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European Integration, Innovations and Uneven Economic Growth: Challenges and Problems of EU 2005.¹

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This paper is dedicated to Prof. Hans Singer – who taught us that innovation and technological change do not necessarily lead to higher real wages to the producers - on his 95th birthday November 29, 2005.

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At the end of 2005 the process of European integration seems to have reached a serious crisis. The rejection of the European Constitution by the French and Dutch voters indicates a strong distrust of the way the integration is proceeding. A survey conducted recently for the Polish *Rzeczpospolita* newspaper found widespread admiration for the achievements of winning freedom of speech and leading the country into NATO and the EU, but 85 per cent of those polled blamed the Solidarity movement for setting in motion the liberalisation that has put many Poles out of work. What went wrong? Why do workers not only in the old EU, but also in the new member states (NMS) feel betrayed? The fact that this change of mood surfaces after merely a year has passed since the euphoric celebrations of the enlargement of the Union makes it even more surprising. The aim of this paper is a preliminary exploration of factors rather than a complete analysis.

As a starting point I would argue that 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 left behind the neo-classically based standard textbook economics (STE) in favour of Schumpeterian evolutionary economics (Rodrigues 2003). As I see it, this shift, however, carried with it several problems; of theoretical, contextual and didactical nature.

First of all a problem of theoretical mismatch occurred. Jacques Delor's 1993 white paper on 'Growth, Competitiveness and Employment' envisioning an innovation-based Europe had been critically received by mainstream economists. Learning from this experience, the Lisbon process was carried through cautiously, avoiding the ministries of finance that had sunk the Delor paper, and this saved it from falling into the same trap. A victory of these tactics, however, may have backlashed, creating problems for the long-run strategy. Coupling innovation and social cohesion makes eminent sense: In an STE framework, however, both these concepts are exogenous elements, and above all they do not belong together. In STE the market is supposed to create economic harmony, and the losers in the game are an object of concern for social workers, not for economists. Both "innovations" and "social cohesion" are essentially alien elements in equilibrium standard textbook economics. The mainstream economic profession predictably reacted to this a bit like chess players would react if outsiders tried to introduce new categories of pieces into the game to change the rules: with indignation and an inclination towards sabotage.

In Europe economic policy-making is more closely tied to and dependent on STE than in the United States. This has its positive sides. It is difficult to envision that the fiscal irresponsibility exercised by the present Bush administration could ever have happened in Europe, as it would have been stopped by professional economists in the administration and in the central banks. When it comes to industrial policy, however, the strong dependence on STE clearly puts Europe at a disadvantage. The Chicago economists abhorring state intervention at any level does not prevent Mayor Daley of Chicago investing heavily in high-tech incubators. It is also important to note that the kind of selective industrial policy not allowed in international agreements, in the United States tends to be carried out by the individual state governments rather than the Federal Government. For close to 200 years US industrial policy has been torn between Alexander Hamilton's theories and ideas of an active state and Thomas Jefferson's ideas that 'a government that governs the least, governs the best'. In reality this tension has been pragmatically solved by combining Jeffersonian rhetoric with Hamiltonian practices.

The very influential US economist Paul Krugman puts it this way: 'the view of trade as a quasi-military competition is the conventional wisdom among policy-makers, business leaders, and influential intellectuals...**It is not just that economics have lost control of the discourse; the kind of ideas that are offered in a standard economics textbook do not enter into that discourse at all...**' (Krugman quoted in Reder 1999: 6). If we ask ourselves *to whom* the economists have lost control in the US policy-making process, Krugman lists an alliance of 'policy makers, business leaders and influential intellectuals'. In my view, more attention should be paid to the qualitative differences between Europe and the United States in the policy-making process. If the goal is to create an innovative Europe, STE is a factor that prevents needed changes in the rules of the game more in Europe than in the US. In fact the 2005 version of the Lisbon Strategy is much closer to STE than its predecessors.

The most serious problem of the Lisbon Strategy is the context – a result of past political decisions – in which it is carried out. The shock therapy that was imposed on most of the New Member States in the early 1990s produced what in Schumpeterian terms could be called destructive destruction: a large-scale destruction of the existing industrial fabric which was not sufficiently replaced by new activities. The integration of former East Germany was an extremely expensive and economically unsuccessful strategy because – in spite of a model reconstruction of all kinds of infrastructure – the industrial fabric was not replaced. It became a 'region on the dole'. It is as if the vision of an enlarged Europe of 2004 considered this integration of East Germany as a huge success that should be uncritically copied on a

larger European scale. Compared to the previous pace and form of European integration, I argue below that the recent integration processes have been unwise moves in terms of speed and timing. In order to repair the damages it is necessary to understand what went wrong.

1. What went wrong to lead to the problems of 2005?

This paper suggests three parallel and complimentary explanations as to what created the present tensions within the European Union. Briefly, these factors are seen as having interacted to create a European Community *Zeitgeist* which by a large number of the populace has not been perceived as being in line with increased 'public happiness', the maximum goal of economic theory in the past.

I. The deviation from successful principles of the past. I argue that with the decision of the 2004 enlargement three important principles were abandoned that had been key to the previous successful building of the European Union, based on the principles of Friedrich List, since its very inception.

II. The theoretical framework. European innovation policies have been introduced on top of a Smithian-Ricardian standard theory, as a Schumpeterian icing on a solidly neo-classical cake. This has made 'innovation' too much of a cure-all, creating a discourse on a generalised and abstract level where 'innovation' and 'learning' have taken the places of 'savings' and 'investment' in the standard equilibrium framework. We argue that this approach prevents a sufficient discussion of the qualitatively different ways innovation impacts the economy – e.g. in terms of imperfect or more perfect competition – in the foresight exercise. Probably the theoretical approach behind the Frascati and Oslo manuals, essentially counting R&D and innovations without much attention to their qualitative and contextual merits, has contributed to this. The alternative to this approach is to see innovation in a framework of uneven economic development where economic growth is *activity-specific*, policies necessarily *context-specific*, where the *windows of opportunity for innovation*² are a moving target and depend on the industrial structure of a nation, and where some innovations increase the welfare of the producers, whereas other innovations – particularly those produced by ICT – in fact may decrease the welfare of the same producers. We discuss why a learning- and innovation-based Europe should be discussed in the non-equilibrium tradition of

² As described by Carlota Perez.

Milanese economist Pietro Verri (1728-1797) and his continental contemporaries rather than in the Anglo-Saxon tradition based on how we today interpret Adam Smith (1723-1790), but is partly very different from what Smith actually preached.

III. The wider context of innovation. It is further argued that the approach taken has been excessively technical and economic, void of a broader cultural and societal context. The spectre of American efficiency and productivity and European lagging has been held up to Europeans. It has not been argued enough that innovation is a way to preserve European quality of life, the Americanization of working life has been an underlying threat. We have not sufficiently integrated the high value of the European way of life into the discussion, although this aspect has been well expressed by US authors (Rifkin 2004, Reid 2004). There is not time or space in this paper to discuss this further, but I would recommend a very perceptive article in the *New York Review of Books* on this important subject (Judt 2005).

In the 42 points of the European Council Conclusions on the Stability and Growth Pact and the Lisbon Strategy from March 22 and 23, 2005, the underlying problems of the present situation of Europe are not raised. The discussion appears as a long list of good intentions which – it seems implicitly to be assumed – necessarily will lead to success. The Lisbon Strategy appears to have been superimposed on the neo-classical economic framework dominating in the 1990s, where the market is a great equaliser and creator of economic order and harmony. In many parts of the global periphery it is increasingly clear that globalisation creates more poverty, not less. It is reasonably clear that such trends – exemplified by East Germany – may be found within the EU. As I see it, the further debate ought to be based on an analysis of what went wrong in the past, and it should move away from the neo-classical tradition of discussing policy void of its context. A policy may be excellent in one set of circumstances, but counterproductive in another. I argue for bringing back the Continental European economic tradition that created *Rhine Capitalism*: a society where the market is a tool rather than a goal in itself, and where economics is defined as the study of the economy as a real object in a specific context, not defined in terms of the adoption of core assumptions and techniques.

Given the strong internal and external forces to which the Lisbon Strategy is subject – discussed under points 5 and 6 below – it is in my view overly optimistic to think that the Lisbon strategy can be successfully carried out with its present toolbox. Today's ideology also limits the use of policy tools that traditionally have been important in the construction of a united Europe.

2. The Global Context: The backlash of globalization and the backlash of European integration as two sides of the same coin.

In 1338 Ambrogio Lorenzetti finished his frescoes *Allegory of Good and Bad Government* in the Town Hall of Siena. The fresco symbolising *good government* shows thriving shops, fine buildings and dancing citizens enjoying their leisure. *Bad government* is shown as ruin, rape, robbery and murder. To Lorenzetti and his contemporaries “public happiness” – as it later was called in Italy (Muratori 1766, Bidussa 1977) – was the result of conscious policy, of *buon governo*. We suggest that *buon governo* implies a qualitatively different understanding of the economy than today’s ‘good governance’.

German writers later coined their own terms for good policy: *Staatsklugheit*, ‘state wisdom’ (Justi 1741, Achenwall 1763) and *Staatskunst*, ‘state art’ (Justi 1761-64, Mauvillon 1776-1777, Müller 1809). Later this state art was built into the theories of Friedrich List (1841), an important part of which was to appreciate and draw policy conclusions from the fact that economic activities differed qualitatively as regards innovations (Reinert 1999). In the 20th century this economic tradition was continued in the works of Werner Sombart, whose path breaking works include how war and luxury historically have been key driving forces of innovation (Sombart 1913a and 1913b). Large parts of his masterly volumes on the capitalist system (Sombart 1927) have been translated into French, Italian and Spanish (see the bibliography of this paper).³ The tradition of ‘economic state art’ (*wirtschaftlicher Staatskunst*) was also continued (Wagemann 1937).

An important part of this ‘state art’ over the centuries was what Robert Wade calls ‘governing the market’ (Wade 1990), similar to what Alice Amsden calls ‘getting the prices wrong’ (Amsden 1992): employing market regulations and institutions that not only create an optimal balance of economic activities in the nation, but also secure a reasonable distribution of income and services. The regulation of foreign trade was a key variable in this policy. It was understood that the market would not, by itself, create neither spontaneous order nor an optimal economic structure.

Economic terminology often obfuscates rather than illuminates present problems. The frequently misused term ‘competitiveness’ adds to today’s theoretical confusion (Reinert 1995). Originally defined by the OECD as a nation’s ability to increase real wages while at the same time remaining

³ Since English speaking economists at the time tended to read German (German was a mandatory part of economics studies in the United States until after World War II), an English translation was not published. However, see an excellent book review by the leading historian of economic thought in the US at the time (Mitchell 1929).

competitive on international markets, the term is now seen in order to advocate the complete opposite effect. A nation is called upon to reduce wages in order for firms to remain competitive. Compared to the perfect competition of STE, the kind of Schumpeterian competition Europe needs – product innovations producing higher real wages – in effect represents a kind of market failure. What we want to produce are ‘market failures’, which combines very poorly with basic logic of STE.

In the historical debate on ‘free trade’, the term meant ‘absence of trade monopolies’. Only recently the term came to signify ‘absence of tariffs’. In fact, fine-tuning tariff policy has played a major role in the construction of post-war Europe. The European Union grew out of the extremely successful Marshall Plan, the main goal of which was to re-industrialise Europe after World War II. At the core of the Marshall Plan was a trade policy that rebuilt the industrial structure of all countries involved, often behind large trade barriers. Only after a symmetrical industrialisation had been achieved did full economic integration take place.

Up until and including the integration of Spain and Portugal, European Union policy has followed this Listian policy of opening up for free trade between *symmetrical partners all with a healthy industrial fabric*. A slow pace of integration, building down tariff barriers slowly, was done with the preservation and strengthening of the industrial symmetry in mind, in order to avoid the economic horrors created by the Morgenthau Plan – consciously de-industrializing Germany from 1945 to 1947 – in mind (Reinert 2003, 2004).

As the fact-based economics discourse slowly yielded to mathematization of the neo-classical synthesis in post-war Europe, the traditional continental tradition disappeared from the economics curriculum to be replaced by US standard textbook economics.(STE). The curious thing here, however, is that in terms of economic policy the US STE tradition had more influence on actual European policy than on US policy (see discussion above).

Fuelled both by the Cold War conflicts and the push to mathematize economics, European economics in the post-WW II period slowly drifted back to the situation of the 1840s: Ricardian economic tradition came to dominate with its basic position of the market as a harmony-making machinery. The lag in this process is interesting: European integration policy continued its Listian principles until the end of the 1980s, much after Friedrich List and his teachings had been eradicated from Europe’s faculties of economics. Only with the 2004 enlargement European integration was based on neo-classical/Ricardian/STE principles. This change to Ricardian principles of integration is, in my view, at the very root of Europe’s problems today.

From the point of view of many of Europe's citizens, there are more elements of Lorenzetti's 'bad government' present today than before this change of basic economic theory.

The vision of WTO's first director Renato Ruggiero on the operation of the world market may stand as a prototype for the new view that also penetrated European Union thinking. This global vision was centred around "the borderless economy's potential to equalise relations between countries and regions. At the global level" Ruggiero says, "old divisions between North and South are being superseded by new distinctions - between those countries embracing technology and globalization, and those that remain behind ..." (Ruggiero 1998: 130-131). As I see it, the European Union strategy is too simplistically based on this view: regardless of context, technology and innovation is enough to solve most problems.

At the global level, the most populated nations on the planet – China and India – had for more than 50 years followed a Listian economic policy protecting industry. They could benefit from globalisation, while many small nations, in Latin America, in Africa and in Asia were de-industrialised as if they had been subject to the type of Morgenthau Plan that devastated Germany between 1945 and 1947 (Reinert 2003). Ruggiero further talks about 'the potential for eradicating global poverty in the early part of the next century - a utopian notion even a few decades ago, but a real possibility today.'

Both in Europe and in the global periphery the optimistic views based on STE were shattered. As I see it, our present collective failure to understand both Europe's problems and why so many countries stay poor is intimately tied to a number of blind spots on the retina of standard economics. These blind spots make it extremely difficult, if not impossible, to create a theory of uneven economic development. As Lionel Robbins wrote more than 50 years ago, the basic features of the neoclassical paradigm produce a *Harmonielehre*, a theory – one might add – where economic harmony is already built into the assumptions on which the theory rests. Today, this paradigm hinders rather than helps our understanding of the reasons behind poverty. As Thomas Kuhn says, 'A paradigm can, for that matter, even insulate the community from those socially important problems that are not reducible to the puzzle form, because they cannot be stated in terms of the conceptual and instrumental tools the paradigm supplies.'⁴

Any long-term solution both for Europe and for the poor nations of the world will have to rest on a *theory of uneven development* – a theory which addresses these blind spots of economics which obfuscate our collective

⁴ Thomas Kuhn, *The Structure of Scientific Revolutions*, p. 37.

view. Such a theory once existed at a level complete enough to create successful economic policy for 500 years – from Henry VII's England in 1485 to the integration of Spain and Portugal into the European Union in 1986 – but is now virtually extinct in any faculty of economics.

Today's approach towards the Third World suffers from two main defects. First the balance is extremely tilted towards *palliative economics*, to ease the pains of poverty rather than to eradicate poverty permanently through economic development. Secondly, today's approach makes it possible to continue and even extend (as in the WTO negotiations) present practice without investigating what went so wrong with globalization in the periphery. Palliative rather than curative measures – debt cancellation and Millennium Goals – make it possible for the world economic order to continue to be based on the theory that created the problems in the first place. The same myths based on ideology rather than on experience, the same policies, and the same people that created the problems are still in charge. To use a medical metaphor: we are giving the patients – the poor countries – blood transfusions in terms of cash and debt relief without having asked the basic question as to why the loss of blood occurs in the first place. It has been a key mistake to keep the same people in power who brought in neoclassical shock therapy, the measures responsible for much of the problems. Just as in the case of Europe, this way of operating virtually guarantees that we do not face the quite fundamental discussion of ***what went wrong***. What is needed is a theory that explains why economic development, in its very nature, is such an uneven process. Only then can the appropriate policy measures be put in place both in Europe and in the poor peripheries of the world.

3. Europe's deviation from Listian principles.

The problems created by today's economic theory, where the market is seen as a harmony-creating machinery, are therefore found both globally and within Europe. In the case of the European Union, the alternative experienced-based theory was kept alive much longer in Europe's own policy than in Europe's approach towards the Third World. At the national level, most – if not all – developed nations experience increasing economic inequalities internally. The same type of problems is experienced on three levels: Globally, with the European Union, and within most developed nations. The basic causes behind these developments are the same: old theories that worked for centuries have been abandoned.

Tensions within the European Community that resulted in votes of *no* to the European Constitution are results of the same economic forces that create poverty in the world periphery. People in the old member states in the European Union feel betrayed because their welfare is being eroded, while

people in the new member states feel betrayed because welfare is not arriving as fast as expected. Not unexpectedly, this completely new and unexpected situation causes people to ask in the same way as they ask about globalization: what went wrong?

German economist Friedrich List (1789-1846) is no hero in today's economics textbooks, but it was his economic principles that not only industrialized Continental Europe in the 19th century, but also built European integration from the early 1950s until and including the successful integration of Spain and Portugal into the EU in 1986. For a long time the division of labour in Europe was clear, Friedrich List ruled the field of practical policy, while neo-classical economics ruled in the economics textbooks. Not until the 2004 integration were List's principles abandoned in favour of the same textbook economics that dominates the Washington Consensus. The result was increased unemployment and poverty in the old core countries inflaming the debate that produced the 'no' to the constitution.⁵

A worrying aspect of this is that even the countries that are hailed as success stories of the recent European integration have serious problems of social cohesion: successful urban centres contrast starkly with rural poverty. With my Estonian colleague Prof. Rainer Kattel, I have started looking at a new index for regional inequality. Based on the *monthly rent* of a city apartment of 100 square meters in the national capital, we measure the distance to the area where, with the same amount of money, you can *purchase a whole house*. In Norway this "monthly rental to full ownership index" lies at around 2.000 kilometers, from Oslo to Vardø at the Arctic Sea in the extreme North. In Estonia, this distance is down to less than 100 kilometres from Tallinn. Estonia is also the nation in Europe with the worst income distribution and where the demographic development suggests that the population will be halved by 2050. It is unfortunate that rather than Europe facing up to these problems, the present mood is to gloss over reality and present Estonia as an unmitigated European success story.

Below are three of List's key principles – they are in reality much older⁶ – contrasted with standard textbook economics. the present neoclassical economic principles must be abandoned in favour of the old Listian principles.

Listian principle: The preconditions for wealth, democracy and political freedom are all the same: a diversified manufacturing sector

⁵ This negative development in Europe is discussed in Reinert, Erik S. and Rainer Kattel 'The Qualitative Shift in European Integration: Towards Permanent Wage Pressures and a 'Latin-Americanization' of Europe?', Praxis Working Paper no. 17, Praxis Foundation, Estonia http://www.praxis.ee/data/WP_17_2004.pdf .

⁶ See several of the papers in Jomo & Reinert (2005).

subject to increasing returns⁷ (which would historically mean manufacturing, but also includes a knowledge-intensive service sector). This was the principle upon which the United States economy was built, this was the principle promoted by the first US Secretary of the Treasury, Alexander Hamilton⁸, and this same principle was rediscovered by George Marshall in 1947 and quoted above.

Neoclassical principle: all economic activities are qualitatively alike, so it does not matter what you produce. Ideology based on 'comparative advantage' without an understanding that it is actually possible for a nation to specialise in being poor and ignorant, in economic activities that require little knowledge, operate under perfect competition and diminishing returns, and/or bereft of any scale economies and technological change.

Listian principle: A nation first industrialises and is then gradually integrated economically into nations at the same level of development.

Neoclassical principle: Free trade is a goal per se, even before the required stage of industrialisation is achieved. The 2004 EU enlargement went directly against Listian principles. First the former communist countries in Eastern Europe (with the exception of Hungary) suffered dramatic deindustrialisation, unemployment and underemployment. These countries were then abruptly integrated into the EU, creating enormous economic and social tensions. From the point of view of Western Europe, the factor price equalisation promised by international trade theory proved to be an equalisation *downward*.

Listian principle: Economic welfare a result of synergy. Already in the 13th century Florentine Chancellor Brunetto Latini (1210-1294) explains the wealth of cities as a *common weal* ('un ben comune') (Reinert 1999). Investments in infrastructure, education and science are an integral part of this type of policy.

Neoclassical principle: 'There is no such thing as society', Margaret Thatcher (1987).

Just as Kuhn describes above, these Listian principles cannot be captured by the tools of the ruling economic paradigm. Understanding List requires understanding qualitative differences between economic activities, diversity, innovations, synergies and historical sequencing of processes. These are all blind spots in standard economics, especially in their interacting and cumulative totality.

⁷ The works of Jane Jacobs on the role of the cities arrive at the same conclusion as List from a different starting point (Jacobs 1984).

⁸ In his 1791 *Report on the Subject of Manufactures*.

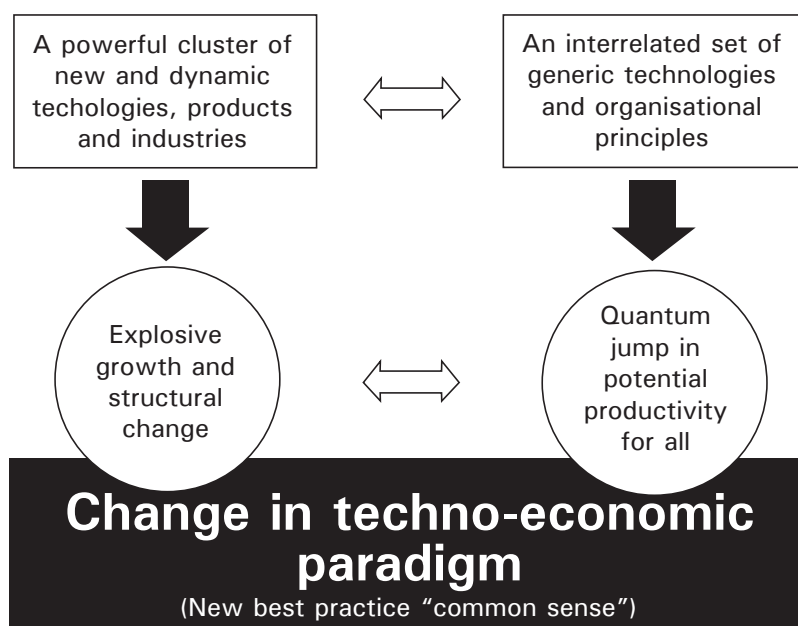
Failure to understand the wisdom of the Listian principles which previously upgraded the common interests of Europe has produced what to many – economically and socially – becomes a race to the bottom. The same abstract theory has recreated the same type of ‘social question’ that plagued Europe during the 19th Century, also then a result of policies based on Ricardian economics. It was only by getting rid of abstract theories both left and right that the social problems of the 19th century were solved. Gustav Schmoller’s speech on becoming *Rektor* of the University of Berlin in 1897 testifies to this process where fact-based economics wins over highly abstract models (Schmoller 1897). Two years later, Cambridge economist Herbert Foxwell describes the very same process of getting rid of Ricardian economics in favour of what Foxwell himself call ‘the realistic school’ (Foxwell 1899).

4. IST, different types of innovations and different effects on real wages.

In my view the vision of the innovation-based society has been based on an insufficient qualitative understanding of the different ways innovations affect different businesses. Information technology creates very different results around Microsoft’s headquarters in Seattle than what the same information technology does in the hotel industry in Venice or on the Costa del Sol. In the hotel business as well as in the used book business across Europe, IST has caused more perfect information leading to falling margins and increased downward pressures on wages and profits. Using the standard definition of the term ‘competitiveness’ – its ability to create higher real wages – in these industries in isolation, IST-based innovations have caused *decreased* rather than *increased* competitiveness. Although it is well known in innovation economics that product innovations and process innovations often have different effects on employment (see. e.g. Fagerberg, Guerreri & Vespagen 1999, Gambardella & Malerba 1999, Vivarelli & Pianta 2000, Reinert 2000, Pianta 2005), not enough emphasis has been given to the fact that innovations actually may reduce value added in certain industries and geographic areas.

Carlota Perez considers that every techno-economic paradigm has two very different aspects: a) a cluster of new basic innovations creates distinct dynamic technologies, and b) the way these new generic technologies change the way the rest of the economy goes about its businesses. Figure 1 illustrates these two aspects of paradigm shifts.

Figure 1: The two main aspects of a techno-economic paradigm shift.



Source: Carlota Perez.

The two aspects of the paradigm shift produce very different types of innovations. The paradigm carrying industries generally produce *product innovations* that create dynamic imperfect competition. In the rest of the economy the paradigm shift tends to produce *process innovations* that either do not shift the degree of imperfect competition, or – as in the case of the airline industry – may unleash a price and productivity competition that will benefit consumers rather than producers. Such innovations may produce lower rather than higher monetary wages in the industry affected, but will create higher real wages to the people consuming their services. Should one group of nations specialize in *product innovations* while the other specializes in *process innovations*, the standard of living is very likely to raise much faster in the *product-innovating* country compared to the *process-innovating* country.

This is because the increased wealth produced by innovations may reach us in two different ways, either through increased monetary wages or through lowered prices for what we consume. To the classical economists, productivity improvements would show up in the economy as lowered prices for the goods which experienced these improvements (Smith 1776/1976: 269, and Ricardo 1817/1973: 46–7). This is the focus also of today’s public choice theory which ignores the benefits coming from higher wages.

At the time of Smith and Ricardo, the gold standard facilitated the result they predicted. In a closed economy, holding velocity of circulation constant, the increase of goods in the economy resulting from technological

progress would chase only the same amount of bullion. Prices *would have to fall*. Rapid technological progress would therefore lead to deflation – which in fact it often did until the gold standard was abolished.

When the gold standard was abolished, people in the industrialized countries got rich in a different way than before – instead of seeing the price of industrial goods fall as it used to, they now saw their monetary income rise. Previously deflation had caused awkward social problems: it was difficult to convince people who had to take continuous pay cuts that, in spite of these pay cuts, they were still getting richer, because the price of the goods they purchased fell at an even faster rate than their wages. The monetary policy which followed after the gold standard was abolished became, from the point of view of the industrialized nations, a more sensible one: money supply kept rising with the amount of goods in the economy, or slightly faster, creating a small inflation which seems to have served to oil the machinery of development. Now the producer in an activity not exhibiting productivity improvements – e.g. the barber – got rich by raising his prices at the rate everybody else had their salaries raised, not only by having the price of manufactured goods lowered.

As shown in Figure 2, from 1899 through 1937, within the US, labour productivity in the automotive industry increased by about 900%, and many other industries recorded productivity improvements exceeding 100%. However, in many US industries: meat packing, hats, railroad cars, lumber-mill products and others, labour productivity did not change at all in the same period.⁹ Yet, the workers in the industries which had no productivity increase at all over this 40-year period had their good share in the unprecedented growth in the US economy over that period. But, as opposed to what was expected in the classical model, this did not come through an improvement in their terms of trade.

The increase in real wages came essentially through increased monetary wages as the national stock of money grew, not through improvements in the terms of trade in the 'dog' industries. In this way the huge productivity advances in the 'star' industries spread to a much larger extent *inside the producing nation* than to customers abroad. A similar view on wage determination is held by the French regulation school (see Boyer 1988).

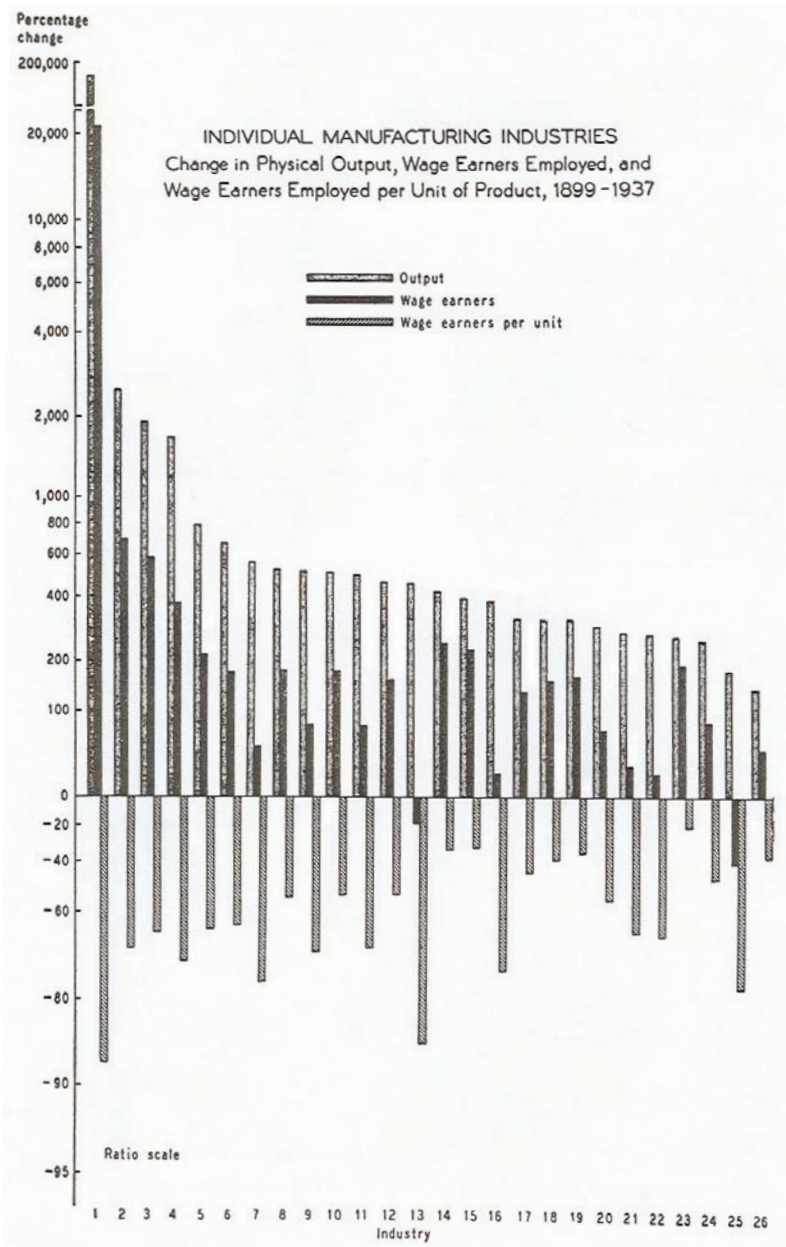
The benefits of technology clearly spread in the economy in a different pattern from what the classical and neoclassical economists expect. I call this the *collusive*¹⁰ mode of diffusing the benefits from technological change:

⁹ Data from Fabricant (1942), pp. 90–91.

¹⁰ This matter is discussed more in detail in Reinert (1994).

the benefits are divided among the capitalists, the workers, and the government *in the producing nation*. (The word collusive does not imply a conspiracy. This collusion comes about by the normal working of the economic, social, and political forces.) Inside a nation, social and democratic forces, labour mobility, and the distributive effects of a huge government sector ensure that the wage level and standard of living in the 'dog' industries do not lag too far behind those of the 'star' industries.

Figure 2.

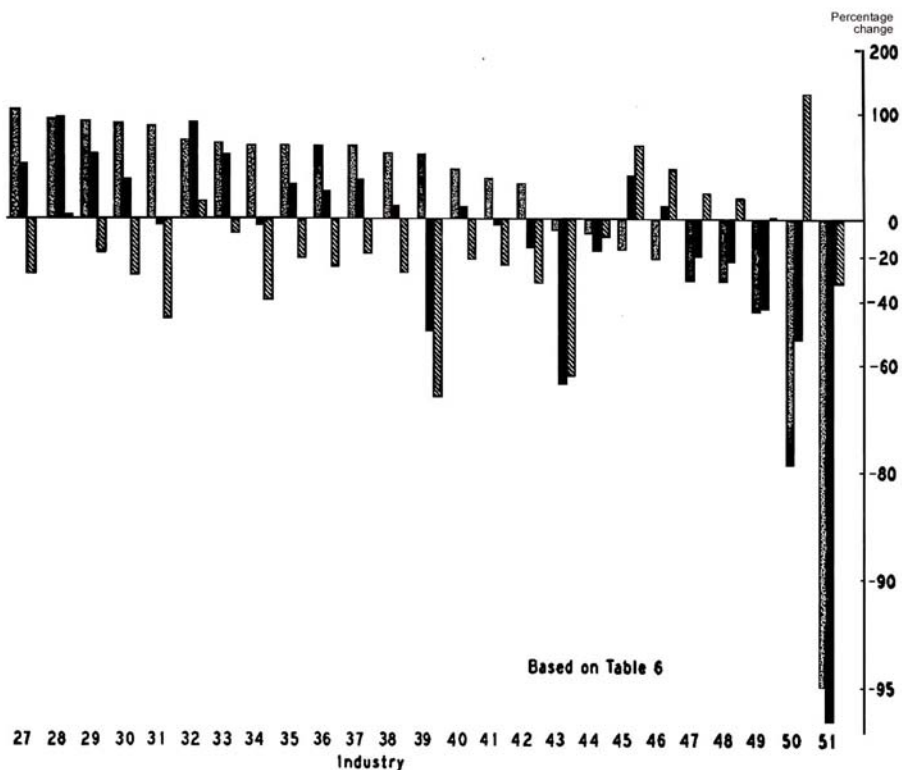


INDUSTRY

- 1 Automobiles, incl. bodies and parts
- 2 Chemicals, industrial, incl. compressed gases and rayon
- 3 Petroleum refining
- 4 Beet sugar
- 5 Fruits and vegetables, canned
- 6 Ice
- 7 Glass
- 8 Paper and pulp
- 9 Silk and rayon goods
- 10 Knit goods
- 11 Printing and publishing, total
- 12 Butter, cheese and canned milk
- 13 Cigars
- 14 Rice
- 15 Paints and varnishes
- 16 Coke-oven products
- 17 Zinc
- 18 Liquors, distilled
- 19 Steel-mill products
- 20 Tanning and dye materials
- 21 Copper
- 22 Explosives
- 23 Wood-distillation products
- 24 Fertilizers
- 25 Blast-furnace products
- 26 Jute goods

INDUSTRY

- 27 Cotton goods
- 28 Hats, wool-felt
- 29 Shoes, leather
- 30 Cane sugar
- 31 Salt
- 32 Meat packing
- 33 Cottonseed products
- 34 Leather
- 35 Woolen and worsted goods
- 36 Liquors, malt
- 37 Shoes, rubber
- 38 Carpets and rugs, wool
- 39 Lead
- 40 Cordage and twine
- 41 Gloves, leather
- 42 Hats, fur-felt
- 43 Chewing and smoking tobacco
- 44 Flour
- 45 Ships and boats
- 46 Cars, railroad
- 47 Lumber-mill products
- 48 Turpentine and rosin
- 49 Linen goods
- 50 Locomotives
- 51 Carriages, wagons and sleighs



Interindustry differences are, of course, much greater in a society like the US than in a 'wage solidarity' culture like the Scandinavian, but the same mechanisms are at work.

Faced with a *collusive spread*, the US during the period covered in Figure 2 would grow richer if it could move workers from the hat industry to the automotive industry. Importing hats and exporting cars will – under the collusive diffusion of technological improvements that in fact happened – improve the US welfare position as compared to autarky. This opportunity is created by the fact that not all economic activities are mechanized at the same time and to the same extent.

Figure 2 also very well illustrates Verdoorn's Law, another phenomenon that adds to the desirability of product innovations. This law shows that the products with the largest increase in output – i.e. new products like cellular phones today – are also the products that show the highest growth of productivity due to increasing returns. We can observe how the industries with the highest increase in physical output (the industries with the lowest sequential number) also tend to be the industries with the highest increase in labour productivity (where the number of wage earners per unit of output has been most reduced).

By increasing barriers to entry into the industry, the combination of technological change and increasing returns – a combination Schumpeter referred to as *historical increasing returns* – acts as a powerful boost for real wages. This 'catapult effect' of real wages is the mechanism that caused fast increases in real wages in the two last colonies of Europe – Ireland and Finland – over the last decades. The mechanism works both directly through labour power, tight labour markets and high demand for high-skilled workers, and through the foreign exchange markets where the currencies of successful nations increase in value (historically Germany, Switzerland and Taiwan are examples of this foreign exchange mechanism).

A *classical* spread of benefits from innovations is the result of the usual assumptions in neoclassical economics. However, with a Schumpeterian world view, a purely classical spread is hardly plausible. The dynamics of the system are generated by the technological change which creates disequilibria – and the higher profits created in the industries experiencing technological change are necessary in order to draw capital to these higher risk and more capital-intensive activities. In addition, a classical spread of the benefits – only in the form of price reductions to customers at home and abroad – would not be seen as fair and democratic in the producing country. That industrialized country workers receive their share in the productivity improvements in terms of higher wages is an integral part of the credo of industrialized societies.

In this case as in so many others, economics is about reinventing wheels. Similar contexts give birth to similar ideas that have been lost for lack of demand. The problems of the 1930, e.g. how differently the crisis affected manufacturing and agriculture, raised this same questions on how technical change spreads in the economy. Thus, in the late 1930s, the Brookings Institution published a series of books aiming at 'nothing less than a general re-examination, in the light of modern developments, of the operation of the capitalistic system of wealth production and distribution'. The studies conclude that the benefits of innovation and technological progress may be spread in the US economy in two different ways:

1. *Raising money wages (my collusive mode)*. 'The most obvious method by which the income of the masses might be expanded... it is the method which has been steadfastly pursued by labor organizations... and it is the method which has been officially experimented with under the auspices of the National Recovery Administration.' It is recognized, however, that this gives a disproportionate wage lead for manufacturing and railway workers.

2. *Price reductions (my classical mode)*. The series of studies concluded that 'the *most advantageous* means of broadly distributing the benefits of technological progress was by reducing prices in line with increasing efficiency in production'. The practical difficulties in achieving this were recognised and outlined in a volume entitled *Industrial Price Policy and Economic Progress* (Nourse and Drury 1938). The conclusion was that in a market where both the industry in question and the labour unions charge what the market can take for products and labour respectively, a large amount of what from an international trade point of view is a 'collusive spread' is inevitable in a market economy.

Clearly, in most industries, the benefits of technological development spread with elements of both modes. Distribution problems *within* a nation, which was the object of the Brookings Institution study, will be alleviated through competition in the labour market, through labour mobility, through the high government share in GNP, through the relocation of industry to areas in the country with less expensive labour, and, particularly in the case of Europe, through the 'wage solidarity' of labour unions. Internationally, these mechanisms work in a very limited way, as does the huge redistributive machinery of national governments. The inevitability of a 'collusive spread' makes a nation's *choice of economic activity* so crucial. As a result of the collusive spread of technological progress, the world's most efficient baseball producer – an economic activity which all the technology and capital of the US has not managed to mechanize – makes 30 US cents an hour in Haiti, and the world's most efficient golf ball producer makes 40 times as much in an industrialized country.

The two different ways innovation spreads was an important part of classical development economics. Hans Singer, a former student of Schumpeter, raised the distribution issue of technological progress in his paper to the 1949 meeting of the American Economic Association. Singer¹¹ pointed out unquantifiable factors, however, and in the ensuing debate his important insight drowned in the attention paid to the terms of trade argument presented by Raul Prebisch. Measuring prices – terms of trade – appealed to the traditions and static world view of the economics profession. The remarkable lack of change in terms of trade between industrialized and primary-producing nations over time, showed by Kindleberger and others, really served to reinforce Singer’s point: each group of nations is able to keep its own productivity improvements as an increase in national welfare.

Table 1 shows the characteristics of the *classical* mode (price reduction) and the *collusive* mode (raising money wages). In a truly classical spread, the innovation immediately falls to the lower level of what I call *The Quality Index of Economic Activities* (Reinert 1994). The use of containers could be an example of such an innovation. The two modes are not mutually exclusive – in most cases they are both present to some degree. Under autarky, it makes no immediate difference to GNP whether the benefits spread in a classical or in a collusive way. In an open economy with restricted labour mobility it makes all the difference in the world.

Table 1:
Characteristics of the two modes of diffusion of productivity improvements

	The Collusive Mode	The Classical Mode
Characteristics of mode		
Divisibility of investments	Indivisible, comes in ‘chunks’	Divisible
Degree of perfect information	Imperfect (e.g., patents, internal R&D)	Perfect (competitive market for technology itself)
Source of technology from user company point of view	Internal, or external in big chunks = high degree of economies of scale	External
Type of innovation	Product innovation	Process innovation
Barriers to entry Industry structure Economies of scale Market shares	Increase Increases concentration Increase Very important	No change Neutral No change Unimportant

¹¹ Published as Singer (1950).

How benefits spread		
GNP as measured	Highly visible	Tends not to appear (Solow-paradoxes)
Profits level	Increases stakes: possibilities for larger profits or losses	No change
Monetary wages Real wages (nationally) Price level Terms of trade	Increase Increase No change No change	No change Increase Decreases Turns against industries experiencing technological progress
Examples of innovations in the two groups	New Pharmaceuticals, mainframe computers, automotive paint production	Electricity, telephones, sewing machines, use of PCs, dispersion paint production, containers
Where found	Mainly in industry, in recent products and processes	In primary and tertiary sectors, use of new generic technologies, mature industry

Source: Reinert (1994), slightly modified.

The main point here is that the ability of *product innovations* (collusive spread) to create higher real wages in a nation is much larger than that of *process innovations* (classical spread). Process innovations tend to make all consumers of a product richer through lowered prices, while product innovations tend to enrich the producing countries through higher wages.

5. Internal factors that determine the feasibility of the Lisbon Strategy.

Standard textbook economics generally operates void of any context. However, the context in which the 2004 enlargement of the European Union took place was a very unusual one. During the preceding decade the new member states from the former communist block had been subject to a shock therapy that had severely changed their economic structure. With the exception of Hungary, all former Second World nations experienced de-industrialization – partly severe – after the fall of the Berlin Wall.

Figure 2 shows the extent of this de-industrialization in the Second World, including in some new European Union member states. It is interesting to observe that in the most recently industrialized countries the labour shed by industry returned to agriculture, while in the more advanced countries industrial labour was incorporated into the residual service sector. A turn to the service sector in a poor deindustrialized nation is qualitatively a very dif-

ferent process from the turn to a knowledge-intensive service sector in a wealthy country. Both when the people whose jobs were lost by fast deindustrialization go back to agriculture and when they go into the service sector we can assume that severe underemployment accompanied the process (Reinert 2004).

Figure 3. Integration and Deindustrialization 1990-2001: Employment Structure by Sector, Selected Transition Economies, 1990 and 2001 (per cent).¹²

Country	1990			2001		
	Agriculture	Industry	Services	Agriculture	Industry	Services
Armenia ¹	17.7	30.4	38.3	44.4	14.1	37.2
Azerbaijan	30.9	22.9	31.1	40.0	10.8	49.3
Bulgaria	18.5	44.2	37.3	26.3	27.6	46.0
Czech Republic	12.3	45.5	42.2	4.8	40.4	54.8
Estonia	21.0	36.8	41.8	6.9	33.0	60.1
Hungary ²	8.7	33.0	58.1	6.2	34.7	58.9
Kazakhstan ³	22.3	31.5	40.7	22.0	18.3	59.8
Kyrgyzstan ³	32.7	27.9	39.4	52.4	11.6	36.1
Latvia	17.4	37.4	45.2	15.0	25.6	59.4
Poland	25.2	37.0	35.8	19.1	30.5	50.4
Romania	29.1	43.5	27.4	42.3	26.2	31.5
Russian Federation ³	13.9	40.2	45.6	11.8	29.4	58.8
Slovakia ²	10.1	39.6	50.0	6.1	37.6	56.2
Slovenia ⁴	10.7	44.1	45.1	9.8	38.1	50.8

Source: International Labour Office 2004.

Creative destruction is an important term in Schumpeterian innovation economics. We have argued that this term entered economics via Friedrich Nietzsche and Werner Sombart (Reinert & Reinert forthcoming 2006). We also have to open our minds to the existence of *destructive destruction*. I have argued that the case of Mongolia in the 1990s is a particularly ugly case of destruction of human welfare (Reinert 2004). As Schumpeter, Nietzsche himself saw the process of creative destruction solely as a positive one. The eminent Renaissance historian Jacob Burckhardt – Nietzsche’s teacher, friend and colleague at the University of Basel – was, however, of a different opinion. ‘...by no means every destruction entails regeneration.... there are (or at any rate there seem to be) absolutely destructive forces under whose hoofs no grass grows’, writes Burckhardt (1943: 214). This is an aspect generally forgotten in economics.

Destruction and creativity produced by innovations may take place in entirely different parts of the globe, as when the textile mills of Manchester replaced the weavers of Bengal. ‘The bones of the cotton-weavers are

¹² Numbers do not add up to 100% because some industries are ‘not adequately defined’.

bleaching the plains of India' the Governor-General wrote home to England in 1835. In Europe the effects are less dramatic, but they are still there. In the case of the new member states the deindustrialisation of the 1990s had two lasting effects. First of all both employment and purchasing power were permanently lost, at least for the foreseeable future. Secondly, a main beneficial effect of the shift in techno-economic paradigm – the upgrading of already existing industry – failed much of its effect because there was little old industry left for upgrading.

An abrupt integration of these countries in the European Union put a heavy burden on the system as a whole. The integration of Spain and Portugal – following the old Listian principles – had been *win-win* situations. Several aspects of the 2004 integration are characterized by processes more of the *lose-lose* kind, the downward pressure of wages in Western Europe are not compensated by a marked increase in welfare in the New Member States. The set of forces governing this is outlined in point 6.

The free trade shock experienced by Eastern Europe in the 1990s had the same effect typically observed when free trade is suddenly opened between a relatively advanced nation and a relatively backward one. Experience shows that the first casualty of free trade, the first industry to close, tends to be *the most advanced industry in the least advanced country*. I call this effect the Vanek-Reinert effect or the 'winner-killing effect' of free trade. This was the case both in the nineteenth-century unification of Italy and in the Czech computer industry after the fall of the Berlin wall. This effect easily develops into a variation of destructive destruction (Reinert 1980). The last economic activity to survive in the poor country is generally subsistence agriculture.

The Vanek-Reinert effect is fully compatible with standard international trade theory: Under free trade each nation reinforces its comparative advantage – the wealthy first world reinforces its comparative advantage in higher skills in increasing-return industries, while poor nations fall back on their comparative advantage in diminishing-return industries. A comparative advantage in a diminishing-return activity is a 'natural advantage', based on nature's bounty, whereas a comparative advantage in an increasing-return activity is a 'created advantage', based on human innovation and skill.

Another factor which is adding to popular discontent is that an increasingly lower percentage of European GDP is allocated to wages (Figure 4 below). The share of wages in the economy peaked during the golden age of production capitalism, in the 1970s. This is a global trend accompanying the rise of financial capitalism, and reflects a number of interrelated factors including the loss of labour union power and the abolition of tariffs that could previously be used to protect national wage levels.

Figure 4. Adjusted Wage Share in the European Union 1960-2000.



Source: European Industrial Relations Observatory On-line, <http://www.eiro.euroworld.eu.int/2000/07/study/tn0007402s.html>, based on European Commission 1999.

6. External factors that determine the feasibility of the Lisbon Strategy.

We would argue that the basic problem of Europe's economic strategy is that ruling economic ideology has unlearned the logic and wisdom of Listian integration. A main characteristic of reigning standard textbook economics is a lack of consideration of *context*. My view is that a number of external factors – numbered 1 to 5 below – will determine the degree of success of the Lisbon strategy. Not paying enough attention to these external factors will jeopardize the process itself.

In evaluating these factors we must also qualitatively evaluate the degrees to which certain phenomena or certain factors are desirable. In human nature as well as in human societies, there can be both too little and too much of a good thing. Vitamin A is essential to human development. Excess doses of this vitamin may, however, be fatal. Economic dynamics that normally are quite healthy can, if they are too strong, also produce negative effects. Economic activities moving to low-cost areas is a completely normal, and even necessary, process in the history of capitalism, and is an integral part of capitalist dynamics. Too high wages in London was the reason why English textile industry moved out of that city many centuries ago. The same thing applies to the growth of the service economy. William Petty (1623-1683) formulated what is called Petty's Law, that economic development changes economic structure over time: first agriculture dominates, then industry, and then the service sector takes over. However, this does not mean that all de-industrialization is healthy. And, a knowledge-intensive

service sector certainly needs high-quality demand from an advanced service sector. The inability to see these types of synergies is another important blind spot of standard textbook economics.

The external variables that cause these moves to be problematic and damaging or not to the creation and even maintenance of real wealth are the following:

1. **The degree of dynamics** in the wealthy core, relative to the other world players (US, China, East Asia). Here Europe scores relatively low, in spite of considerable efforts,
2. **The timing of this event in the techno-economic paradigm.** With the Fordist mass production wave near its crest during the 1950s and 1960s, a radical integration would have been easier almost anywhere than now, in the post-financial crisis, deflationary period of the paradigm, resembling in so many ways the 1930s, including politically (Perez 2002, 2004). That financial capitalism, rather than production capitalism¹³, is in charge during such periods further aggravates the problem (Hilferding 1910, Veblen 1914, 1919, 1921, 1923). Both the attention of economists and of financial markets is carried away from production to studying finance.
3. **The size of the poor/unemployed/underemployed population** to be integrated compared to the population of the core countries. Here integrating Portugal and Spain was relatively easy, but again Europe now faces a problem.
4. **The ability of the industrial structure in the poor countries to upgrade.** Compared both to the post-WW II situation and to the integration of Spain, Portugal and Greece, the situation in the CEE is very problematic. Instead of the slow reduction of tariffs that made the Spanish, Portuguese and even Greek industries survive and upgrade, the CEE countries – with the exception of Hungary – had to varying degrees been subject to de-industrializing that had Morgenthau Plan-like effects, also creating havoc in the agricultural sector.
5. **The wage dynamics of the rest of the world.** Here the dynamics are generally strongly in disfavour of European wages. The United States is an innovation powerhouse with creeping Wall-Martization of the labour market, increasing illegal immigration, and falling real wages. China is rapid

¹³ The relationship between financial capitalism and production capitalism is discussed in Reinert & Daastøl (1998) providing an extensive bibliography on the subject.

ly catching up technologically with minimal increases in real wages, and a virtually unlimited supply of labour from the interior at very low prices. The weakness of labour unions in both these countries will – combined with the other factors on this list – automatically lead to wage pressures in Europe. The efforts needed, and the bottlenecks that will appear, in order to upgrade the Chinese workforce fast enough will be a factor working in the other direction, in favour of a better European wage level.

In this situation both businesses and macroeconomic variables may be doing very well, but not the nations' inhabitants. Germany, for instance, is now getting into the situation of profitable businesses, jobless growth, and falling real wages. This is the same pattern of 'jobless growth' that for a long time has been typical of Latin America.

7. Conclusion: A plea for the return to Continental European economics.

As Paul Krugman says, there are periods when old economic wisdom is unlearned and has to be rediscovered (Krugman 1996). Or as John Stuart Mill expresses it, much stronger, 'It often happens that the universal beliefs of one age of mankind – **a belief from which no one was, nor without an extraordinary effort of genius and courage could at the time be free** – becomes to a subsequent age so palpable an absurdity, that the only difficulty then is to imagine how such a thing can ever have appeared credible...It looks like one of the crude fancies of childhood, instantly corrected by a word from any grown person.' (Mill 1848/1929: 3, emphasis added).

The first age of globalisation ended with a return to tariff protection. 'The Rise and Fall of the Free Trade Movement' was the appropriate title of a book published by Cambridge economist William Cunningham in 1905. Today it is clear that while the world took for granted that the factor price equalisation produced by free trade would mean an upward adjustment of real wages for all, in reality there are strong pressures the other way: for a factor-price equalisation *downwards* combined with increased unemployment. This produces a wake-up call both for the global economy and for the European economy.

'Because the private interest of each individual, *when it coincides with the public interests*, is always the safest guarantor of public happiness' says Pietro Verri (Verri 1771: 42)¹⁴ Adam Smith's followers (more than Smith himself) changed this into a system where private interests – by definition and in any context – not only coincided with the public interest, but *alone* were sufficient to create public happiness. In the 1990s it looked as if Smith

¹⁴ 'Perché l'interesse privato di ognuno quando coincide col pubblico interesse è sempre il più sicuro garante della felicità pubblica.

had been right, now it is increasingly clear that we have to modify this view.

The conclusions of the March 22 and 23, 2005, meetings of the European Council correctly and importantly state: 'Europe needs a solid industrial fabric throughout its territory' (point 15). In 1841 Friedrich List gave Continental Europe a theory on how to achieve this, how to industrialize against the fierce 'competitiveness' of England. As already said in section 3 of this paper, the tools, goals and formulas created by List were followed loyally until and including the successful integration of Spain and Portugal into the European Union. Friedrich List told us that symmetrical integration, by industrialized nations where everyone's industrial structure survived, would be beneficial to all parties, a *win-win* situation.¹⁵ Today Europe has created a situation which to many of its inhabitants, both in the old and new member states, appears as a *lose-lose* situation. As I see it, these are problems that will require the resurrection of some of the recently abolished tools from the policy toolbox, together with the factually based continental economic theories that created them.

Joseph Schumpeter provides a description of this type of economics, when he contrasts the work of German economist Johann Heinrich Gottlob von Justi (1717-1771) with that of Adam Smith:

'He (Justi) saw the practical argument for laissez-faire not less clearly than did A. Smith, and his bureaucracy, while guiding and helping when necessary, was always ready to efface itself when no guidance or help seemed needed. (Schumpeter's footnote here: 'This was not merely a dream. It will be pointed out below that the bureaucracy in the typical German principality actually tried to behave like this'). Only he saw much more clearly than did the latter all the obstacles that stood in the way of its working according to design. Also, he was much more concerned than A. Smith with the practical problems of government action in the short-run vicissitudes of his time and country, and with particular difficulties in which private initiative fails or would have failed under the conditions of German industry of his time. His laissez-faire was a laissez-faire plus watchfulness, his private-enterprise economy a machine that was logically automated but exposed to breakdowns and hitches which his government was ready to mend. For instance, he accepted as a matter of course that the introduction of labour-saving machinery would cause unemployment: but this was no argu-

¹⁵ Today also advanced services play a very important part. These services, however, seem to depend on the demand from a strong industrial sector.

ment against the mechanization of production because, also as a matter of course, *his* government would find equally good employment for the unemployed. This, however, is not inconsistency, but sense. And to us who are apt to agree with him much more than we do with A. Smith, his (Justi's) vision of economic policy might look like *laissez-faire* with the nonsense left out.'

In the 1840s the economic wisdom of Verri, Justi and their contemporaries had been replaced by Ricardian economics where the market was seen as producing harmony. Contrary to the predictions of Ricardian economics, what was then called 'the social question' shattered Europe and led to revolutions in all large European countries with the exception of England and Russia. However, Marx' spectre of communism sparked economic reform, where the *Verein für Sozialpolitik*, literary the Association for Social Policy,¹⁶ produced economic and social institutions that created the European welfare state. Gustav Schmoller, quoted above, took the leadership of the *Verein* from the start in 1872. Chancellor Bismarck's support of this line of economic research was key to its success.

Following the 1848 upheavals, timely fact-based, context-specific and problem-oriented economics – rather than Ricardo's assumption-based, context-free and highly abstract theories – chased away the 'spectre of communism' and laid the foundations for democratic social market economies. As Keynes wisely said, the real issue was 'not one between collectivism and *laissez-faire*, but between targeted state action and a socialism which was out of date and contrary to human nature'.

In this long term perspective, however, today's political situation in Europe carries with it a strong sense of *déjà vu*. The August 22 (2005) cover of the influential German newsmagazine *Der Spiegel* shows a portrait of Karl Marx making a 'V' sign for Victory, accompanied by the text 'A spectre returns. The new power of the left'¹⁷ Again Europe seems to be squeezed between two extreme economic models as in the 1840s, extreme liberalism and Marxism. It appears we may be doomed to repeat conflicts that we had previously managed to solve. One important reason for this retrogression is that the triumphalism following the fall of the Berlin Wall made us collectively forget the wise targeted state actions that modified the pure market economy. If communism failed, so Europe seems to have reasoned in the 1990s, the market had to be perfect. Based on this the 2004 enlargement was agreed.

¹⁶ Active from 1872 to 1932.

¹⁷ 'Ein Gespenst kehrt zurück. Die neue Macht der Linken'

The European mood carries with it an element of what Albert Hirschman – in a Latin American context – referred to as *fracasomanía*, a failure complex amongst the leadership who are convinced that everything is going wrong (Hirschman 1970). This gloom is particularly well represented in Germany (Steingart 2004, Prantl 2005, Sinn 2005), with the scattered analyst actually re-inventing Hirschman's point (Schumacher 2005). Compared to the rest of the world, many things are not really that bad. If we compare European productivity data compared to those of the United States and correct for the hours worked, we find that European productivity is in fact doing well. The biggest problem is self-inflicted: the downward pressure on real wages and the welfare system in 'old Europe' coupled with extremely low real wages and huge un- and underemployment in the new member states. These problems are two sides of the same coin. A widely proclaimed success story in the new member states, Estonia's electronic industry, produces hourly wages of about 1 Euro, only 10 per cent of the earnings of someone sweeping the streets of Paris or Frankfurt. Tensions are too big and the number of people involved is too high for the market alone to create a happy end. In fact what is missing is old fashioned *Staatsklugheit*, or experience-based wisdom among the political elites.

The present situation of Europe requires more than the Lisbon Strategy's list of good intentions focusing around innovations, it needs to bring back economic thinking and economic tools that had been abandoned with the 1990s. This includes bringing back the earlier focus on employment that dominated the period after World War II. It also means a qualitatively much more profound and differentiated analysis of technology and innovations and their economic consequences on both wages and employment, at company, national and community levels. Furthermore, studying the phenomena that create the economic differences that now haunt Europe is not meaningfully carried out in a framework of equilibrium theory. The now virtually defunct continental European tradition of economics is much better suited to such a task. Above all, the discussion of the Lisbon Strategy must be lifted out of the generic and context-free and into a context where present problems, many of them created by the shock therapies of the 1990s, are recognised as being real challenges.

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