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# Chapter 1 The Terrible Simplifiers: Common Origins of Financial Crises and Persistent Poverty in Economic Theory and the New '1848 Moment'

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... soon or late, it is ideas, not vested interests, which are dangerous for good or evil.

John Maynard Keynes, closing words of The General Theory (1936)

The United Nations recently announced that the number of chronically hungry people on the planet has exceeded the billion mark for the first time. It is extremely unlikely that any of them will ever hold a Swiss 1,000 franc banknote (worth more than 900 dollars), but if they did, they would see the portrait of a man who perceived the essence of the explanation as to why extreme poverty and extreme plenty coexist so naturally on this planet, and of the grim fate of the permanently starving—Swiss historian Jacob Burckhardt (1818–1897). Burckhardt coined the term 'the terrible simplifiers' to describe the demagogues who—in his dark vision of what the 20th century would bring—would play central roles in the future (Dru 2001: 230). Events amply fulfilled Burckhardt's predictions of a cataclysmic 20th century, of the rule of terrible simplifiers, men who were Burckhardt's colleagues at the University of Basel, Friedrich Nietzsche, called power-maniacs (*Gewaltmenschen*), and John Maynard Keynes referred to in 1936 as 'madmen in authority'.

A key common element in persistent world poverty and in the financial and (real) economic crisis is the 'terrible simplification'—a theoretical overshooting into irrelevant abstractions—that has taken place in economic theory after World War II. As unlikely as it may initially sound, I shall endeavour to explain in this paper how—in spite of its apparent sophistication—equilibrium economics became 'mathematized demagoguery' based on an extremely simplistic world view. Joseph Schumpeter's solution to the late 19th century

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Methodenstreit ('battle of methods') of economics had pointed in a very different direction, arguing that the profession needed to have theories at different levels of abstraction. According to the problem posed and the question asked, one should be able to enter the edifice of economic theory at a level of abstraction where one was likely to find an answer (Schumpeter 1908). After World War II, economics experienced the opposite development: only very abstract theory survived. In this process, the main causes of uneven development as well as the cause of financial crises were assumed away from the theoretical edifice. The financial crisis appears to have created a turning point. The July 18, 2009 edition of *The Economist*—normally a weekly that strongly supports mainstream economic theory—portrays the crisis in economic theory on its front cover with a book entitled 'Modern Economic Theory' experiencing a meltdown like an ice-cream abandoned on the beach on a hot summer's day, with the subtitle: 'Where it went wrong—and how the crisis is changing it'.

# Where Economics went Wrong: On Abstraction vs. Simplification

All theories depend on abstractions. When we use the word 'leaf'—like leaves on a tree—we are making a sweeping generalization by implicitly overlooking the enormous differences that exist among various types of leaves. However, opening the theoretical box labelled 'leaf', we find that botanical science has produced a very detailed classification system for leaves: sword-shaped (ensiformis), lance-shaped (lanceolata), ovate (ovata), elliptic (elliptica), cordate (cordata), oblanceolate (oblanceolata), etc. Most people eating blackberries would be satisfied with recognizing just one species (Rubus fruticosus), but in my country (Norway) alone, botanists distinguish among a large number of species, for which the main distinguishing factor is the shape of the leaves (Rubus plicatus, fissus, sulcatus, radula, etc.). The apparent simplification of using the word 'leaf' is a justified abstraction, not a terrible simplification, because—in the spirit of Schumpeter (1908)—it is possible to arrive at a qualitative understanding of leaves through a taxonomy (a classification system) for leaves that exists on a multiplicity of levels, down to a level of detail that far exceeds most people's needs.

In botany, opening the very abstract box called 'leaf', we find a very complete taxonomy at different levels of abstraction. If we pry open most of the theoretical abstractions in economics, we shall find that even these static boxes are empty. Economics hardly contains any taxonomies; in fact, the

most salient feature of economics as a science is the 'equality assumption'; the economic mainstream effectively assumes away all differences among human beings, among economic activities and among nations. One classic example of this is the concept of the 'representative firm', which equates the giant firm Microsoft with a twelve-year-old self-employed shoeshine boy in a Lima slum (Reinert 2007).

Assuming that qualitative differences do not exist—as does mainstream economics in key areas—is a terrible simplification that has extremely serious consequences in terms of lost human welfare. We can only understand why medical doctors make more money than truck drivers if we are willing to observe the differences between the two professions. In parallel fashion, we can only understand the difference in wealth between the United States and Africa by qualitatively understanding the huge differences in the productive structures of the two areas.

The roots of this problem are already found in Adam Smith's Wealth of Nations (1776), where the author bundled all manufacturing, all agriculture and all trade—all human economic activity—into one single category: labour hours. I have previously explained how Adam Smith is at his least convincing when he tries to prove to his readers that all economic activities are alike (Reinert 1999). Building on 'labour hours' as the only unit of accounting, David Ricardo (1817) constructed the labour theory of value that provided the origins of international trade theory that essentially conceived of world trade as the bartering of labour hours, void of any quality, among nations. Not even the fact that some economic activities obviously are able to absorb more capital or become more mechanized than others is accounted for.1

Economic theory is cyclical, and this paper argues that crises create turning points when theory is forced to move from a very high level of abstraction from practical irrelevance—to something more closely resembling reality, and therefore becomes more able to solve the problems facing us.

International trade theory's prediction of equalization of wages across countries is, in my view, the key terrible simplification that causes world hunger. Not only are all qualitative differences assumed away, the production process itself is also abstracted away. Assuming away unemployment, as the World Bank traditionally does in its models, only adds another dimension to the terrible simplification on which our world economic order is based. In many countries, 80 per cent of the potentially active population are unemployed or underemployed. Assuming that fact away is a terrible simplification.

Even very simple taxonomies may have strong explanatory power. If we divide human beings into just two different categories, men and women, we can explain procreation. Similarly, as Friedrich List (1841) observed, successful economic strategies have historically been based on the classifications found in King (1721), which have been the basis for all successful strategies of catching up. The core theoretical argument explaining this lies in an equally simple binary taxonomy found in a 1923 paper by US economist Frank Graham (see Appendix 1), arguing that a key point in the career of Nobel Laureate Paul Krugman was precisely the elimination of Graham's taxonomy.<sup>2</sup>

US historian Richard Goldthwaite shows the historical importance of the dichotomy between raw materials and manufacturing in a recent book: what is generally seen as Europe's 'commercial revolution', Goldthwaite argues, was in fact a process of import substitution—manufactured goods, that had previously been imported in the Levant, started to be produced in Europe from the 12th century onwards (Goldthwaite 2009, 6–8). I shall argue that this extremely important distinction—between raw materials subject to diminishing returns, monoculture and perfect competition on the one hand, and manufactured goods subject to increasing returns and a large division of labour on the other—was lost in the post-WW II period. Only nations that continued their industrialization strategies—like India and China, starting from the late 1940s—have been successful during the latest process of globalization. If India and China are removed from the sample, globalization is a shambles, even more so in terms of real wages than in terms of GDP per capita (because wages as a percentage of GDP have been reduced across the board).

Today's mainstream economics, I would argue, has lost not only a key feature of the Enlightenment—making order by producing classification systems (taxonomies)—but also the key feature of the Renaissance that preceded the Enlightenment: the immense creativity and innovations, in all aspects of human life, unleashed during that period. Economics lost what Nietzsche refers to as 'capital of will and spirit' (*Geist- und Willens-Kapital*). Our qualitative understanding ('verstehen' in German philosophy) was crowded out by a more mechanical form of understanding (see Drechsler 2004 for a discussion). In this way, the process of economic development became reduced to a process of adding capital to labour in a quasi-mechanical fashion, much like adding water to soluble coffee. By neglecting the differences between economic activities, economics was not able to break the core of the vicious circles that keep poor countries poor, the mutually reinforcing lack of purchasing power and lack of employment (see Kattel, Kregel and Reinert 2009).

The accuracy so admired by today's economists has been achieved at the cost of eliminating diversity, of having produced concepts that are empty boxes and of having embraced what Nobel Laureate James Buchanan (1979: 236) calls 'the equality assumption'. At the core of our world economic order lie the terrible simplifications of international trade theory. Assuming perfect information (i.e.

that all know the same) and constant returns to scale for all ranges of output for all goods (i.e. no fixed costs), and assuming that all goods are private, there is no reason why there should be any trade at all (except in raw materials, for reasons of climate and geography). In its most simple form, the theory that regulates international trade is based on assumptions that mimic conditions which would not produce any division of labour or any trade. It describes a world in which every human being would be a self-sufficient microcosm. The WTO and our world order are based on theories that are, at their very core, fairly simplistic banalities wrapped in an appearance of 'science'.

### RECONSTRUCTING RELEVANT ECONOMICS

I foresee that within the next ten or twenty years the now fashionable highly abstract analysis of conventional economists will lose out. Though its logical base is weak—it is founded on utterly unrealistic, poorly scrutinized, and rarely even explicitly stated assumptions—its decline will mainly be an outcome of the tremendous changes which, with crushing weight, are falling upon us

(Gunnar Myrdal, Swedish development economist)

This quotation from Nobel Laureate Gunnar Myrdal dates from 1956. This chapter argues that Myrdal was wrong only about timing. The process he describes is happening now, because only now—with the worldwide financial crisis—is it possible to see the basic weaknesses of standard textbook economics as they relate to the financial crisis and to persistent poverty in the Third World.

In his 1952 book, The Counterrevolution of Science: Studies in the Abuse of Reason, Austrian economist Friedrich von Hayek (1899-1992) states that 'never will man penetrate deeper into error than when he is continuing on a road which has led him to great success'. Hayek pictures a process of scientific decay that grows out of the excesses that follow from the very success of a particular set of ideas. Twenty-two years later, after having shared the Nobel Prize with the same Gunnar Myrdal, we find Hayek arguing along the same lines. Had he been consulted as to whether to establish a Nobel Prize in economics, Hayek says in his Nobel dinner speech, 'I should have decidedly advised against it'. Hayek's main argument against awarding a Nobel Prize in economics was that such a prize 'would tend to accentuate the swings of scientific fashion'. Economics differs from other sciences, Hayek notes.

Following Kuhn (1970), the idea of changes in scientific research agendas—or paradigms—became common knowledge. Science occasionally makes radical breaks. But economics is different from the hard sciences in that, through the mechanisms described by Hayek, the paradigm decays by overshooting into irrelevance (Reinert 2000), and the need for correction is perceived and carried out. But, here also, economics differs from other sciences. Once it has been understood that the world is not flat, but round, the idea of a flat earth never comes back. In economics however, the paradigmatic overshooting into excesses—as described by Hayek—brings back theoretical elements that had previously been present, but were later discarded.

The theoretical overshooting, then, is caused by making economics gradually excessively abstract, which eventually necessarily creates a counterreaction. Economics as a science thus oscillates cyclically over time between very abstract theory, as the theory ruling from the stagflation of the 1970s until the 2008 financial crisis, and less abstract theory.

The 2008 financial crisis and the failure to eradicate poverty in the Third World are both results from the kind of overshooting—political and ideological—explained by Hayek. The financial crisis and persistent poverty, I argue, are both the result of a theory that got too abstract and became fascinated with tools and methods that failed to take into account extremely important aspects of economic reality. After the financial crisis, everyone says 'We are all Keynesians now'. Both in the case of the financial crisis and in terms of advice to poor countries in the economic periphery, it is time to resurrect the thinking of John Maynard Keynes.

Financial crises make it clear that markets, if left to themselves without regulation, do not produce economic harmony. Harmony is the result of wise regulations. Such crises open people's eyes to the fact that the same principles of potential market-made disharmony also apply to the markets for goods and services. Also in trade policies economic harmony is a result of wise regulations. After the 1847 financial crisis, John Stuart Mill recanted David Ricardo's trade theory. John Maynard Keynes also tells us how he changed his mind about the same free trade theory—which, in the meantime, had come back into fashion—around the time of the 1929 crisis. Both Mill and Keynes saw that poor countries need an increasing returns sector, i.e. an industrial sector, in order to become wealthy.

The financial crisis in 1847 triggered a dramatic shift in economics starting in 1848. 'If you went to sleep in 1846 and woke in 1850 you would wake into a different world' wrote an English university professor in his memoirs (Reeves 2007: 202). This paper argues that we are now facing a very similar

situation: an '1848 Moment' when the economy is seen in a new light, less abstract and more firmly based on empirical observations.

# ECONOMICS ABSTRACTED FROM PRODUCTION: THE COMMON ELEMENT IN FINANCIAL CRISES AND PERSISTENT POVERTY

What unites the failure to understand that a financial crisis was coming and persistent poverty in the Third World is an economic theory at a level of abstraction where production is left out, a theory where the world economy is perceived as stock markets and freight terminals. In reality, markets and trade are mere complements of an incredibly complex global system of production. By focusing on stock exchanges and trade, the complexities of world production have essentially been left out of economic theory. In the case of the financial crisis, the blind spot was the inability to see the separation of financial economy from the real economy of production of goods and services, and how the uncontrolled growth of the former could, in the end, destroy the latter. This separation was clear to the main economists who contributed to our understanding of financial crises in the past: Thorstein Veblen, Joseph Schumpeter and John Maynard Keynes. In the case of persistent poverty, the parallel blind spot is the unwillingness to face up to the overwhelming historical proof that middle-income and rich nations can only be built on a large division of labour in the presence of increasing returns. In both cases the core of the problem is a failure to qualitatively understand the productive sector of nations.

As we have seen, the roots of this problem go far back to when Adam Smith bundled production and trade together as 'labour hours' and David Ricardo—and especially his later followers—produced a theory of international trade representing the world economy by bartering labour hours. The parallel in the financial sector is that David Ricardo also forgot to create 'money' as a separate category. Economic theory based on such abstraction created blind spots on the collective retina of economists, and the illusion of markets guaranteeing a harmony. Economists modelled a dam: a system automatically seeking equilibrium when disturbed. The financial crisis and persistent poverty in the Third World amidst a world of plenty expose the fundamental flaws of a science based on the metaphor of equilibrium.

This illusion of guaranteed harmony has undermined the productive capacities of poor countries in the world periphery just as it has undermined world financial markets, and huge rescue operations—paralleling those in financial markets—need to be launched to rebuild the productive sectors in poor countries. The blind spots and faulty reasoning behind the profession's misreading of both problems—financial crises and persistent poverty—are closely related. Therefore, the same economists—e.g. Keynes—who understand financial crises also understand why mainstream economics fails to correct persistent poverty in the periphery.

Several key failures of current academic economics are common to both financial crises and persistent poverty in the world periphery:

- 1. Not separating the sphere of money, or the financial economy (Schumpeter's *Rechenpfennige* or 'accounting units'), from the real economy of goods and services (Schumpeter's *Güterwelt*). Not distinguishing between the two spheres of the economy, neoclassical economists (as opposed to, say, traditional continental European economists) were blind to the possibility of a financial crisis. For the same reason, neoclassical development economics attempted to solve the problems of poverty by transferring capital rather than by addressing the problems of the productive sectors in poor countries.
- 2. Not keeping an eye on a nation's productive structure as its economic core, focusing on finance rather than on the impact of finance on the real economy. In normal times, the financial sector serves as scaffolding for the real economy. Financial crises begin when the financial sector starts making money in ways that do not help the real economy, when banks enter into loan agreements that are so risky that the borrowers are not even able to pay interest on their loans: Ponzi financing (Minsky 1990). Unsustainable financial pyramid schemes fill financial markets with 'toxic assets', liquidity is withdrawn, and financial crisis occurs.
- 3. Not recognizing that a functioning capitalism requires investments to be made in potentially profitable ventures, not in Ponzi schemes. From this point of view, subprime lending and, to a large extent, lending to the Third World, were both Ponzi schemes: loans made to people and nations that could not reasonably be expected to have a cash-flow that would even cover the interest on loans they were given (Kregel 2004). Here, Kregel makes an extremely important point: The Myrdalian 'perverse backwashes'— that more funds tend to flow from poor to rich countries rather than the other way around (Myrdal 1956)—can be explained by the same Minsky mechanisms that explain the current financial crisis. The current lack of industrial policy in poor countries makes it impossible to generate sufficient industrial rents to make investments profitable (see Cimoli, Dosi and Stiglitz [eds] 2009).

The financial crisis showed us that Hyman Minsky was right in describing and predicting 'financial fragility'. Something apparently very solid, like the global financial system, in reality proved to be very fragile. As the crisis develops we are experiencing other economic fragilities as well: poor countries are increasingly experiencing 'wage fragility' in productive systems (as an example public sector wages in Latvia were cut by 25 per cent in early 2009). If vicious circles of decreasing wages, decreasing demand and decreasing tax bases are allowed to continue as they presently do in the periphery, we may experience increased 'livelihood fragility' there: physical survival may be increasingly threatened. In wealthy countries the influx of poor labour is already starting to produce 'technological fragility': a much lower cost of labour eliminates the incentives for expensive mechanization and we may experience a degree of 'primitivization' of developed economies.

Carlota Perez (2002) argues that major booms and busts always result from projecting the real success of fundamental technological breakthroughs on to other projects which lack this characteristic. When US Leather wished to be valued as US Steel, and when Parmalat tried to do to milk or Enron to energy what Bill Gates had done to computing, and markets were willing to believe the story, the road to fraud was short.

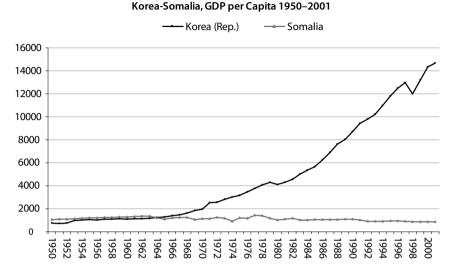
# THE CHALLENGE: RELEARNING THE ART OF CREATING MIDDLE-INCOME COUNTRIES

Until 1964, the Republic of Korea was poorer than Somalia. Figure 1.1 shows how Korea started an impressive growth spurt while Somalia got gradually poorer. This happened because Korea consciously changed its comparative advantage in international trade from products subject to diminishing returns (raw materials) to increasing returns (manufactured goods and advanced services). In this way, Korea escaped from the poverty trap explained in Frank Graham's classic 1923 article 'Some Aspects of Protection Further Considered' (see Appendix 1).

Why are there so few middle-income countries? Why do countries tend to cluster in two convergence groups, developed and 'underdeveloped'? Why is it so difficult to create national economies that are half way between Somalia and Korea on Figure 1.1?

Figure 1.1:

Comparing economic development in Somalia and Korea



Source: Reinert, Amaïzo and Kattel (2009)

This paper argues that our inability to create middle-income countries is a result of 'terrible simplifications' resulting from destabilizing stability, as described by Minsky, from 'theoretical overshooting' in Hayek's sense. The policy recommendations resulting from this theoretical overshooting have made the creation of new middle-income countries virtually impossible. A middle-income nation has an increasing returns (industrial) sector which, for a while, is not yet competitive on world markets. Opening to free trade was supposed to even out world incomes. The WTO's first Director-General, Renato Ruggieri, declared that we should unleash 'the borderless economy's potential to equalise relations among countries and regions'. Instead, this process ended up killing the incipient industrial sectors in poor countries, lowering real wages. The belief that the market, left to itself, guarantees harmony was at the core of the Washington Consensus ideology of the International Monetary Fund (IMF) and the World Bank.

### THE FAILURE OF NEOLIBERAL DEVELOPMENT POLICY

Until the mid-1970s, development economics was based on the notion that a middle-income country is a country with the same type of economic structure—a large manufacturing sector—as a rich country. It was understood that for a variety of reasons—among them market size, technological sophistication, relatively high price of capital relative to labour, etc.—the industrial sector

of a poor country would need a lot of time before it would be strong enough to face competition from wealthier countries. This period of 'infant industry protection'—as John Stuart Mill called it—is comparable to the many years amazon.com operated its business with great losses. Slowly industrializing a nation represents the same kind of trade-off between present costs and greater returns (e.g. wages) in the future. In the meantime the poor country would earn scarce foreign exchange from the export of commodities. For developing countries, customs duties tend to provide a large share of government revenue, and because ports were relatively easy to control, even weak governments could easily secure this revenue (e.g. compared to a value added tax).

As already alluded to, if China and India are separated from the rest of the developing world the development record over the last 35 years has been poor in most developing countries. China and India have based their national development on continuing their industrialization efforts<sup>5</sup> started around 1950 (Nayyar 2007). In no way can these countries be considered showcases of the neoliberal policies propagated by the Washington Consensus. On the contrary, they followed the policy advice of Friedrich List (1841) that industrialized Continental Europe and the United States: industrializing and then slowly 'opening up' borders. China and India may have allowed too little competition for too long, and may have opened up late, but these are small mistakes compared to the policy errors of the Washington Consensus responsible for the deindustrialization of so many developing countries in the periphery.

The term creative destruction, inspired by Joseph Schumpeter, has grown increasingly popular, and is sometimes used to justify all kinds of changes.<sup>6</sup> However, destruction and creativity may take place in different parts of the globe, as when the textile mills of Manchester replaced the weavers of Bengal during the first Industrial Revolution. This paper argues that trade liberalization divided the Third World into two groups: (1) those—like India and China—that pursued industrialization for more than 50 years and benefited from access to the world market, and (2) those countries where industrialization was too weak to survive, the synergies of industrialization were put in reverse, and the economies deindustrialized and thus became primitivized (Reinert 2007: Chapter 5).

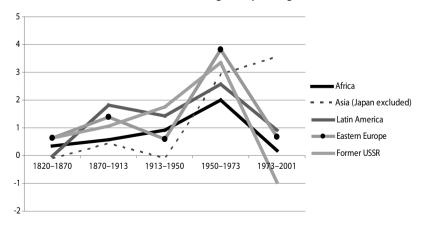
Early economic writers repeated again and again that all wealthy nations had one important thing in common: a large number of different manufacturing industries all subject to increasing returns (Reinert 2009a). It has been common knowledge since the 1400s that a wealthy city was created by a 'common weal', a ben commune. The first author to pinpoint increasing returns and diversified manufacturing as the key to wealth creation was the Italian economist, Antonio Serra, who in 1613 explained why Venice, virtually void of natural resources, was so rich, while his own Naples, rich in natural resources, was so poor. Without increasing returns, there was no dynamic capitalism, a very limited division of labour, and no high wages. From this perspective, colonialism involves a technology policy preventing increasing returns activities from being established in the colonies (Reinert 2007).

Serra's 1613 treatise argued that increasing returns was at the core of the wealthproducing mechanisms in each of these many different activities. Maximizing the division of labour was at the core of any policy of 'good government' (S. Reinert 2010). A large number of activities subject to increasing returns was the key to national wealth, and-most importantly-middle-income nations were those where the same type of activities and the same large division of labour were present, but in a system slightly less efficient than in those of the world leaders. A slightly less efficient manufacturing and service nation was much wealthier than the most efficient producers of raw materials (subject to diminishing returns). To make a comparison appealing to the readers' intuition: it is much better to be a mediocre lawyer than to be the world's most efficient cotton-picker. This is the principle upon which all successful industrial policy has been built from Henry VII came to power in England in 1485 until the post-WW II Marshall Plan in Europe. It has been articulated by classical development economics, but undermined by the Washington Consensus. The rest of this section shows the mechanisms with which the Washington Consensus policies have *primitivized* the periphery.

Figure 1.2 shows how rates of economic development improved and peaked at the height of classical development economics in the mid-1970s. Only East Asia, with its recent tradition of industrial policy, has managed to keep up the positive trend.

Figure 1.2:

Growth rate of GDP per capita of selected world regions; regional average in selected periods between 1820 and 2001; annual average compound growth rate



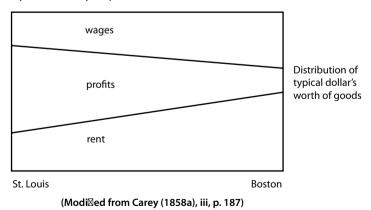
Source: Kattel, Kregel and Reinert (2009). Original data from Maddisson (2003)

Figure 1.2 shows the dismal performance of neoliberal development policies that came into effect starting in the late 1970s, when debt crises in the Third World forced Third World countries to open up abruptly. Deindustrialization was the price paid for being saved by the IMF and the World Bank.<sup>7</sup>

# Increasing Returns and Synergies: Their Creation and their Destruction

In many ways, the United States can be seen as the prototype successful developmental state. After US independence, the Continental European understanding of development as synergies among a large number of increasing returns industries was retrieved from European literature and rediscovered by US economists. These economists insisted that the United States, in spite of its abundance of natural resources and obvious comparative advantage in agriculture, would grow poor without manufacturing industry (Hamilton 1791; Raymond 1820; M. Carey 1822). Later, along the same lines of reasoning, Henry Carey (1793– 1879) insisted that trading too much with Britain would preclude the United States from enjoying the bounties of future technological change. Carey also devised what he called a 'commodity map', which illustrates how the presence of a manufacturing sector changes the way income is distributed within a nation. Carey's map, which could also have been called a 'development synergy' map, is an illustration of the centuries-old observation of the effects of a manufacturing sector. Today, the map can be used to explain the mechanisms by which Washington Consensus policies increased poverty in the world periphery.

Figure 1.3: Henry Carey's 'commodity map' (1858)



Source: Perelman (2002: 90)

Figure 1.3 represents the breakdown of a typical dollar's worth of goods, i.e. a proxy for what we would call output or GDP. The height of the graph represents 100 per cent of GDP. Carey shows how different the composition of GDP was in the developed East compared to the undeveloped West of the United States at the time; the graph indicates how the composition of output changes as one moves gradually from Boston to St. Louis—from right to left in the figure—or vice versa. Economic development—increasing the division of labour and manufacturing—is represented by moving east from St. Louis, Missouri towards Boston. Poverty and backwardness grow as one moves west from Boston to St. Louis. St. Louis thus represents the situation in the undeveloped world or periphery today. Here, raw materials—e.g. cotton or cattle—are produced; land is abundant and cheap, labour is unskilled and cheap, tasks are simple and the division of labour is limited. Under such conditions, Carey says, profits take up a large share of the GDP.

The East, Boston, represents today's developed world with a large division of labour that adds a lot of value to a raw materials base. In the East, in contrast to the underdeveloped West, a multitude of workers combine their efforts within a complex social division of labour to work raw materials into ever more sophisticated products. More skills are required, increasing returns create higher profits and higher barriers to entry. Here, wages and rents form a much larger portion of the value of products, while profits shrink to a smaller percentage of GDP.

If a nation should move over time from Boston to St. Louis, that means undoing the synergies of development, reversing the critical mass that creates wealth, in a sense travelling from capitalism back in time towards something resembling feudalism. This more than 150 year old graph shows how Washington Consensus policies that started in the late 1970s have produced the same regressive effect as Henry Carey claims moving from Boston to St. Louis would have done in 1858: wages as a percentage of GDP sank slowly, while rents and profits—the FIRE sector: finance, insurance and real estate—grew correspondingly.

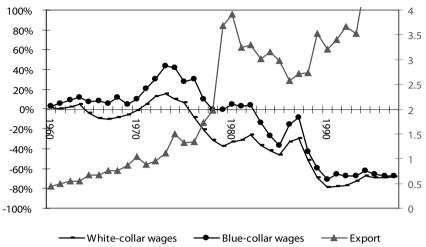
'Market failure' is a term often used when actual developments fail to behave the way economic theory would predict. Cimoli, Dosi and Stiglitz (2009) acknowledge that 'market failure' is not a useful way to approach the problem of poverty. In fact, from a Schumpeterian angle, what we generally refer to as 'development' is, in fact, a 'market failure' compared to the standard neoclassical model assuming perfect competition and diminishing returns. What all developed countries have in common is a large increasing returns sector that has created huge barriers to entry, imperfect competition,

and a 'rent' that has been divided among capitalists (high profits), labour (high wages) and the government sector (larger tax base) (Reinert 2009a). In this section, we shall see how the policies of the Washington institutions led to the destruction of these industrial rents, and to huge falls in real wages. The shock therapies of the Washington institutions—instant free trade and 'structural adjustments'—sent poor countries, whose industrial sectors were not yet competitive on the world market, 'from Boston to St. Louis' in Carey's scheme.

Looking at the example of Peru since 1950, waves of industrialization and deindustrialization have been associated with fluctuations in living standards. The standard of living of the population has been inversely related to the weight of the primary sector in the total economy. During the period 1950-1997, a one percentage point decrease in manufacturing as a share of GDP led to a fall in white-collar wages by 5.4 per cent, and a fall in bluecollar wages by 7.5 per cent. Conversely, when manufacturing increased by one percentage point in total GDP, white-collar and blue-collar real wages increased by 10.6 and 15.5 per cent respectively (Roca and Simabuko 2004). Going back to Carey's map, we can conclude that every time manufacturing increased as a percentage of GDP, this corresponding to 'moving east' on the Carey map: wages went up. Every time the manufacturing sector shrank, it corresponded to 'moving west' on the Carey map: wages went down.

Figure 1.4 shows how real wages in Peru peaked in the mid-1970s when the country did everything 'wrong' according to the Washington Consensus. Peruvian industry was kept up by high tariffs and represented a 'bad' form of protection. Industrialization was 'artificial', but the wages, roads, schools and hospitals created by this industrialization were all real. It is also important to see how exports took off and made the country look very successful while real wages were plummeting at the same time. The Washington Consensus shock therapy hit Peru on two fronts simultaneously—with deindustrialization plus downsizing the public sector. By killing off the two sectors with strong union power—one private, one public—the whole national wage level collapsed. This was accompanied by a rapid fall in the terms of trade (Reinert 2007: Figure 15).

Figure 1.4: Industrialization, deindustrialization and real wages in Peru



Source: Reinert (2007)

Peruvian wage levels fell much faster than GDP, as the composition of Peruvian GDP changed. Figure 1.5 shows how dramatic this change was. At the height of industrialization in Peru in 1972, wages amounted to 51.2 per cent of GDP and the income of the self-employed was 26.5 per cent, a total of 77.7 per cent of GDP. Figure 1.5 shows how wages, salaries and the income of the self-employed shrank rapidly as the country prematurely opened up to free trade. In 1990, the last year the Peruvian central bank provided a breakdown of GDP in this way, the share of wages in GDP had been almost halved to 26.5 per cent, and the share of the income of the self-employed had fallen to 15.9 per cent. In total, the wages, salaries and the income of the self-employed as a share of GDP had shrunk by 45 per cent—from 77.7 to 42.4 per cent of GDP—as a result of Washington Consensus policies from the mid-1970s to 1990. The 'national industrial rent' had been destroyed, with devastating consequences for real wages that had been more than halved in real terms.

Rapid trade liberalization led to rapidly falling real wages, worsening income distribution and primitivization of the economy back to a more feudal structure, corresponding to a voyage from developed Boston to underdeveloped St. Louis in Henry Carey's model. This underscores why a poor nation is much better off with a relatively inefficient manufacturing sector than with no manufacturing sector at all. I have argued that successful economic policy has been based on a 'cult of manufacturing' before introducing free trade since the late 1400s (Reinert 2007). Occasionally—as just before the French Revolution (1789), just before

100% 90% 80% 70% □ PROFITS 60% ■ MUNICIPAL TAX 50% ■ SELF-EMPLOYED 40% ■ WAGES 30% 20% 10% 0% 1950 1955 1960 1965 1970 1975 1980 1985 1990

Figure 1.5:

Peru: Deindustrialization and falling wages as a share of GDP, 1950–1990

Legend, from top, pro\( \text{\textit{M}}\)ts, pre-dial (tax), income of the self-employed, wages.

Source: \( \text{Banco Central de Reserva del Per\( \text{\text{i}}\) Breakdown of GDP by source has not been published after 1990.

1848, and after the stagflation of the 1970s—theoretical 'overshooting' based on excessively abstract models has led to this understanding being abandoned. In all three cases the result has been seriously worsening social conditions for the poor. Just before the French Revolution free trade in grain had led to a shortage of bread in Paris. The Storming of the Bastille, marking the start of the Revolution, was triggered when news of the dismissal of the last antiphysiocrat (anti-free trader) Jacques Necker as Minister of Finance reached Paris. Just as in 1848—which will be discussed in the concluding section of the paper—ill-timed free trade was seen as a source of human suffering. Free trade may come into conflict with the right to food, as French economist Simon Linguet (1736–1794) argued.

John Maynard Keynes was not only right about financial crises, but his advice to poor peripheral countries, in the early 1930s, should be given to poor countries today, adapted to the current technological context of course. Following the first period of globalization, Keynes recommended a certain measure of deglobalization in order to promote peace:

I sympathize, therefore, with those who would minimize, rather than with those who would maximize, economic entanglement among nations. Ideas, knowledge, science, hospitality, travel—these are the things which should of their nature be international. But let goods be

homespun whenever it is reasonably and conveniently possible, and, above all, let finance be primarily national. Yet, at the same time, those who seek to disembarrass a country of its entanglements should be very slow and wary. It should not be a matter of tearing up roots but of slowly training a plant to grow in a different direction.

For these strong reasons, therefore, I am inclined to the belief that, after the transition is accomplished, a greater measure of national self-sufficiency and economic isolation among countries than existed in 1914 may tend to serve the cause of peace, rather than otherwise. At any rate, the age of economic internationalism was not particularly successful in avoiding war; and if its friends retort, that the imperfection of its success never gave it a fair chance, it is reasonable to point out that a greater success is scarcely probable in the coming years (Keynes 1933 in Keynes 1972).

In the same paper, Keynes tells us how his view of free trade changed:

I was brought up, like most Englishmen, to respect free trade not only as an economic doctrine which a rational and instructed person could not doubt, but almost as a part of the moral law. I regarded ordinary departures from it as being at the same time an imbecility and an outrage. I thought England's unshakable free trade convictions, maintained for nearly a hundred years, to be both the explanation before man and the justification before Heaven of her economic supremacy. As lately as 1923 I was writing that free trade was based on fundamental 'truths' which, stated with their due qualifications, no one can dispute who is capable of understanding the meaning of the words.

It is my conviction that a new generation—particularly in the Third World—soon will come to look at late 20th century truths in the same way Keynes looked at those of the 19th century: 'It is astonishing what a bundle of obsolete habiliments one's mind drags round even after the centre of consciousness has been shifted'. As long as financial crises only hit the periphery, the blame could be put on the peripheral countries themselves, not on the economic system: the Asian Crisis was blamed on 'Asian values' and 'crony capitalism'. Now, when the crisis has hit the core nations, we may see a shift in the centre of consciousness as regards economic realities in the developed world. The risk is, however, that policies towards the Third World may continue to be guided by the same 'obsolete habiliments' inherited from Washington Consensus principles.

# CONCLUSION: TOWARDS 'AN 1848 MOMENT' WHEN EMPIRICAL KNOWLEDGE MATTERS AGAIN

'You don't get dramatic change, or reform, or action unless there is a crisis', then US Treasury Secretary Henry Paulson recently said, commenting on the financial crisis (New York Times, December 26, 2008). Unfortunately, Upton Sinclair's assertion that 'It is difficult to get a man to understand something when his salary depends on his not understanding it' appears to apply both in the world of theory and practices. With the clear light of understanding, many economists' handling of the financial crisis suggests 'financial illiteracy' (Financial Times, December 24, 2008, page 1). The growing list of fragile, failing and failed states (FFFs) testifies to the fact that poor nations have long been in crisis. However, persistent, but untruthful rhetoric claiming the relative successes of China and India as a result of trade—rather than of half a century of heavy-handed industrial policy—has effectively obliterated the miserable economic performance of much of the rest of the poor world.

Financial crisis will bring reform, but the 'developmental illiteracy' that has paralleled 'financial illiteracy' also urgently needs addressing. Huge subsidies in the form of cash transfers have saved the financial cores of capitalism against their own mistakes. Now, it is time to save the true victims of the market—the world's poor—from the same type of mistakes, imposed on them by others. At the core of both problems—financial crisis and persistent poverty—is a mistaken theory claiming that markets are, by nature, harmony-creating. However, centuries of experience show that 'efficient markets' produce 'spontaneous chaos' as much as they produce 'spontaneous order'; 'destructive destruction' is perhaps as frequent an outcome as 'creative destruction'. And as Jacob Burckhardt commented to a junior colleague at the University of Basel, Friedrich Nietzsche, 'There are (or at any rate, there seem to be) absolutely destructive forces under whose hoofs no grass grows' (Burckhardt 1943: 214). Both in financial markets and international markets for goods and services, order and progress are always achieved through wise policies from a perspective that sees the market as a tool rather than as a goal.

We mentioned the French Revolution and the late 1840s as two periods when views of the market as harmony-ensuring swiftly shifted to acknowledge that markets are potentially chaos producing. However, with the theories of David Ricardo, the illusions of trade as a harmony-producing machinery came back. 1846 saw the repeal of the Corn Laws and the peak of influence of Ricardo's economic theory. A deep financial crisis in 1847 marked a turning point, followed in 1848 by revolutions in all large European countries with the exception of England and Russia.

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1848 produced three important books all critical of the economic order legitimized by Ricardian economics: Karl Marx and Friedrich Engels' Communist Manifesto (Marx was so radical that he was forced to flee Germany for England), Bruno Hildebrand's National Economics in the Present and in the Future (Hildebrand was a liberal who had to flee Germany for Switzerland in order to escape the death penalty<sup>8</sup>) and John Stuart Mill's *Principles* of Political Economy. From completely different political angles, all three books attacked the mainstream economics of the day for suffering from the same weaknesses of which we accuse today's mainstream. By attempting to make economics a much more accurate science than it merits, mainstream economics has created economic disasters: both financial crisis and poverty in the periphery. All three 1848 books understood that national wealth required industrialization, recanting Ricardo's trade theory, the very same theory which at present—in its most simplistic form—provides the basis of the world economic order that locks poor nations into a comparative advantage of being poor. Table 1.1 illustrates the kind of shift in economic focus likely to result from the current '1848 Moment' precipitated by the financial crisis.

Table 1.1:
The coming shift in economic focus: Before and After the 1848 moment

Pre-Financial Crisis Focus	Post-Financial Crisis Focus
Capital	Technology and entrepreneurship
Financial economy	Real economy
International trade	National production
Economic models	Economic facts and their contexts
Distribute capital ('aid') to eradicate poverty	Distribute production to eradicate poverty
Perfect competition	Poverty eradication needs high wages and capital formation that only dynamic imperfect competition creates
Economics strongly ideologically biased. The Washington Consensus maintained markets are good and the state is bad	Separation of analysis and ideology, 'technocratic' analysis
Economic activities qualitatively alike	Economic activities qualitatively di <b>\(\mathbb{\mathbb{M}}\)</b> erent
Gross national product per capita	Real wages
Economics as a science de\( \mathbb{M}\) ned by the use of certain tools	Economists' toolbox extended to any relevant approach
The market as an ideological goal	The market as a tool for wealth creation

John Stuart Mill—celebrated today as an important liberal (in the European sense)—acknowledged that poor nations needed manufacturing industry and recommended 'infant industry protection'. In a speech to Belgian workers in 1848, Karl Marx was pleased with Ricardo's free trade theory because premature trade liberalization would create poverty and hastening revolution. Warlords in the world periphery may appreciate free trade for the same reason Marx did: premature trade liberalization locks a nation in a pre-capitalist and backward economic structure that prevents democracy. A nation without a large division of labour and a web of increasing returns' industries is unlikely to be able to support a democratic system. Enlightenment economists and philosophers were very aware of the fact that increasing returns, industrialization and democracy go hand in hand. John Stuart Mill not only rediscovered the reasons for 'infant industry protection', but also understood that at the core of widespread poverty lies the curse of diminishing returns (compare Serra's work from 1613, Graham 1923 and Reinert 1980):

I apprehend (the elimination of this factor) to be not only an error, but the most serious one, to be found in the whole field of political economy. The question is more important and fundamental than any other; it involves the whole subject of the causes of poverty; ... and unless this one matter be thoroughly understood, it is to no purpose proceeding any further in our inquiry. (Mill 1848: 176)

Mill also describes the collective wake-up call when an inappropriate type of theory is left behind, defining the generic '1848 Moment':

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 1848/1987: 3)

The one single message in this paper is that the only way to create middleincome countries is to create countries with a large division of labour in increasing returns sectors—countries with a manufacturing sector (and advanced services). Diversification away from the primary sector and the creation of employment must be given priority before free trade. This has been the basis of all successful developmental practice since the late 1400s and of development theory since 1613. At times, this principle gets suppressed by excessively abstract economic theories—at the time of the French Revolution,

in the 1840s and since the late 1970s—but empirically-based theories eventually come back, resurrected by economic crises. The nexus that always gets rediscovered is the apparently paradoxical but crucial connection between manufacturing and wealth: that building a non-agricultural sector is the best way to eradicate poverty and famine.

An English pamphlet expresses this very clearly as early as in 1690: 'It is also remarkable, that Mechanicks prevent Famine in a Nation; this at first sight will appear a Paradox, that the multiplying of Mouths, that eat corn, whose hands sow none, should yet increase food; which matter of fact demonstrates the Truth of, notwithstanding: For whoever saw a Famine in Holland? On the Contrary, they who sow none, yet supply other parts of the World with Corn, which they effect by means of their Arts and Trade' (A Discourse 1690, 29).

The Marshall Plan following World War II was based on this same principle. The Morgenthau Plan that had been created in order to deindustrialize Germany after World War II had proved that the absence of industry also created famine in Germany in 1945–1947, as it had done throughout European history (Reinert 2004). The Marshall Plan came into being in early 1947 as this fact was recognized, thus representing yet another '1848 Moment' in the history of economic thought. The Marshall Plan was based on the exact opposite principle of the Morgenthau Plan, on the reindustrialization of Europe, and it was the most successful development plan in the history of mankind. The 1948 Havana Charter—approved by all members of the United Nations at the time—was based on the principles of John Stuart Mill and of the Marshall Plan. A blueprint for the development of peripheral economies exists in the Havana Charter, and a key factor is the timing of free trade. Policies that create and nurture increasing returns' sectors in poor countries are needed, and discussion of how and when to turn on and off will be as heated as it has always been. When successfully promoted—as in the United States—protection carries the seed of its own destruction: having achieved a certain size and skill level, protected companies themselves seek larger markets and freer trade in order to stay competitive. History does not supply easy formulas, but at least shows us some very important principles that have been ignored far too long due to the Washington Consensus.

#### REFERENCES

- Buchanan, James (1979). What Should Economists Do? Liberty Press, Indianapolis.
- Burckhardt, Jacob (1943). Reflections on History. Allen & Unwin, London.
- Carey, Henry (1858). Principles of Social Science. 3 volumes. Lippincott, New York.
- Carey, Mathew (1822). Essays on Political Economy; or, the Most Certain Means of Promoting the Wealth, Power, Resources and Happiness of Nations: Applied Particularly to the United States. H.C. Carey & I. Lea, Philadelphia.
- Cimoli, Mario, Giovanni Dosi and Joseph Stiglitz [eds] (2009). *Industrial Policies and Development: The Political Economy of Capabilities Accumulation. The Past and Future of Policies for Industrial Development*. Oxford University Press, Oxford.
- A Discourse of the necessity of encouraging mechanick industry (1690). Printed for R. Chiswell, London.
- Drechsler, Wolfgang (2004). 'Natural versus Social Sciences: on Understanding in Economics'. In Erik S. Reinert [ed.]. Globalization, Economic Development and Inequality: An Alternative Perspective. Elgar, Cheltenham: 71–87.
- Dru, Alexander [ed.] (2001). The Letters of Jacob Burckhardt. Liberty Fund, Indianapolis.
- Goldthwaite, Richard (2009). *The Economy of Renaissance Florence*. Johns Hopkins University Press, Baltimore.
- Graham, Frank (1923). 'Some Aspects of Protection Further Considered'. *Quarterly Journal of Economics* 37: 199–227.
- Hamilton, Alexander (1791). 'Report on the Subject of Manufactures'. Reprinted in Frank Taussig. [ed.]. *State Papers and Speeches on the Tariff.* Harvard University, Cambridge, MA, 1893.
- Hayek, Friedrich von (1952). The Counterrevolution of Science. Studies in the Abuse of Reason. Free Press, Glencoe, IL.
- Kattel, Rainer, Jan Kregel and Erik S. Reinert (2009). Ragnar Nurkse (1907–2007): Classical Development Economics and its Relevance for Today. Anthem, London.
- Keynes, John Maynard (1972). National Self-Sufficiency. The Collected Writings of John Maynard Keynes. Vol. XXI. Macmillan, London.
- King, Charles (1721). The British Merchant; or, Commerce Preserv'd. 3 volumes. John Darby, London.
- Kregel, Jan (2004). External Financing for Development and International Financial Instability. G-24 Discussion Paper Series No. 32, October 2004. Available at www.unctad.org
- Krugman, Paul (1990). Rethinking International Trade. MIT Press, Cambridge, MA.
- Krugman, Paul (1991). Geography and Trade. MIT Press, Cambridge, MA.
- Krugman, Paul (2009). 'How I Work'. http://web.mit.edu/krugman/www/howiwork.html (accessed July 2009)
- Kuhn, Thomas (1970). The Structure of Scientific Revolutions. University of Chicago Press, Chicago.

- List, Friedrich (1841). Das Nationale System der Politischen Oekonomie. G. Cotta'scher Verlag, Stuttgart and Tübingen.
- Mill, John Stuart (1848). Principles of Political Economy. Longmans, London.
- Minsky, Hyman (1990). Stabilizing an Unstable Economy. Yale University Press, New Haven.
- Myrdal, Gunnar (1956). Development and Underdevelopment. A Note on the Mechanism of National and International Economic Inequality. National Bank of Egypt, Cairo.
- Nayyar, Deepak (2008). 'Learning to Unlearn from Development'. Oxford Development Studies, 36 (3): 259–280.
- Perelman, Michael (2002). 'The Comparative Sociology of Environmental Economics in the Works of Henry Carey and Karl Marx'. *History of Economics Review*, 36, Summer: 85–110.
- Perez, Carlota (2002). Technological Revolutions and Financial Capital. The Dynamics of Bubbles and Golden Ages. Elgar, Cheltenham.
- Raymond, Daniel (1820). Thoughts on Political Economy. Fielding Lucas, Baltimore.
- Reeves, Richard (2007). John Stuart Mill: Ricardian Firebrand. Atlantic Books, London.
- Reinert, Erik S. (1980). International Trade and the Economic Mechanisms of Underdevelopment. PhD thesis, Cornell University, Ithaca, NY.
- Reinert, Erik S. (1999). 'The Role of the State in Economic Growth'. *Journal of Economic Studies*, 26 (4/5): 268–326. A shorter version was published in Pier Angelo Toninelli [ed.]. *The Rise and Fall of State-Owned Enterprises in the Western World*. Cambridge University Press, Cambridge, 2000.
- Reinert, Erik S. (2000). 'Full Circle: Economics from Scholasticism through Innovation and back into Mathematical Scholasticism'. Reflections around a 1769 price essay: "Why is it that Economics so Far has Gained so Few Advantages from Physics and Mathematics?". *Journal of Economic Studies*, 27 (4/5): 364–376.
- Reinert, Erik S. (2004). Globalisation in the Periphery as a Morgenthau Plan: The Underdevelopment of Mongolia in the 1990s. In Erik S. Reinert [ed.]. *Globalization, Economic Development and Inequality: An Alternative Perspective*. Elgar, Cheltenham: 157–214.
- Reinert, Erik S. (2007). *How Rich Countries got Rich... and Why Poor Countries Stay Poor.*Constable, London; Public Affairs, New York; Anthem, Delhi; Third World Network, Penang.
- Reinert, Erik S. (2009a). Emulating Success: Contemporary Views of the Dutch Economy before 1800. In Oscar Gelderblom [ed.]. *The Political Economy of the Dutch Republic*. Ashgate, Aldershot.
- Reinert, Erik S. (2009b). Emulation versus Comparative Advantage: Competing and Complementary Principles in the History of Economic Policy. In Mario Cimoli, Giovanni Dosi and Joseph Stiglitz [eds]. *Industrial Policies and Development: The Political Economy of Capabilities Accumulation. The Past and Future of Policies for Industrial Development.* Oxford University Press, New York.
- Reinert, Erik S., Yves Amaïzo and Rainer Kattel (2009). The Economics of Failed, Failing and Fragile States: Productive Structure as the Missing Link. The Other Canon

- Foundation and Tallinn University of Technology Working Papers in Technology Governance and Economic Dynamics, No. 18.
- Reinert, Hugo and Erik S. Reinert (2006). Creative Destruction in Economics: Nietzsche, Sombart, Schumpeter. In Jürgen Backhaus and Wolfgang Drechsler [eds]. Friedrich Nietzsche 1844–2000: Economy and Society. Springer, New York: 55–85.
- Reinert, Sophus (2010). *Antonio Serra's 1613 Treatise on the Wealth and Poverty of Nations*. Edited and with an introduction by Sophus A. Reinert. Anthem, London.
- Ricardo, David (1817). Principles of Political Economy and Taxation. Murray, London.
- Roca, Santiago and Luis Simabuko (2004). Natural Resources, Industrialization and Fluctuating Standards of Living in Peru, 1950–1997: A Case Study of Activity-Specific Economic Growth. In Erik S. Reinert [ed.]. *Globalization, Economic Development and Inequality: An Alternative Perspective*. Elgar, Cheltenham: 115–156.
- Schumpeter, Joseph Alois (1908). Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie. Duncker und Humblot, Munich and Leipzig.
- Serra, Antonio (1613). Breve trattato. Lazzaro Scoriggio, Naples.
- Smith, Adam (1776/1976). The Wealth of Nations. Chicago University Press, Chicago.

#### Notes

- A Heckscher-Ohlin framework introduces more factors of production, including land and capital, and indeed opens up for what is called the Rybczynski Theorem: as one factor of production (e.g. capital) grows, the output of the capital-extensive commodity (e.g. innovations-based production) grows, while the output of the labour-intensive product contracts. In other words, some nations will easily specialize in innovation-intensive (generally also increasing-returns-intensive and imperfect-competition-intensive) products with a large division of labour and get rich, while other nations will specialize in labour-intensive technological dead ends, often devoid of scale-effects and innovation potential, producing under perfect competition, diminishing returns and monoculture (this is a key point in Reinert 2007). By opening up for diversity, this model of international trade also opens up for a theory of unequal development.
- 2 For the discussion about how Krugman changed from agreeing with Lenin and the classical development economists that the increasing/diminishing returns dichotomy creates poverty traps to excluding the diminishing returns part of the argument, see DESA working paper, ST/ESA/2009/DWP/88.
- 3 Activities subject to increasing returns are those where production costs fall as the volume of production increases. These lower costs for established firms form important barriers to entry for newcomers, and produce a type of imperfect competition that forms the basis for extra income, for a 'rent', that is shared between capital (profits), workers (in the form of higher wages), and government (in the form of higher taxable income) in industrial countries. I argue that what we call 'development' to a large extent consists in establishing such 'industrial rents'. Resource-based activities, on the other hand, always have one factor of production (land, ore, etc.) limited by nature, and are therefore subject to diminishing returns. Costs cannot be lowered beyond a certain point because inputs are only available in poorer quality than the first and best resources used: lower quality land, lower grade ore, etc. The low barriers to entry for the production of raw materials lead to 'perfect competition' or 'commodity competition, and the shared national rents that can be created in increasing returns activities are impossible to create in a country where only resource-based activities are present. Later in this chapter, we see how Washington Consensus policies ruined industrial rents in poor countries, thereby lowering the real wages by more than 50 per cent in many cases (see Reinert 2004, 2007, 2009a for further discussions). The 'normal' case in economic textbooks is 'perfect competition' and 'diminishing returns'. In a sense, Washington Consensus policies succeeded in making poor countries look more like the ideals of standard textbook economics, but this made these countries much poorer than they would have been with industrial rents.
- 4 Several mechanisms of economic primitivization are introduced in Reinert (2007, Ch. 5)
- 5 Here, I am referring to their domestic industrialization policy from around 1950, not their specialization in international trade much later.
- 6 The term *creative destruction* entered economics via Friedrich Nietzsche and Werner Sombart (Hugo Reinert and Erik Reinert 2006). The financial instruments creating 'toxic assets' have added a new Schumpeterian term: 'destructive creation'.
- 7 Detailed case studies show how this process evolved in Mongolia and Peru (Reinert 2004; Roca and Simabuko 2004).
- 8 Hildebrand was a critic of Engels who argued that poverty in the 1840s was worse where there was no industry to speak of.

#### APPENDIX I.

## FRANK GRAHAM'S THEORY OF UNEVEN DEVELOPMENT

Increasing and diminishing returns in international trade: a numerical example

Stage 1.2:
World income and its distribution before trade

Product	Country A		Country B			
	Man-days	Output per man-day	Total	Man-days	Output per man-day	Total
Wheat	200	4	800	200	4	800
Watches	200	4	800	200	3	600

World production: 1,600 wheat + 1,400 watches. In wheat equivalents: 3,200

Country A's income in wheat equivalents: 1,714 wheat Country B's income in wheat equivalents: 1,486 wheat

Price: 4 wheat = 3.5 watches

Stage 1.3: World income and its distribution after each country specializes according to its comparative advantage

Product	Country A		Country B			
	Man-days	Output per man-day	Total	Man-days	Output per man-day	Total
Wheat	100	4.5	450	300	3.5	1050
Watches	300	4.5	1350	100	2	200

World production with trade: 1,500 wheat + 1,550 watches

In wheat equivalents: 3,271

Country A's income in wheat equivalents: 1,993 wheat Country B's income in wheat equivalents: 1,278 wheat

