Singapore, and the Nordic economies, are performing exceedingly well also in services value added. The rise of ICT enabled business services is certainly one of the key factors behind these dramatic growth rates. However, we can also see that in services France and Germany are keeping up with East Asian and Nordic economies. Similar to industrial development, Spain, Portugal and Greece saw steady growth also in services. CEE countries, in turn, have witnessed, similarly to industry value added, a strong drop in services value added after 1990, the main difference seems to be that the recovery was in services quicker by few years: many CEE countries reach 1990 levels by late 1990s. However, the difference of a year or two does not ameliorate the fact that also in services the 1990s were for CEE and NIS economies a lost decade. Yet, even if the 2000s have brought both in industry and services significantly better levels of value added for CEE countries (but certainly not for NIS economies), it is difficult to talk about strong catching up in 2000s. On the contrary, in terms of value added per capita, CEE economies lag behind South Korea, Singapore and Finland more that they did in 1990 (see Figures 6 and 7). However, it can be argued that leading CEE economies like Hungary are slowly catching up to Greece, Spain and Portugal.

Figure 6: Industry value added per capita (constant 2000 USD) in selected CEE, Asian and European economies, 1990-2005.



Source: World Bank WDI online database;¹⁸ authors' calculations

¹⁸ Similar data can be found also in Eurostat databases.



Figure 7: Services value added per capita (constant 2000 USD) in selected CEE, Asian and European economies, 1990-2005.

Source: World Bank WDI online database;¹⁹ authors' calculations

Inevitably, dynamic changes in value added are also reflected in changing employment structure of an economy, and also in different sectors' changing share of value added in GDP. CEE countries have witnessed dramatic gains in service employment (e.g. from 36% to 53% of total employment in Poland, from 37% to 57% in Bulgaria, from 1990 to 2005; World Bank WDI online database). Similarly, the share of services value added as a percentage of GDP has risen in CEE countries very quickly in the period 1990-2005 (e.g. from 33% to 58% in Bulgaria, from 33% to 66% in Estonia; World Bank WDI online database). These changes are accompanied by respective losses in industry employment and value added. While in industry employment CEE countries lost 5-10% in 1990-2005 (which is comparable to European and East Asian economies), then in share of industry value added in GDP, CEE countries have seen drastic drops: from 49% to 29% in Estonia and from 50% to 30% in Poland, compared to change from 32% to 29% in Finland and from 41% to 40% in South Korea. (World Bank WDI online database)

We would argue that there are different kinds of deindustrialisation: in CEE and NIS we see a type of deindustrialisation of poor countries, a result of a too abrupt opening to free trade; in developed countries we see natural transition from industry to services of a mature and wealthy economy (Petty's law). In wealthy countries, services now exhibit the same characteristics –

¹⁹ Similar data can be found also in Eurostat databases.

high technology, increasing returns and high barriers to entry – that used be the hallmark of manufacturing in former techno-economic paradigms.

These problems in the sphere of production, particularly in industry, rapidly translate into balance of payment problems, and just as there was no Marshall Plan to restore the productive sector of Eastern Europe as there had been in the West after 1947, there were no counterparts in the mone-tary sphere, nothing similar to the European Payments Union for settling trade balances as in 1950-1958. Given the policy framework, the emerging developments in CEE and NIS countries inevitably increased social stress and outer constraints in form of a negative current account balance. Indeed, the former was the case in all countries and as Figure 8 illustrates, in most CEE countries the current account balance deteriorates starting in 1993 and is accompanied by double digit growth rates of external debt (World Bank WDI online database).

Figure 8: Current account (bars) and FDI (lines) as % of GDP in selected new member states, 1992-2004.



Source: World Bank WDI Online Database.

By 2001, all CEE countries had a negative balance in trade of goods (Sneijers 2004: 2). Yet, inflow of foreign direct investments (FDI), gradually picking up after the mid 1990s, enabled rapid change and covered some of the negative trade balance consequences (see Figure 8). FDI also fuelled rapid privatisation of industries: there was a strong correlation between FDI inflow and privatisation revenues in CEE and NIS in the 1990s (EBRD 2000:84). Yet, as we have seen above in industrial change dynamics in CEE, the financial architecture created for the transition turned both FDI and privatisation, especially in the beginning, into means of 'destructive destruction' and Myrdalian vicious circles. The most recent financial transfers by the state to industrial companies of the Soviet period were transferred into loans of newly founded banks to the same companies. Most of the latter were to be privatised. This automatically created liabilities on the balance sheets of companies, in turn making the industrial restructuring of companies very difficult and creating high risks in the banking sector. The system set up was weak and prone to crisis from the very beginning. Only companies with previous experience in dealing with Western partners, managed to more or less restructure and survive (a good case study is Radosevic/Yoruk 2001). Thus, there was strong 'liability destruction' but hardly any 'asset creation' (see further Kregel et al. 1992: 44-54). This prepared the ground for the Vanek-Reinert Effect, as we have seen above, to rapidly take root in CEE and NIS industries. This, in turn, translated into a sudden and unprecedented onset of social problems: between 1989 and 1996 'the number of poor and unemployed in the region [CEE and NIS] rose respectively by 100 and 10 million while the crime rate tripled' (Cornia 2004). Almost all CEE countries have experienced severe deterioration in life expectancy up to mid 1990s, and the NIS countries are still seeing lowering life expectancy (Cornia 2004). In addition, all CEE countries experienced growth in regional and income inequality during the 1990s. Since the growing knowledgeintensive service-sector needs demand from the manufacturing sector, this sector also failed to develop sufficiently (with some exceptions, like consumer banking).

The positive effects of FDI and privatisation were thus offset by the dramatic rise in social problems as so-called transition costs. Arguably there had to be some rather painful costs as well as uneven development (see, e.g., Hirschmann 1958). Yet, by any standard or understanding of capitalism, the rapid liberalisation and onslaught of social problems should have been counterbalanced by creation of new value by upgrading – rather than permanently destroying – large parts of the previous industrial structure. Yet, as we have seen above, this has not been the case. Furthermore, if we look in more detail at the development of share of medium and high technology in manufactured exports (international competitiveness) and in manufactured value added (quality of the industrial structure), the new EU member states from CEE were more competitive in 1980 than in 2000²⁰ (see Figure 9).

²⁰ For specific case studies, see Tiits et al. 2002; King 2002.



Figure 9: Quality of industrial change in CEE, Latin America and East Asia.

Source: UNIDO 2004; authors' calculations.²¹

In 1990, CEE countries had qualitatively better industrial structures and were more similar to the East Asian economies than they are today. However, by 2001 the difference between these two groups of countries is truly astonishing. The quality of industrial change in the CEE countries in 1990s indicates that the incentives created by the transition architecture for the private sector have not changed significantly over time, nor have these incentives significantly increased productivity of labour and consequently more income has not been generated. In other words, the high human costs of transition have hardly been justified, and the policies initiated and the socio-economic frameworks created in the 1990s have failed to deliver. These developments deteriorate the EU23 competitiveness and quality of industrial structure as compared with the East Asian economies and the rest of the world. A logical consequence of this is a growing competition of wages, taxes and productivity within the EU (Figure 10). The system is in danger of developing into a race to the bottom.

²¹ The calculations are based on averages. In case of CEE countries, some data is missing; however, largest CEE economies like Hungary and Poland are well represented, as are the Baltic economies; see also figures above with World Bank WDI onine database data. East Asia includes South Korea, Singapore, Malaysia, Thailand.



Figure 10: Labour cost and corporate tax competition in Europe, 2005 (data for labour costs 2004)

Source: Eurostat databases; calculations by the authors.

The size of this problem becomes apparent when we look at the share of CEE countries in world manufacturing. This share plummeted from 19,3% in 1980 to 2,7% in 2001 (including the non-EU members from CEE and NIS [UNCTAD 2004: 89]). Thus, in the CEE we can see a rapid increase in foreign direct investments in the automotive industry (UNCTAD 2003: 60-61) and simultaneously a relocation in electronics out of the CEE (particularly from Hungary, UNCTAD 2003: 62; on China in this context, see Boston Consulting Group 2003). Both IBM and Philips decided to move their production from Hungary to China in 2002. This indicates a loss of high-tech industry (electronics) and a specialisation in a mature industry (automotive). The industrial structure of CEE countries enables these countries to suck in Western European industrial jobs, albeit at a significantly lower wages and without significant linkages to a local economy. Even in ICT sector we can see how companies like Elcoteg (one of the market leaders in mobile phone assembly) offers wages just above minimum wages in CEE. Thus, there are hardly any pressures in CEE countries that would significantly push the wages and productivity higher, but there also appear to be hardly any pressures for EU15 wages to stay high in the new EU.

In addition, the change of techno-economic paradigms in the 1980s and 1990s – from Fordist mass-production into one based on ICT – has certainly played a crucial role in the development dynamics of CEE as well as in European integration. The Soviet style economy could cope relatively well with the mass-production paradigm, yet almost by definition networking via backward and forward feedbacks could not develop. This was done centrally. However, networks are perhaps one of the key characteristics of the ICT-led paradigm (Perez 2006). Thus, the entire economic culture and structure of the CEE countries was fundamentally 'Fordist' and alien to the new paradigm (Freeman 1998). This made the effects of rapid liberalization considerably worse and, ironically, as ICT paradigm enables significant specialization and segmentation of markets and production, the new paradigm also put heavy pressures (in terms of possibilities and competition) on Western European manufacturers to outsource production to lower wage areas like CEE.

Further, the EU enlargement falls into the middle period of the techno-economic paradigm, typically characterised by financial crisis and socio-economic and institutional adaptation to the new paradigm. We are at a stage of the techno-economic paradigm where the harvest of the new technologies 'is gathered under recessive symptoms and with more anxiety than rejoicing' (Schumpeter 1939, Vol. 1: 139). Similar wage pressures could be observed in the 1930s when only strong unions kept the industrial sector from the total collapse in real income which happened in the agricultural sector (US rural wages fell 70 per cent in purchasing power during the early 1930s). Such processes feed back into the economy as falling demand, and possibly into a new depression, which – just as the Asian Crisis – cannot happen in neo-classical theory, but may well happen in practice.

In addition, creation of European Monetary Union along the Maastricht criteria of price and fiscal stability brought unwarranted tightness in labour, monetary and fiscal policy areas in the 1990s that can be argued to have caused main growth barriers in Germany that in turn affects competitiveness of other Euro-area countries (Kregel 1999, Bibow 2005, Hein/Truger 2007). In effect, Euro-area countries, most notably Germany, were cut off from main policy means to alleviate pressures from CEE enlargement (cheap labour and production) and techno-economic paradigm change (as specialization and segmentation, and as outsourcing), and this only magnified the impact of both developments.

Thus the EU needs to go through a double institutional change: adapting to an enlarged Europe as well as to a new techno-economic paradigm, both under increased wage- and technology-pressures from other continents. And this institutional change is hampered by unnecessarily tight monetary and fiscal policies that limit policy space to deal with abovementioned challenges.

4. The Lisbon process as well-intended but inappropriate answer

We have argued that the principles of the European enlargement in 1990s are largely from the Washington Consensus toolbox. The main neoclassical/neoliberal assumption behind integration seems to be that enlarged internal market should distribute capital to regions and countries needing it the most (see also Priewe 2006: 157). At first sight it would seem that in this policy regime, the EU Lisbon Strategy – the European Union economic strategy launched in 2000 – represents a healthy theoretical shift towards a dual emphasis on innovations as the basic engine of economic growth and on social cohesion in order to mitigate the uneven economic growth that necessarily follows in a dynamically innovative society. Europe seemed to have left behind the neo-classically based standard textbook economics in favour of Schumpeterian evolutionary economics. In what follows, we argue that the Lisbon Strategy, in particular after its complete makeover in 2005, is in reality hardly much more than a Schumpeterian icing on a solidly neoclassical cake.

In reviewing the renewed *Lisbon Strategy for Growth and Jobs*, and in particular the myriad of policy papers and communications surrounding it,²² following conclusions can be drawn:

> 1. The Lisbon Strategy is based on profoundly simplistic, and also self-contradictory, understanding of innovation; on the one hand innovation is understood in linear terms (from science to growth), and on the other hand innovation is ubiquitous and part of market competition. It is thus not surprising that much of the Lisbon Strategy is high-tech oriented and tries to alleviate the socalled European paradox (good research, poor innovation) that in reality does not exist in many countries, in particular in the new member states. The ubiquitous nature of the concept of innovation, on the other hand, makes its usage blind to the Listian understanding that different technologies and different economic activities experience innovation highly differently (Singer 1950; Reinert 2006a). For instance, process innovations that abound in service sectors with ICT usage, often undermine competitive position of companies and their wages (e.g., hotel industry). Innovation is, by its nature, a process of creative destruction and the Lisbon Strategy fails to a large extent to take the destructive elements into account. (Only in parts dealing with labour market policies we find initiatives targeted at alleviating asymmetrical shocks; these measures are albeit of temporary nature. A notable exception is also planned state aid reform.) We argue that this is the main failure of the Lisbon

²² The main documents, also the renewed Lisbon Strategy termed Growth and Jobs, are available on the European Commission website at http://ec.europa.eu/growthandjobs/index_en.htm. Here we have looked in particular at European Commission 2005a, 2005b and 2005c, main documents specifying in detail how the renewed Strategy should work.

Strategy to deliver on its promise: it entails very few policy initiatives that could enable the private sector to move towards higher value added and fast growing sectors (the main Listian principle of economic development and integration).²³

- 2. On the contrary, the main driver of private sector innovation according to the Lisbon Strategy is the market. The European Union should enhance the internal market: 'This would also increase level of competition the main stimulus for innovation' (European Commission 2006a: 5). Another major pillar for innovation is seen in the low administrative costs (European Commission 2006a: 6). The main theoretical idea behind these assumptions is the market failure approach (see, e.g., European Commission 2006a: 11). Such narrow approach to innovation and economic dynamics in general has drawn high levels of criticism in recent years (see Cimoli et al 2006 for a comprehensive argument).
- 3. The importance of market-driven neo-classical and -liberal thought is perhaps even stronger in proposed policy design instruments: 'The identification of priority areas should be market-driven, in full respect of the need to preserve free and fair competition' (European Commission 2006a: 12).24 This approach not only defies much of highly negative practical experiences different states world-wide have had with such schemes in last guarter century, it is also in direct opposition to regional policy developments across Europe that emphasise local partnerships-based priority setting and cooperation (for a good overview, see European Commission 2006b). In addition, the new member states in particular have in their innovation policies chosen market-led approach with often catastrophic results in policy impact (Kattel 2004; Svarc 2006; Radocevic/Reid 2006). It is also in contrast to the Commission's plans to emphasise sector-specific approach to innovation (see, e.g., European Commission 2006c: 7). Further, market-driven understanding of innovation and industrial dynamics is a priori unable to understand that different regions in Europe face fundamentally different problems (both in terms of industrial and technological development) and that pushing for 'level playing-field' of common market might easily destroy further skill and knowledge capacities in the new member states. The Lisbon Strategy is essentially denying that Europe has member states with widely differing industrial/technological structure and that the convergence, par-

²³ Compare here in stark contrast recent policy initiatives in the state-level policies in the USA, see, e.g., National Governors Association 2007.

ticularly in terms of productivity, is happening very slowly. In such a situation, much of science and innovation policy attempts in the new member states are bound to have little effect on their respective industrial structures. Indeed, one can argue that the new member states are subsidising international science and R&D community since little of local science and R&D has any impact on local economy due to lack of linkages. One can also argue that it is a certain form of colonialism where the poor subsidise the rich (see also Jacobs 1984).

4. It is significant that in the entire documentation on the Lisbon strategy, there is hardly any mention of monetary, fiscal and wage policies. Yet, these policy fields arguably form the core problems for Euro-area countries, as argued above.

5. Conclusion

We have argued the following:

- 1. CEE industry experienced a strong Vanek-Reinert effect: in rapid liberalisation of trade and markets between countries/regions with strongly unequal levels of development, the first to suffer from competition are the most advanced industries of the least developed country/region. The last activity to remain is subsistence agriculture.
- 2. The policy environment created for and during the transition that focused on macro-economic stability and speed of changes meant, in reality, rapid simultaneous asset destruction and liability creation for many big industrial companies. The nature of CEE industry was profoundly misunderstood and thus much of industrial and knowledge capacity was simply irrecoverably lost. Rather than Schumpeterian creative destruction, many CEE countries experienced destructive destruction and primitivisation.
- 3. The economic and industrial policies in most CEE countries during the 1990s stressed an openness to FDI and foreign borrowing, which coincided with global changes in industrial and knowledge networks that flushed these countries with outsourced industries, and hence these policies have generally failed to significantly impact living standards or industrial structure in the host countries.
- 4. By early 2000s, most CEE countries stand at the brink of financial fragility in terms negative current account and external debt growth rates, and are thus bound to keep policy environment favourable for FDI via lower taxes, subsidies and infrastructure enhancement. Typically, EU structural funding is used for these

purposes, and not for industrial upgrading desperately needed by most industries.

- 5. Another effect of this development is a downward wage pressure in the economic core, pointing to a tendency towards factor-price equalisation being achieved by the rich getting poorer without the poor getting significantly richer. Throughout late 1990s and early 2000s Germany and many other continental countries experienced stagnating or minimally rising real wages.
- 6. The main policy response to these challenges, the Lisbon Strategy, is based on market-driven concept of innovation that tends to see innovation as combined with perfect competition rather than recognising that 'development' is essentially a product of Schumpeterian rent-seeking. In the alternative Schumpeterian/Galbraithian world view, growth is a product of rent-seeking businesses, big labour and big government. Failing to take differences between economic activities and between contexts (countries) into account, the enhancement of the internal market *per se* is erroneously seen to be the main cure for Europe's problem. We argue that this, for many new member states and many regions of the old member states, is an economically suicidal policy as it continuously destroys knowledge and skills, and the corresponding rents to capital and labour, both East and West without creating new ones.

It can be argued that the European Union enlargement project is laudably idealistic.

Whereas the US does not absorb any of the social costs in the Mexican deindustrialisation of traditional industry and allows little (legal) immigration, the European integrative model has the disadvantage of possibly accruing very high costs on several counts. The large internal wage differentials are likely to create strong downward pressures on the wage level in the core countries, where the conflicts during 2004 and 2005 may have been just preliminary skirmishes for a much larger battle to follow. Just as the free float of alcohol from new member countries has caused a collapse of alcohol prices in a country like Sweden, a large scale free float of labour may very well have a similar effect on labour prices (although some measures have been taken). At the same time the rapid integration into the world economy during the 1990s had already devastated the industrial structures in the new member states, so there is little to build on except moving already existing jobs and purchasing power eastwards, making European integration into a lose-win zero-sum game type of integration, rather than a win-win flying geese type.

The EU enlargement has brought the new EU into a situation where it is difficult to see reasons that would stop pressures towards lower wages, cuts in social benefits etc. An idealistic integration – which at a lower pace of integration could have had more flying geese qualities – may end up as a lose-lose strategy. The present European strategy does not capture the benefits from really cheap imports in labour intensive products and crops as the US does from Mexico, but on the cost side it may accrue heavy social expenses associated with integrating the poor periphery. As with the integration of DDR, a first beneficial 'pipe line effect' will boost sales from the 'old' core, but this benefit is truly transitory.

Turning to the earlier theoretical discussion of types of economic integration, Europe is weak in the win-win categories. The present integration of the European Union is clearly a departure from the slow and careful Listian form of symmetrical integration that characterised the growth of the European Common Market, starting in the immediate post-war period. In the old mercantilist tradition, in the first decades of European integration it was made sure that the important paradigm carrier industries - at that time above all the automotive industry - were present in all large countries. When Spain later acceeded to the Union, it already had a basic industrial structure which – through gradual rather than abrupt tariff reductions – was able to upgrade and successfully integrate symmetrically with the rest of Europe. The automotive industry with its layers of suppliers is one example of this successful transition. An artificially high exchange rate of the peseta prevented social dumping and wage pressures on the rest of Europe, at the cost of relatively high unemployment in Spain. However, with the former DDR, the exchange rate was so high and the economic structures so rigid that the new Länder lost all competitiveness and were largely deindustrialised. All in all, the integration of the large Spanish economy carries all the elements of a carefully planned Listian integration.

There is, we argue, a qualitative quantum leap towards the worse in the philosophy behind European integration between the careful economic integration of Spain, Portugal and Greece, on the one hand, and the 1 May 2004 integration, on the other. The first was pragmatic, gradual, and Listian; the second was much more ideological, based on free trade shocks, a product of economists and politicians who had come to believe in the crude propaganda version of economics where markets create automatic economic harmony. The errors created by the ideology of the 1990s now threaten European wealth and welfare. Failing to take into account the forces that by their very nature make economic development into an uneven process, the Lisbon Strategy becomes merely a list of good intentions.

References:

- Akamatsu, K. (1961), *A Theory of Unbalanced Growth in the World Economy*, Weltwirtschaftliches Archiv, 86, pp. 196-217.
- Backhaus, J.G. (2001), *Constitutional Causes for Technological Leadership: Why Europe?*, Independent Institute, Working Paper 39.
- Bibow, J. (2001), 'Making EMU Work: Some lessons from the 1990s', in *International Review of Applied Economics*, Vol. 15, No. 3, pp. 233-259.
- Bibow, J. (2005), 'Germany in Crisis: The Unification Challenge, Macroeconomic Policy Shocks and Traditions, and EMU', in *International Review of Applied Economics*, Vol. 19, No. 1, pp. 29–50.
- Boston Consulting Group (2003), 'Made in China: Why Industrial Goods Are Going Next', at www.bcg.com.
- Botero, G. (1590), *Delle cause della grandezza delle città*. Libri tre, Rome: Vincenzio Pellagallo.
- Cimoli, M. (ed) (2000), *Developing Innovation Systems: Mexico in a Global Context*, New York: Continuum International Publishing Group.
- Cimoli, M. and N. Correa (2002), 'Trade Openness and Technological Gaps in Latin America: A "Low Growth Gap"', Laboratory of Economics and Management, Sant'Anna School of Advanced Studies, Working Paper Series, 14/2002.
- Cimoli, M., G. Dosi, R. Nelson and J. Stiglitz (2006), 'Institutions and Policies Shaping Industrial Development: An Introductory Note', Laboratory of Economics and Management Sant'Anna School of Advanced Studies, Working Papers.
- Cornia, G.A. (2004), Rapid Change and Mortality Crises, at www. networkideas.org.
- Drechsler, W. (2005), 'The Rise and Demise of the New Public Management', in *Post-autistic Economics Review*, Issue 33, 14 September 2005.
- EBRD (2000), *Transition Report 2000*, London: Hyway Printing Group.
- European Commission (2005a), Delivering on Growth and Jobs: A new and integrated economic and employment co-ordination cycle in the EU. Companion document to the Communication to the Spring European Council 2005: Working together for growth and jobs A new start for the Lisbon Strategy, Brussels: European Commission.
- European Commission (2005b), Lisbon action plan. Incorporating EU Lisbon programme and recommendations for actions to member states for inclusion in the national Lisbon programmes. Companion document to the Communication to the Spring European Council 2005: Working together for growth and jobs, Brussels: European Commission.
- European Commission (2005c), Building our common Future Policy challenges and Budgetary means of the Enlarged Union 2007-2013,

Brussels: European Commission.

- European Commission (2006a), *Putting knowledge into practice: A broadbased innovation strategy for the EU*, Brussels: European Commission.
- European Commission (2006b), *Innovative strategies and actions: Results from 15 years of regional experimentation*, Brussels: European Commission.
- European Commission (2006c), *An innovation-friendly, modern Europe, Communication from the Commission to the European Council* (Informal Meeting in Lahti, Finland, 20 October 2006), Brussels: European Commission.
- Eurostat (2004), Employment in the Market Economy in the European Union. An Analysis Based on the Structural Business Statistics.
- Eurostat (2005), *High Technology: Enterprises and trade, Statistics in Focus, Science and Technology*, No. 9.
- Freeman, C. (1998). 'Innovation Systems: City-state, National, Continental and Subnational', at http://www.ie.ufrj.br/redesist/P1/texto/NT02.PDF.
- Götzfried, A. (2004), 'High-Technology and Knowledge-Intensity Leading to More Value Added, Innovation and Patents', in *Statistics in Focus, Science and Technology*, 8, Eurostat.
- Graham, F. (1923), 'Some Aspects of Protection Further Considered', in *Quarterly Journal of Economics*, February, pp. 199-227.
- Hein, E. and A. Truger (2007), Macroeconomic Policies, Wage developments and Germany's stagnation, in J. Hölscher (ed), Germany's Economic Performance, Basingstoke: Palgrave Macmillan, pp. 143-166.
- Hirschmann, A.O. (1958), *The Strategy of Economic Development*, New Haven: Yale University Press.
- Jacobs, J. (1984), *Cities and the Wealth of Nations: Principles of Economic Life*, New York: Random House.
- Kattel, R. (2004), 'Governance of Innovation Policy: The Case of Estonia', in *Trames*, Vol. 8, No. 4, pp. 397-418.
- King, C. (1721), *The British Merchant or Commerce Preserv'd*, 3 vols, London: John Darby.
- King, L.P. (2002), 'Emperor Exposed: Neoliberal Theory and De-modernization in Postcommunist Society', at http://sociology.berkeley.edu/ faculty/evans/king the emperor exposed.pdf.
- Kregel, J. E. Matzner, G. Grabber (eds) (1992), The Market Shock. An AGENDA for the Economic and Social Reconstruction of Central and Eastern Europe, Austrian Academy of Sciences / International Institute for Peace, Ann Arbor: University of Michigan Press.
- Kregel, J. (1999), 'Currency stabilization through full employment: Can EMU combine price stability with employment and income growth?', in *Eastern Economic Journal*, Vol. 25, No. 1, pp. 35-47.

- Kregel, J. (2004), 'External Financing for Development and International Financial Instability', G-24 Discussion Paper Series, United Nations, at http://www.unctad.org/en/docs/gdsmdpbg2420048 en.pdf.
- Krugman, P. (1980), *Rethinking International Trade*, Cambridge, Mass.: MIT Press.
- List, F (1841), *Das Nationale System der Politischen Ökonomie*, Stuttgart &Tübingen: Cotta.
- Mittag, H-J. (2004), 'Labour Costs in Europe 1996 2002', in *Statistics in Focus, Population and Social Conditions*, 9, Eurostat.
- National Governors Association (2007), 'The 2007 State New Economy Index: Benchmarking Economic Transformation in the States', at www.nga.org.
- Nurkse, R. (1953), *Problems of Capital Formation in Underdeveloped Countries*, New York: Oxford University Press.
- Ortiz, L. (1558), *Memorial al Rey para que no salgan dineros de España*, Madrid.
- Perez, C. (2002), *Technological Revolutions and Financial Capital: The Dynamics of Bubbles and Golden Ages*, Cheltenham, UK: Edward Elgar.
- Perez, C. (2004), 'Technological Revolutions, Paradigm Shifts and Socioinstitutional Change', in E.S. Reinert (ed), *Globalization, Economic Development and Inequality: An Alternative Perspective*, Cheltenham, UK: Edward Elgar, pp. 217-242.
- Perez, C. (2006), 'Respecialisation and the deployment of the ICT paradigm: An essay on the present challenges of globalisation', in Compañó et al. (eds), *The Future of the Information Society in Europe: Contributions to the debate*, Seville, Spain, European Commission, Directorate General Joint Research Centre. Institute for Prospective Technological Studies (IPTS), pp. 27-56.
- Priewe, J. (2006), 'Exploring the future borders of the European Union', in E. Hein et al. (eds), in *European Economic Policies Alternatives to Orthodox Analysis and Policy Concepts*, Marburg: Metropolis, pp. 151-180.
- Paine, R. (ed) (1977), 'The White Arctic: Anthropological Essays on Tutelage and Ethnicity', St John's Memorial University of Newfoundland.
- Porter, M. (1990), *The Competitive Advantage of Nations*, London: Macmillan.
- Radosevoc, S. and D.E. Yoruk (2001), Videoton: The growth of enterprise through entrepreneurship and network alignment, University College London, Center for the Study of Economic and Social Change in Europe, Working Paper No. 3.
- Radosevic, S. and A. Reid (2006), 'Innovation Policy for a Knowledgebased Economy in Central and Eastern Europe: Driver of Growth or

New Layer of Bureaucracy?', in K. Piech and S. Radosevic (eds), *Knowledge-Based Economy in Central and East European Countries: Countries and Industries in a Process of Change*, Basingstoke: Palgrave Macmillan, pp. 295-311.

- Reinert, E. (1980), *International Trade and the Economic Mechanisms of Underdevelopment*, Ph D. Thesis, Cornell University.
- Reinert, E. (1998), 'Raw Materials in the History of Economic Policy; or, Why List (the Protectionist) and Cobden (the Free Trader) both Agreed on Free Trade in Corn', in G. Cook (ed), *The Economics and Politics of International Trade: Freedom and Trade*, Volume II, London: Routledge, pp. 275-300.
- Reinert, E. (2003), 'Increasing Poverty in a Globalised World: Marshall Plans and Morgenthau Plans as Mechanisms of Polarisation of World Incomes', in H-J. Chang (ed), *Rethinking Economic Development*, London: Anthem, pp. 453-478.
- Reinert, E. (2004), 'Globalisation in the Periphery as a Morgenthau Plan: The Underdevelopment of Mongolia in the 1990s', in E. Reinert (ed), *Globalization, Economic Development and Inequality: An Alternative Perspective*, Cheltenham, UK: Edward Elgar, pp. 157-214.
- Reinert, E. and R. Kattel (2004), 'The Qualitative Shift in European Integration: Towards Permanent Wage Pressures and a "Latin-Americanization" of Europe?', PRAXIS Working Paper No. 17, at http://www.praxis.ee/data/WP 17 20042.pdf.
- Reinert, E. (2006a), 'European Integration, Innovations and Uneven Economic Growth: Challenges and Problems of EU 2005', in Compañó et al. (eds), *The Future of the Information Society in Europe: Contributions to the debate*, Seville, Spain, European Commission, Directorate General Joint Research Centre. Institute for Prospective Technological Studies (IPTS), pp. 124-152.
- Reinert, E. (2006b), 'The Economics of Reindeer Herding: Saami Entrepreneurship between Cyclical Sustainability and the Powers of State and Oligopolies', in *British Food Journal*, Vol. 108, No. 7, pp. 522-540.
- Reinert, E. (2007), *How Rich Countries Got Rich . . . and Why Poor Countries Stay Poor*, London: Constable.
- Rosenstein-Rodan, P. N. (1943), 'The problems of Industrialization of Eastern and South- Eastern Europe', in *Economic Journal*, 53, pp. 202-211.
- Svarc, J. (2006), 'Socio-political factors and the failure of innovation policy in Croatia as a country in transition', in *Research Policy*, 35, pp. 144–159.
- Schmoller, G. ([1884] 1944), Das Merkantilsystem in seiner Historischen Bedeutung. Städtische, Territoriale und Staatliche Wirtschaftspolitik, Frankfurt a. M.:Klostermann.

- Schumpeter, J. (1939), *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process*, New York: McGraw-Hill.
- Serra, A. (1613). Breve trattato delle cause che possono far abbondare li regni d'oro & argento dove non sono miniere, Naples: Lazzaro Scorriggio.
- Singer, H. (1950), 'The Distribution of Gains between Investing and Borrowing Countries', in *American Economic Review*, Vol. 40, No. 2, pp. 473-485.
- Sneijers, P. (2004), 'Industry and construction in the New Member States and Candidate countries', in *Statistics in focus, Industry, Trade and Services*, 23, Eurostat.
- Tiits, M., R. Kattel and T. Kalvet (2002), 'The Estonian Economy. Competitiveness & Future Outlooks', in *R&D and Innovation Policy Review*, Tallinn: R&D Council of the Republic of Estonia.
- UNCTAD (2004), *Development and Globalization: Facts and Figures*, New York and Geneva: United Nations.
- UNIDO (2004), Industrial Development Report 2004: Industrialization, Environment and the Millennium Development Goals in Sub-Saharan Africa, UNIDO: Vienna.
- Vernon, R. (1966), 'International Investment and International Trade in the Product Cycle', in *Quarterly Journal of Economics*, 80, pp.190-207.

Working Papers in Technology Governance and Economic Dynamics

The Other Canon Foundation, Norway, and the Technology Governance program at Tallinn University of Technology (TUT), Estonia, have launched a new working papers series, entitled "Working Papers in Technology Governance and Economic Dynamics". In the context denoted by the title series, it will publish original research papers, both practical and theoretical, both narrative and analytical, in the area denoted by such concepts as uneven economic growth, techno-economic paradigms, the history and theory of economic policy, innovation strategies, and the public management of innovation, but also generally in the wider fields of industrial policy, development, technology, institutions, finance, public policy, and economic and financial history and theory.

The idea is to offer a venue for quickly presenting interesting papers – scholarly articles, especially as preprints, lectures, essays in a form that may be developed further later on – in a high-quality, nicely formatted version, free of charge: all working papers are downloadable for free from http://hum.ttu.ee/tg as soon as they appear, and you may also order a free subscription by e-mail attachment directly from the same website.

The first nine working papers are already available from the website. They are

- 1. Erik S. Reinert, *Evolutionary Economics, Classical Development Economics, and the History of Economic Policy: A Plea for Theorizing by Inclusion.*
- 2. Richard R. Nelson, *Economic Development from the Perspective* of Evolutionary Economic Theory.
- 3. Erik S. Reinert, *Development and Social Goals: Balancing Aid and Development to Prevent 'Welfare Colonialism'.*
- 4. Jan Kregel and Leonardo Burlamaqui, *Finance, Competition, Instability, and Development Microfoundations and Financial Scaffolding of the Economy.*
- 5. Erik S. Reinert, *European Integration, Innovations and Uneven Economic Growth: Challenges and Problems of EU 2005.*
- 6. Leonardo Burlamaqui, *How Should Competition Policies and Intellectual Property Issues Interact in a Globalised World? A Schumpeterian Perspective*
- 7. Paolo Crestanello and Giuseppe Tattara, *Connections and Competences in the Governance of the Value Chain. How Industrial Countries Keep their Competitive Power*

- 8. Sophus A. Reinert, *Darwin and the Body Politic: Schäffle, Veblen, and the Shift of Biological Metaphor in Economics*
- 9. Antonio Serra, *Breve Trattato / A Short Treatise (1613)* (available only in hardcopy and by request).
- 10. Joseph L. Love, *The Latin American Contribution to Center-Periphery Perspectives: History and Prospect*
- 11. Ronald Dore, Shareholder capitalism comes to Japan
- 12. Per Högselius, *Learning to Destroy. Case studies of creative destruction management in the new Europe*
- 13. Gabriel Yoguel, Analía Erbes, Verónica Robert, and José Borello, Diffusion and appropriation of knowledge in different organizational structures
- 14. Erik S. Reinert and Rainer Kattel, *European Eastern Enlargement* as Europe's Attempted Economic Suicide?

The working paper series is edited by Rainer Kattel (kattel@staff.ttu.ee),

Wolfgang Drechsler (drechsler@staff.ttu.ee), and Erik S. Reinert (reinert@staff.ttu.ee), who all of them will be happy to receive submissions, suggestions or referrals.