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The Terrible Simplifiers: Common Origins of Financial Crises and Persistent Poverty in Economic Theory and the new '1848 Moment'

Erik S. Reinert

Abstract

One element explaining the financial crisis is what Hyman Minsky called 'destabilizing stability': long periods of stability lead to increasing vulnerability. This paper argues that similar mechanisms are at work inside economics: long periods of economic progress in the core countries lead to increasingly abstract and irrelevant economic theories ('terrible simplifications'). This leads to turning points towards more relevant economic theories, referred to as '1848 moments'. The paper further outlines the key variables that need to be re-introduced into economic theory in order to furnish poor countries with the type of productive structures that makes it possible to eliminate poverty.

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Erik Reinert established The Other Canon Foundation, Norway, is Professor at the Tallinn University of Technology, Estonia, and author of many works, including *How Rich Countries got Rich...and Why Poor Countries Stay Poor* (2007). The author would like to acknowledge support from the Estonian Science Foundation (grant no ETF8097) 'Innovation Policy and Uneven Development'.

Comments should be addressed by email to the author: reinert@staff.ttu.ee; eriksreinert@gmail.com

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United Nations
Department of Economic and Social Affairs
2 United Nations Plaza, Room DC2-1428
New York, N.Y. 10017, USA
Tel: (1-212) 963-4761 • Fax: (1-212) 963-4444
e-mail: esa@un.org
<http://www.un.org/esa/desa/papers>

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Erik S. Reinert

*'...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, best known as a historian of the Italian Renaissance, 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 Burckhardt's colleague 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 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. 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 for¹.

1 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.

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.

One difficult thing with science, of course, is that different things are different. Taxonomies are therefore very important in order to organize scientific knowledge. Establishing taxonomies was an important part of the Enlightenment project. The botanical taxonomy of Linnaeus is the most famous one. During the Enlightenment, however, the taxonomic project also involved economics, the most complicated taxonomy of 'good and bad trade'—what type of trade benefitted and what type of trade would hurt the nation—is probably the one contained in Charles King's three volumes (1721). Linnaeus became professor of botany at the University of Uppsala, Sweden, in 1741, the same year Anders Berch received the first professorship of economics anywhere in the world outside Germany, at the same University of Uppsala. Berch (1747) had a very similar taxonomy to that of King (1721): national wealth is produced by importing raw materials and exporting manufactured goods.

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) and Berch (1747), 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), which will be discussed later in the paper, arguing that a key point in the career of Nobel laureate Paul Krugman was precisely the elimination of Graham's taxonomy.

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). In this paper, 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).

We intuitively understand that all professional dishwashers in New York restaurants will have a considerably lower income than most, if not all, practicing New York lawyers. An intuition that also follows automatically is that if all professional dishwashers in New York are put to live in one 'nation' and all practicing lawyers in another, we shall automatically have one 'nation' of lawyers which will be much wealthier than

the other nation inhabited by professional dishwashers. Wealth, at this level of abstraction, is activity-specific. It is tied to one economic activity rather than to another. US economist Daniel Raymond (1820)—one of the fathers of the successful 19th century US manufacturing strategy—argued that this same principle applied to nations: just as human beings could upgrade to more lucrative economic activities, so could nations. This intuition, while still present at the level of understanding income differences among individuals, has been totally lost in mainstream economic theory. This is the reason why, I have argued, economists give very different advice to their own children (based on a notion that different economic activities are qualitatively different) than they give to African children (specialize according to your comparative advantage, even if that means specializing in staying poor and ‘washing dishes’).

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 (‘vestehen’ 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—of 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 counter-reaction. 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. A key difference between the two types of theories is how they relate to empirical facts. The following quotes are typical of the two approaches:

Abstract economic theory:

“One of the best things with economics is that it is just a way of thinking, factual knowledge is non-existent”, Professor Victor Norman, *Dagens Näringsliv*, December 31, 1994, p. 21.

Empirically based economic theory:

“The root of everything we can call theory is to observe things as they are”. Hans-Georg Gadamer, *Lob der Theorie. Reden und Aufsätze*, 1991, p. 43.

These two different approaches to economics are largely incompatible. For reasons that shall be explained later, I refer to the point when the damages caused by overshooting in the level of abstraction become evident—the moment when abstract economic theory yields, by necessity, to more empirical theory—as ‘the 1848 moment’.

Algerian-born philosopher Jacques Derrida (1930–2004) has contributed to explaining the overshooting phenomenon. Every structure—whether literary, psychological, social, economic, political or religious—that organizes our experience is constituted and maintained through acts of exclusion, Derrida says. We cannot include all possible factors in a theory, but if we exclude too much—if theory gets too abstract and overshoots—what we have left out will come back to haunt us. Abstract structures can become repressive. Derrida insists that what is repressed does not disappear, but always returns to unsettle every construction, no matter how secure it may seem. Both the financial crisis and persistent poverty in many Third World nations are the result of leaving out of economic theory important empirical phenomena not well

captured by the increasingly abstract models that became standard textbook economics. And as the theories attempted to include more complicating factors, like increasing returns, we shall see that this was done in a way that obliterates the structural differences among countries. Complexity was added, but not diversity. As events that cannot happen in theory, only in practice—like financial crises and persistent Third World poverty under a free trade regime—come back to haunt the economics profession, the profession is forced to lower its level of abstraction. This happened during the French Revolution, after 1848, after 1929, and is happening again in 2009.

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 Mills and Keynes saw that poor countries need an increasing returns sector², 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.

2 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.

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).

As already mentioned, these three failures may be traced back to the economics of David Ricardo and especially to his exceedingly loyal followers. His theory made the blind spots of present economics possible by failing to create money as a separate category apart from 'the economy', and by conceiving world trade as a barter of labour hours—where a labour hour in Stone Age technology has the same market value as a labour hour in Silicon Valley—made it impossible to recognize that some nations specialize according to their comparative advantage in being poor (Reinert 2007).

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 mechanisation and we may experience a degree of 'primitivization'³ of developed economies.

The presence of huge and increasingly competitive low-wage economies in India and China under a free trade regime is likely to give any movement towards 'factor-prize equalization' a strong downward trend: wages in rich countries are more likely to converge towards the poor than the other way around. This is likely to make clear that at the core of what is called 'economic development' lies an 'industrial rent' which is potentially fragile much in the same way as the world financial system. As in the 1930s, under conditions of rapidly increasing 'wage fragility' and 'job fragility' protectionism will probably be seen as a solution. Protectionism does not, however, necessarily lead to 'beggar-thy-neighbour' policies and negative-sum games. The Marshall Plan that rebuilt Europe after World War II was essentially a symmetrical system of protection programmed to come to an end with free trade. Such schemes are possible also today, and the good news coming from the crisis is that as rich countries reinvent toolboxes of economic policy, poor countries will necessarily have to be allowed to do the same. Finally.

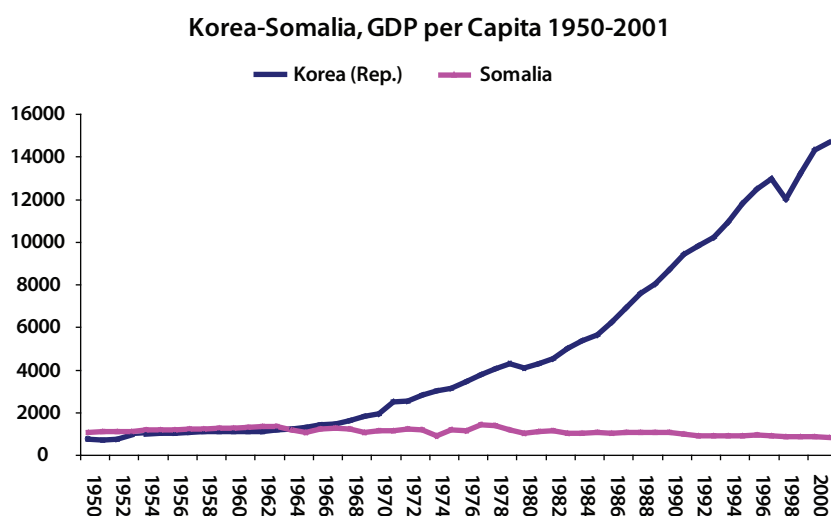
3 Several mechanisms of economic primitivization are introduced in Reinert (2007, Chapter 5)

The Challenge: Relearning the Art of Creating Middle Income Countries

Until 1964, the Republic of Korea was poorer than Somalia. Figure 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?

Figure 1.
Comparing Economic Development in Somalia and Korea



Source: Reinert, Amaizo and Kattel, 2009

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.

Financial Crisis as a Result of Overshooting Success

Since the first international financial crisis in 1720—simultaneously hitting Amsterdam, Paris and London—overshooting previous successes has been a key element of financial crises (Het Groote Tafereel 1720, Cole 1949). An important element in financial crises is financial innovations which, originally possibly useful and legitimate, can gradually become speculative instruments which can subsequently become disastrous (Mackay 1841). Markets perceive that normal economic gravity has ceased to exist due to such new financial innovations. In 1720, the new financial instrument was common or joint stock; in 2008, it was the new derivatives and securitized debt, facilitated by abolishing existing prudential legislation (the 1933 Glass-Steagall Act).

This paper argues that our inability to create middle income countries is a result of 'theoretical overshooting' in the sense described by Hayek, while 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

Banks were partly allowed to discontinue their traditional and important role in the economy—evaluating risk and carry that risk on their balance sheets. The risks previously borne by the financial institutions themselves were passed on to the system and to society at large and money was made on commissions (Kregel 2004).

The 1720 crisis also involved overshooting in previously successful colonial ventures. Spain's colonies were producing wealth in the form of gold and silver. France was planning to do the same in a colonial scheme on the Mississippi, and England expected the same in the South Seas. These became the famous Mississippi and South Sea bubbles. Continuing a strategy that had previously led to success now led to disaster.

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.

Hyman Minsky's 'destabilizing stability' (Minsky 1990, Kregel 2004) describes how long periods of stability led to easier credit until a Ponzi scheme—a fraudulent scheme where borrowers are not even able to cover interest payments (as with the subprime loans)—leads to the collapse of the whole financial sector. An earlier 'overshooting' theory of financial crises was produced by Clément Juglar (1819–1905) who, like Minsky, emphasized the oversupply of increasingly risky credit. Mikhail Tugan-Baranovsky (1865–1919) emphasized the role of *overinvestment*, the other side of *under-consumption*, the perspective with which J.A. Hobson (1858–1940) approached the problem. What these theories all have in common is that crises are a result of what Hayek called "continuing on a road which has led...to great success".

Destabilizing Stability and Cyclicity of Economic Theory: the Mechanics

I would argue that economic theory itself is subject to a similar process of 'destabilizing stability'. Long periods of economic progress in the core countries lead to increasingly abstract and irrelevant economic theories ('terrible simplifications'). The present misfit between theory and reality first manifested itself in the 1970s, in the world periphery, with deindustrialization and falling real wages (see e.g. the example of Peru below). After the fall of the Berlin Wall, the Second—former communist—World received a free trade shock causing, as in Peru, real wages (but not GDP) to be halved in many countries (see Reinert 2004 for a description of the Mongolian case). When the Asian crisis hit in the late 1990s, it was blamed on 'Asian values' and 'crony capitalism'. For a long time, it has been very easy to absolve economic theory and the Washington institutions from any wrongdoings in Africa; 'corrupt Africans' could take the major part of the blame. As a result, the Millennium Development Goals essentially became a set of palliative measures aimed at relieving the pain of poverty rather than eradicating it (Reinert 2007). Only when the crisis hits the economically hegemonic countries themselves, it dawns on the theoretical mainstream that there might be something wrong with the theory, rather than with the people. Only then is there a turning point towards more relevant economic theories—an '1848 moment'.

Such '1848 moments' have a strong element of the story of the Emperor's New Clothes in them. Suddenly, everyone dares to say that the Emperor is naked, and a precondition for seeing this is the presence of people—like the little boy in the fairytale—who have not been corrupted by the prestige, privileges and status associated with power. And—as Veblen would have said—whose instincts had not been contaminated by irrelevant higher education. Then, and only then, is theory forced down several levels of

abstraction. In a Veblenian sense, the financial crisis itself is a result of not having shielded ‘the instinct of workmanship’—the creative part of capitalism—from the sterile quest for extracting profit from a financial sector divorced from producing real goods and services (Reinert and Viano, 2010). The crisis resulted from an economic theory largely abstracted from production—a problem which Veblen so vehemently warned US society against from 1899 to 1929. Only after his death did the American public understand how important his warnings had been (Reinert and Viano, 2010).

Canadian economist Harold Innis (1894–1952) provided what, in this writer’s opinion, is a plausible explanation of the mechanics behind the cyclicity of economics. Innis postulates a type of learned knowledge, which he refers to as ‘Latin’, inspired by mediaeval scholasticism, so often irrelevant (see Reinert 2000 for a comparison of scholasticism and neo-classical economics). The opposite of this abstract and learned type of knowledge is what Innis calls ‘the vernacular’ (i.e. the oral and un-codified mediaeval language of the commoners). The vast and, by definition, uncharted knowledge-base of the vernacular is strongly related to concepts such as tacit knowledge (M. Polanyi, 1967), fuzzy logic, and traditional knowledge (Berkes 2008). These concepts all convey—as does ‘the vernacular’—experienced-based knowledge of a complexity that defies modelling. The continuing attempts of the German Historical School to explain ‘the whole’ (*die Ganzheit*) reflects the desire to be scientific without oversimplifying. However, authors who aim at being the opposite of ‘terrible simplifiers’ by attempting to codify vernacular knowledge—like Friedrich Nietzsche, Werner Sombart and Thorstein Veblen—end up appearing chaotic and very difficult to access. This brings us back to the proposition in Schumpeter (1908) that the challenge consists of producing a theory that possesses various levels of abstraction, where one will find an appropriate level according to the nature of problem at hand.

For Innis, the written word starts a new and different trajectory of knowledge, where the ‘simplification’ inherent in writing—by necessarily leaving out, and/or abstracting from, so much of the vernacular knowledge—created a monopoly of knowledge incidental to a specialized skill in writing. In neoclassical equilibrium economics, that specialized skill has been mathematical modelling, honed to the point of being, at times, ridiculously simple by professional demands such as ‘one idea, one paper’ and reinforced by economic incentives such as ‘publish or perish’.

The increasing abstraction of ‘Latin’ into irrelevance can be destructive to culture itself. As long as Ricardian international trade theory was used for export purposes only, to ‘advise’ poor countries, it presented no danger to the United States. But when the very same theory is employed for domestic purposes, the simplistic ‘Latin’ models may become dangerous. “On the capture of Athens by the Goths in 267 A.D. they are reported to have said, ‘Let us leave the Greeks these books for they make them so effeminate and unwarlike’”, Innis quotes. My worry is that the United States may itself have been seriously weakened by disregarding its own increasing returns sectors (the core of which is manufacturing), i.e. weakened at the core while still warlike in the periphery (see Reinert 2009a for a brief discussion of the mechanisms behind the fall of economic hegemonies).

In recent years, neoclassical (‘mainstream’) economics virtually became the only game in town. In an Innis type framework, a point is reached when a set of ideas becomes so dominant that it permeates every discourse, and because—by then—it is so overextended that its faults become painfully obvious. This is what happened to mainstream economics recently with the present financial crisis, exemplified by the front cover of *The Economist* referred to above. Here is where the idea of Minerva’s owl enters into Innis’ thinking: our understanding of a theoretical structure is only reached when that structure is about to collapse (the owl of

Minerva, the goddess of wisdom, only starts its flight at dusk, an idea from Hegel). Only when it collapses, under the weight it has to bear, the blatant shortcomings of neoclassical economics become obvious.

But, referring to the quote from Keynes with which this paper starts, the power of ideas and the power of the vested interests combine here. Those communicating in ‘Latin’ become the ‘masters of complexity’, and in the process, a hierarchy of professionals and amateurs is created. Monopolies of knowledge by professionals—such as neo-classical economists—will tend to polarize societies into a mass of the ignorant and a knowledge elite. Such monopolies of knowledge encourage centralization of power, and an alliance—sometimes fragile, sometimes solid—is formed between the holders of the knowledge monopoly and the political elites. Those who control knowledge have the power to define reality. But neo-classical economics perpetuated the theories of David Ricardo which were developed at a time when England still hoped to convince the rest of the world that its virtual monopoly as the only manufacturing country in the world was in everyone’s interest. Making all economic activities qualitatively alike—by modelling labour hours devoid of any qualities—was an important methodological tool aimed at achieving this world monopoly. No one saw this clearer than the founding fathers of the United States, especially those whose portraits adorn the dollar bills (with the possible exception of Thomas Jefferson who, appropriately, is almost impossible to find on the virtually non-existent two dollar banknote).

The United States violently opposed the idea of free trade until the country had been industrialized, and in the 19th century United States, free traders were primarily slave owners (Jefferson being one) who feared British retaliation against US industrialization that could hurt the slave production of crops like sugar, cotton, and tobacco. Indeed, the links between free trade and slavery were very strong in the 19th century USA, being the counterpoint to the so-called high-wage strategy proposed by the Northern (later Unionist) proponents of industrialization. It would be an irony if the relative retrogression of the United States should be caused by belief in the oversimplification of Ricardian trade theory—the same theory that the United States saw clearly and for so long exposed as an English bluff aimed at maintaining economic supremacy.

Increasing Distance = Increasing Abstraction and Simplicity

The geographical dimension in this process needs to be emphasized. As already noted, Derrida insisted that what is excluded, comes back to haunt the theory. What is now haunting trade theory and the global economy is repression of the fact that economic activities are qualitatively very different from the point of view of creating economic growth. At the core of the problem of today’s world economic order lies Ricardo’s trade theory, based on the barter of labour hours devoid of any qualities. This suggests that free trade between African farmers and Silicone Valley will produce economic harmony through ‘factor-price equalization’ or, at least, benefit both trading partners. The risk of nations specializing in being poor is ignored.

In general, the level of abstraction used in approaching economic issues increases with the distance from the problem. We can call this the *Increasing Distance equals Increasing Abstraction Theorem*. Questions close to home are solved by a commonsense ‘historical approach’, while problems far from home are solved by applying very abstract principles. As already discussed, most of us intuitively understand that if we put all engineers in one nation and all people making a living washing dishes in restaurants in another, we shall have one rich nation of engineers and a poor nation of dish-washers. This intuition, however, cannot be translated into standard trade theory because it violates Ricardo’s core assumption that labour hours are qualitatively alike. As Thorstein Veblen put it, “Education may contaminate the instincts”.

As already discussed, using their common sense, economists advice their children based on the assumption that economic activities are qualitatively different as generators of wealth. When the distance to the issue grows, when it comes to advising Africa, economists' recommendations are based on Ricardian trade theory where there are no qualitative differences between an hour of engineers' work and an hour of washing dishes. At best, there is an implicit assumption that 'capital' can be added to increase the productivity of people washing dishes to make as much money as engineers. Which, of course, is not the case.

Paul Krugman made an interesting observation confirming this 'increasing distance= increasing abstraction' theorem. While the United States insisted on Ricardian trade theory and standard textbook economics as the foundation for the world economic order, Krugman complained that US trade policy failed to follow the principles of Ricardian trade theory: "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 economists 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).

Krugman defends Canadian protectionist policies: 'it seems reasonable to argue that Canada's nationalistic economic policies were the key factor in creating this (industrial) strength' (Krugman 1991: 92). Based on his knowledge of US neighbour Canada, Krugman recognizes the value of infant industry protection, but then, surprisingly, goes out of his way to show that the Canadian case—the only empirical case he uses—is different to that of other periphery nations. I find it very difficult to understand why Krugman does not make recommendations of this kind also to other laggard countries, but seemingly the 'common sense close to home, abstract theories further away' mechanism has been at work: *increasing distance = increasing abstraction*.

For the same reason, we observe domestic changes in the hegemonic countries before they are applied in the rest of the world. During the 1991 minimum wage debate in the United States, virtually all economists violently opposed tampering with the labour market, ostensibly leaving the market to determine wages. When the same debate took place again in 2007, virtually all US economists supported an increase in minimum wages. Paul Samuelson, the father of modern trade theory, withdrew his across-the-board recommendation of free trade when free trade started causing poverty in the United States (Samuelson 2004). That markets, left to themselves, can increase poverty, not only in the United States, but also in the Third World, is now generally acknowledged.

A further example of the *increasing distance = increasing abstraction theorem* is the way neo-Schumpeterian economics—placing innovation, rather than equilibrium, at the core of economics—has had growing influence in the developed world, e.g. in Europe's *Lisbon Strategy*, but so far has had very little impact on Third World policies⁴. After some initial ground-work (Nelson and Winter 1982, Dosi *et al.* 1988), the OECD dedicated a whole research program (TEP, Technology and Economy) to this approach in the early 1990s. So far, the tendency has been to focus on innovation in rich countries, but to leave poor countries with their 'comparative advantage', often in activities bereft of possibilities for innovation (Reinert 2007).⁵ This line of investigation is bringing back important elements of classical development economics, associated with Albert Hirschman, Ragnar Nurkse, Gunnar Myrdal and others (Kattel, Kregel and Reinert 2009).

4 Reinert (2004) represents an attempt to do so.

5 A new volume on industrial policy written using a neo-Schumpeterian framework (Cimoli, Dosi and Stiglitz (eds) 2009) is likely to initiate a phase of innovation-based theories of poverty eradication in the Third World.

It is important to understand, then, that intellectuals may have ‘modes’ of thought that operate on very different levels of abstraction. Krugman is an interesting example of how different these modes can be. In his piece ‘How I work’, Krugman, the Nobel Prize winner, says: “A minor regret is that I have never engaged in really serious empirical work. It’s not that I dislike facts or real numbers. Indeed, I find light empirical work in the form of tables, charts, and perhaps a few regressions quite congenial.... Every year I promise to try to do some real empirical work. Next year I really will!” In Harold Innis’ terms, this is the Krugman who writes in ‘Latin’, in this case, science virtually void of categories and experience.

Another very different Paul Krugman exists, however: the one who writes extremely insightful and heavily empirically-based columns in the *New York Times*, founded on a wealth of ‘vernacular’ knowledge and with strong ethical views. If the ‘vernacular’ Krugman would just be as well informed and interested in Africa’s productive structure as he is in US health care reform, I am convinced the result would be very good. Unfortunately, so far, the empirical and well informed Krugman is reserved for issues regarding the United State: *increasing distance = increasing abstraction and simplicity*. ‘Simplify, simplify’ is one of the important rules Krugman the Nobel economist has set for himself in ‘How I work’. In his *New York Times* columns, he is doing the opposite, and with very good results.

Using the terminology of Francis Bacon (1561–1623), mainstream economics at this time represents ‘degenerate learning’, rather than ‘good and solid knowledge’:

‘Surely, like as many substances in nature which are solid, do putrefy and corrupt into worms; so it is the propriety of good and solid knowledge to putrefy and dissolve into a number of subtle, idle, unwholesome and, as I may term them, vermiculite questions, which have indeed a kind of quickness, and life of spirit, but no soundness of matter, or goodness of quality. This kind of degenerate learning did chiefly reign amongst the schoolmen⁶, who, having sharp and strong wits, and abundance of leisure, and small variety of reading, but their wits being shut up in the cells of a few authors (chiefly Aristotle their dictator), as their persons were shut up in the cells of monasteries and colleges, and knowing little history, either of nature or time, did, out of no great quantity of matter, and infinite agitation of wit, spin out unto us those laborious webs of learning which are extant in their books. For the wit and mind of man, if it work upon matter, which is the contemplation of the creatures of God, worketh according to the stuff, and is limited thereby: but if it work upon itself, as the spider worketh his web, then it is endless, and brings forth indeed cobwebs of learning, admirable for the fineness of thread and work, but of no substance or profit’ (quoted in Reinert 2000).

What happens during 1848 moments—such as the one we are in now—is that abstract models are increasingly seen as irrelevant, as a degenerate form of knowledge, and economic theory increasingly opens up to and re-accommodates empirical facts, again becoming ‘good and solid’ knowledge. As a result, far away countries have the possibility to be treated with the same empirically based knowledge which is normally only used close to home.

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

6 The reference is to Scholasticism.

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 efforts⁷ started around 1950 (Nayyar 2007). In no way can these countries be considered showcases of the neo-liberal 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.⁸ 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 de-industrialized and thus became *primitivized* (Reinert 2007: Ch 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 wealth-producing 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

7 Here I am referring to their domestic industrialization policy from around 1950, not their specialization in international trade much later.

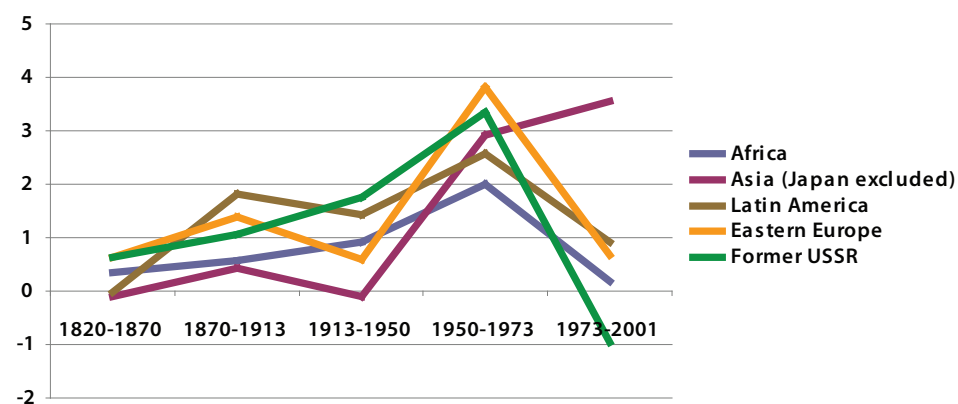
8 The term creative destruction entered economics via Friedrich Nietzsche and Werner Sombart (Hugo Reinert and Erik Reinert 2006). The financial instruments creating ‘toxic assets’ have added a new Schumpeterian term: ‘destructive creation’.

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 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 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.⁹

Figure 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 Maddison 2003.

The dismal results from neo-liberal development policy can be explained as a result of the cumulative effect of a number of vices producing theories at excessive levels of abstraction, and therefore, of irrelevance. The first vice is what Schumpeter referred to as the *Ricardian vice*, that is piling a heavy load of strong policy recommendations upon very shaky assumptions. Milton Friedman (1953) defended this thus: "Truly important and significant hypotheses will be found to have 'assumptions' that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions" (Friedman 1953: 14). Friedman thus justified an adverse relationship between theory and reality, legitimizing a profession where unrealistic assumptions are rewarded with scientific prestige. This we can refer to as the *Friedmanian vice*. I have dubbed the third vice the *Krugmanian vice*, the production of theoretical models that explain the real world better than Ricardo did, but not applying them to actual economic policy (Reinert 2007). Together these vices combine to create and maintain the blind spots of economic theory that have prevented the profession from seeing financial crises and persistent poverty.

⁹ Detailed case studies show how this process evolved in Mongolia and Peru (Reinert 2004; Roca and Simabuko 2004).

Increasing Returns as the Key to Wealthy Nations

Persistent poverty in the Third World is a result of trade policy ‘overshooting’. For more than 500 years, it has been recognized that middle income nations have the same type of economic structure as rich nations, albeit slightly less efficient. Therefore, all currently rich countries have been through a period of ‘emulation’—copying the structure of rich countries—before embarking on a strategy of specializing according to comparative advantage (Reinert 2007, 2009b). The burden of proof rests with those who argue in favour of free trade under all circumstances to find historical cases of nations that have grown wealthy in the absence of a significant manufacturing sector.

Economic theory has emphasized ‘capital’ and ‘trade’, seriously neglecting the role of a nation’s productive structure, of technology, of entrepreneurship and of unemployment. The Washington international financial institutions have promoted models assuming full employment when lack of employment has been at the core of the problem of poverty. The more abstract the theoretical model in a social science, the more likely it is that the relevant facts will be excluded.

By modelling the global economy as a system in which nations barter labour hours, David Ricardo implicitly made all economic activities qualitatively alike. He made no effort to consider they could be different. If we divide human labour into only two different categories—those who work under diminishing returns and those who work under increasing returns—we can, to a great extent, explain what distinguishes poor countries from rich ones. Rich countries have a large increasing returns sector, poor nations have very small ones, typically below 6 per cent of GDP (Reinert, Amaïzo and Kattel 2009).

Increasing returns means that, as the volume of production increases, fixed costs per unit of production fall. If it cost Microsoft 500 million dollars to develop Windows Vista, that would be the cost of the first copy. If two copies were sold, the unit cost would be 250 million dollars. But since copies can be distributed at extremely low cost, on the web, unit price comes down very fast. The fact that the initial investment is so high makes it very difficult to compete with Microsoft. High initial investments imply high ‘barriers to entry’ into many industries. The same barriers to entry protect profitability, but can also lead an industry—the airline industry is one example—into periods when all lose money. High capital intensity also implies barriers to exit.

Importantly, increasing returns invalidate the core assumption of standard economics: perfect competition. The higher the increasing returns, the larger the barriers to entry and the more imperfect the competition. Behind these barriers, rich countries have managed to elevate their wage levels. Because of these barriers to entry, by demanding a larger share of the pie, labour unions have actually created a larger pie. As long as all manufacturers in the same labour market are subject to the same wage demands, they can all concede to the demands without going bankrupt as their competitors have to yield to the same demands. Higher wages increase the relative price of labour, which in turn makes mechanization increasingly profitable. This spiral of increasing wages (i.e. increasing demand) and increasing productivity due to mechanization—induced by the same wage increases—is at the core of the impressive growth of developed economies since the 1850s. This is the same type of self-reinforcing mechanism described by Serra as regards increasing returns and increased exports from Venice: because increased production volumes lead to lowered costs and prices, gaining even more customers, which again lowers prices (and raises barriers to entry and competition) even more: cumulatively “one factor reinforces the other”, as Serra says (Serra in Sophus Reinert 2010: Chapter 10).

The existence of increasing returns—of falling production costs as volume increases—was implicitly recognized in ‘conscious’ industrial policy as far back as 1485 (Reinert 2007). Frank Graham (1923) showed how—with international specialization—nations specializing in increasing returns activities (manufacturing industry) grow richer while nations specializing in diminishing returns activities (raw materials) grow poorer (Appendix I). In other words, as some nations specialize in becoming richer, other nations specialize in being poor. In an early work (Reinert 1980), I showed that mechanisms described by Serra and Graham were actively at work in the main 20th century export commodities of three Andean republics: tin in Bolivia, bananas in Ecuador, and cotton in Peru. Every time national production increased, labour productivity decreased as the nations moved further and further into the realm of diminishing returns: increasingly marginal and less productive land or mines were put to work. When national production diminished, productivity again increased, often dramatically. This is, of course, the complete opposite effect of what can be observed in manufacturing industry, where increasing returns produce *lower*, not higher, costs as production is increased.

Paul Krugman’s early work was partly inspired by the taxonomy in Frank Graham’s 1923 article: a nation specializing in diminishing returns activities will grow poorer, while a nation specializing in increasing returns activities will grow richer. In an early paper (‘Trade, Accumulation, and Uneven Development’, in Krugman 1990), Krugman indeed argues that Lenin and the classical development economists were right. As I have tried to show (Reinert 2007), the increasing and diminishing returns factor is, in fact, just the tip of a sizable theoretical iceberg, but—as English classical economists, from Malthus to Mill, understood so well—it is the key point from which to start the process of qualitatively understanding poverty. Unfortunately, Paul Krugman soon left the ‘bad news’ of diminishing returns out of his writings, concentrating on the good news about increasing returns and trade.

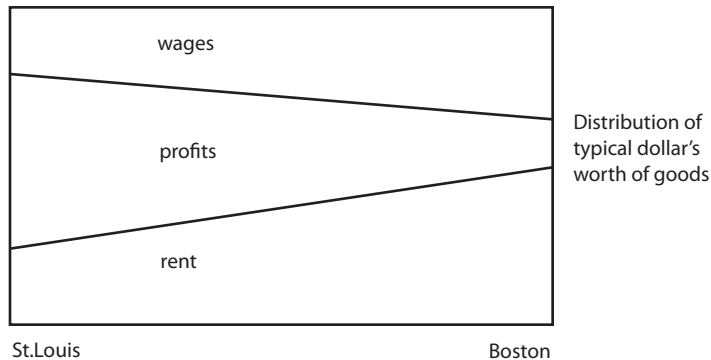
In isolation, increasing returns provides an argument for free trade, but only when nations are assumed to have similar degrees of increasing returns. A classification system dividing economic activities in increasing and diminishing returns activities, like Graham’s, describes situations where nations will be better off by protecting increasing returns activities than with free trade. During the period when neoliberalism totally dominated economic theory, no demand obviously existed for theories that undermined the ideology of free trade. In that sense, economic theory is much more driven by ‘demand’ than we are generally willing to admit, but it is now relatively easy to see the neoliberal theory was indeed totally dependent on a theory lacking taxonomies: introducing differences would undermine the desired theoretical conclusions. Introducing qualitative differences into the theoretical structure of economics would be to admit potential disharmony. By leaving out situations where free trade leads to increased poverty—by starting to ignore Graham’s simple, but exceedingly important taxonomy—Krugman, in effect, became a ‘simplifier’ who contributed to the serious ‘overshooting’ of the free trade argument.

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 3.
Henry Carey’s ‘Commodity Map’ (1858)



(Modified from Carey 1858a, iii, p.187)

Source: Perelman (2002: 90)

Figure 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

grows 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.

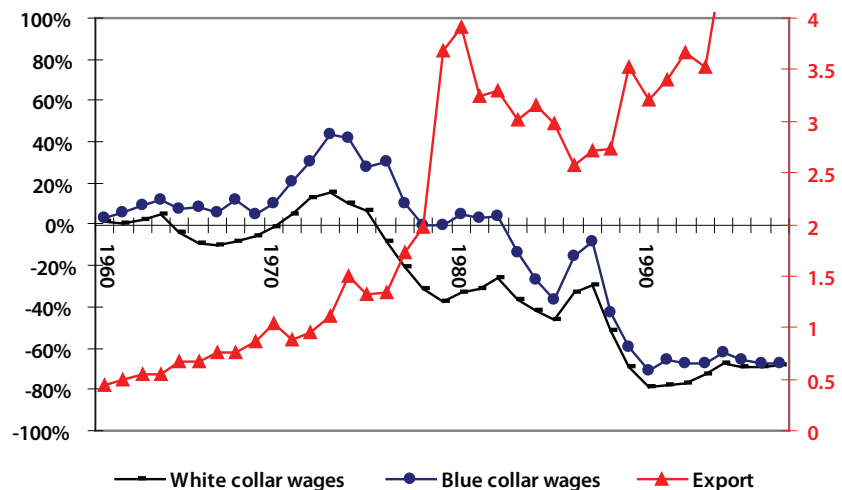
‘Market failure’ is a term often used when actual developments fail to behave the way economic theory would predict. Cimoli, Dosi and Stiglitz (2009) acknowledge that ‘market failure’ is not a useful way to approach the problem of poverty. In fact, from a Schumpeterian angle, what we generally refer to as ‘development’ is, in fact, a ‘market failure’ compared to the standard neo-classical 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 de-industrialization 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 to 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 blue-collar 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 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 de-industrialization 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 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 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 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 break-down 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 per cent 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.

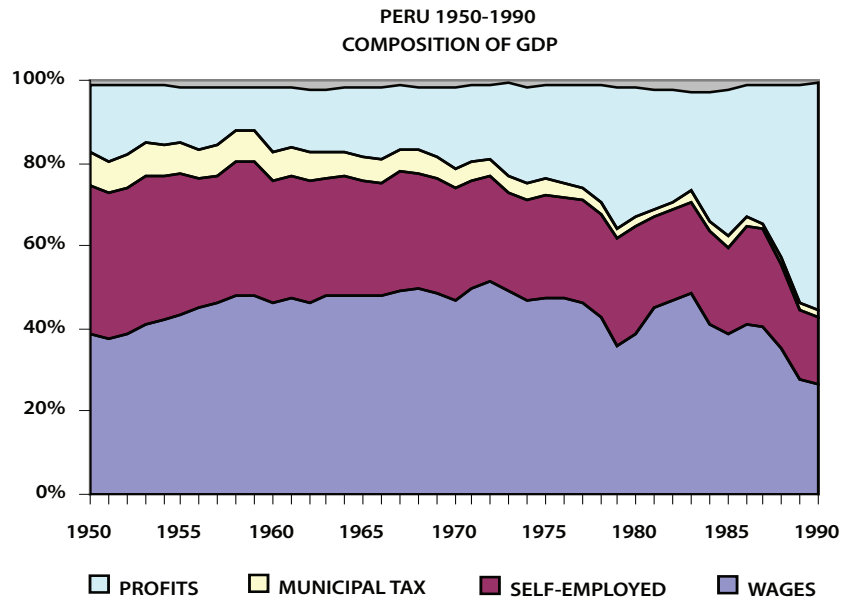
Rapid trade liberalization led to rapidly falling real wages, worsening income distribution, and primitivization of the economy back to a more feudal structure, corresponding to a voyage from developed Boston to underdeveloped St. Louis in Henry Carey’s model. This underscores why a poor nation is much 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 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 anti-physiocrat (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 de-globalization 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

Figure 5. Peru: Deindustrialization and falling wages as a share of GDP, 1950–1990



Legend, from top, profits, pre-dial (tax), income of the self-employed, wages.

Source: Banco Central de Reserva del Perú.
Breakdown of GDP by source has not been published after 1990.

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.

“... mainly I attribute my change of outlook to ...my hopes and fears and preoccupations, along with those of many or most, I believe, of this generation throughout the world, being different from what they were. It is a long business to shuffle out of the mental habits of the prewar nineteenth-century world. It is astonishing what a bundle of obsolete habiliments one’s mind drags round even after the centre of consciousness has been shifted. But to-day at last, one-third of the way through the twentieth century, we are most of us escaping from the nineteenth; and by the time we reach its mid point, it may be that our habits of mind and what we care about will be as different from nineteenth-century methods and values as each other century’s has been from its predecessor’s.”

It is my conviction that a new generation—particularly in the Third World—soon will come to look at late twentieth century truths in the same way Keynes looked at those of the nineteenth century: “It is astonishing what a bundle of obsolete habiliments one’s mind drags round even after the centre of consciousness has been shifted”. The *increasing distance = increasing abstraction theorem* suggests that the present financial crisis may create a shift in ‘the centre of consciousness’ as regards economic realities in the developed world, while the 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). 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. The fall of physiocracy and free trade at the time of the French revolution is documented in Steven Kaplan’s *Bread, Politics, and Political Economy in the Reign of Louis XV* (1976). 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.

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 penalty¹⁰), 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 illustrates the kind of shift in economic focus likely to result from the current ‘1848 moment’ precipitated by the financial crisis.

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. As Tocqueville put it: ‘I do not know if one can cite a single manufacturing and commercial nation,

10 Hildebrand was one of critics of Engels, he argued that poverty in the 1840s was worse where there was no industry to speak of.

from the Tyrians (Phoenicians) to the Florentines and the English, that has not also been free. Therefore a close tie and a necessary relation exist between those two things: freedom and industry' (quoted in Reinert 2007).

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 middle income 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 de-industrialize 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 re-industrialization 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.

Table 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 different
Gross national product per capita	Real wages
Economics as a science defined 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

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Appendix I.
Frank Graham's Theory of Uneven Development

Increasing and diminishing returns in international trade: a numerical example

Stage 1: 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	800	200	800
Watches	200	4	800	800	200	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 2: 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