Globalisation in the Periphery as a Morgenthau Plan; The Underdevelopment of Mongolia in the 1990’s.

Why Globalisation is one Nation’s Food and the Other Nation’s Poison.

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‘I apprehend (the elimination of Diminishing Returns) 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 matter be thoroughly understood, it is to no purpose proceeding any further in our inquiry’.

John Stuart Mill, Principles of Political Economy, 1848.

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Introduction: A Morgenthau Plan for Mongolia.¹

‘Woe to the vanquished’ was the saying of the old Romans. This dictum came to my mind as I was attending a conference in the Mongolian Parliament in March 2000. As the only non-Asian I participated in a forum addressing the severe economic problems of the country. The local newspapers vividly reported that not far away from the snug heat of Parliament, an estimated two million animals pasturing the plains were starving to death in the bitter cold. Permanent desertification threatened the country, and it was clear that this disaster was a man-made one. What was not reported was the important fact that the two million animals dying during the winter of 1999/2000 were only the increase in the animal population over the last two or three years. The fundamental cause of the disaster was the same type of diminishing returns that has afflicted mankind since biblical times; too much economic pressure on one factor of production, land, the supply of which had been fixed once and for all by an act of God. Rooted in this phenomenon, Malthusian spectres of vicious circles of poverty were already well developed.

In terms of economic theory, the Mongolian situation takes us back to the economics as the ‘dismal science’, to Thomas Malthus (1820), John Stuart Mill (1848) and even Alfred Marshall (1890). In spite of the recurrence and description of these phenomena since the biblical Genesis, the mechanisms at work in Mongolia during the 1990’s were apparently not recognised, not even when the disaster was a consummated fact. The underlying cause was clearly not global warming, as the Western press reported.

The more I studied Mongolia in the months to come, the clearer it became that this nation, vanquished in the Cold War, to all practical effects was being subjected to a Morgenthau Plan (Morgenthau 1945). The subjugated Germany of World War II was, according to this plan, to be deindustrialised and made into an agricultural and pastoral nation. The Morgenthau Plan was abruptly stopped in Germany in 1947 when ex-President Herbert Hoover of the United States reported back from Germany: ‘There is the illusion that the New Germany left after the annexations can be reduced to a ‘pastoral state’. It cannot be done unless we exterminate or move 25.000.000 out of it’ (Hoover’s Report No. 3, March 18, 1947, quoted in Baade 1955).

During the fifty years preceding the reforms of 1991, Mongolia slowly, but successfully, built a diversified industrial sector. The share of agriculture in the national product had declined steadily from 60 per cent in 1940 to about 16 per cent in the mid 1980’s (World Bank 1991: 13). However, the de-facto Morgenthau Plan proved exceedingly successful in de-industrialising Mongolia, just as had been the plan’s intention in Germany. In Mongolia fifty years of industry building was virtually annihilated over a period of only four years, from 1991 to 1995, not to recover again. In a majority of industrial sectors, production is down by more than 90 per cent in physical volume since the country opened up to the rest of the world, almost overnight, in 1991 (see the statistical appendix for Mongolia in this paper; Tables 1-3).

An unexpected effect of the Morgenthau Plan in Germany was that the decline in industrial production was almost paralleled by a reduction in agricultural productivity (Balabkins 1964: 87). This phenomenon – which would not have surprised 19th Century economists – was extremely strongly felt also in Mongolia. The jobless industrial workers were forced to take

¹ The author gratefully recognises the partial financing of this project from The Royal Norwegian Ministry of Foreign Affairs. The opinions expressed in this paper are, however, his own, and do not necessarily reflect the views of the Ministry.
up the pastoral way of living of their ancestors, adding 8 Million pasturing animals during the 1990’s. This pressed down productivity, and strongly increased the ecological pressure on the pastures of the sub-Arctic steppe (Tables 6-7). The productivity decline in agriculture is even more notable. Since 1991, average yields for all crops are down by more than 50 per cent, and in the case of the most important fodder crop the reduction in yield per hectare is an impressive 71 per cent (Tables 4-5). Real wages are difficult to estimate meaningfully, since a gradually shrinking number of people have ‘real jobs’. It has been estimated, however, that the purchasing power of the average Mongolian has been roughly halved since 1991 (Malhotra 1998). Already in 1996, before the last decline started, thirty-six percent of the Mongolian population lived below the weighted national poverty line of US Dollars 17 per month (World Bank 2000b).

The Mongolian balance of payment deficit equals to 50 per cent of annual exports. Still the normal market mechanisms that, in the textbooks, are supposed to correct this situation have not been allowed to do their job. An artificially overvalued currency coupled with real interest rate of 35 per cent work makes it impossible for the productive structure to regain international competitiveness. Priority is given to short-term financial stability, a choice that, at the next turn of the screw, will hit the financial sector again as the real economy deteriorates even more.

The causal roots of Mongolia’s unrestrained economic decline can, however, no longer be traced through the normal sources in the West, since the industrial statistics provided by the Washington Institutions only start in 1994 or 1995 (IMF 2000a). At this time, most of the economic damage had already been done. The picture of a deindustrialisation a la Morgenthau today only becomes clear when the official Mongolian statistics are studied (National Statistic Office 1999). IMF data after 1994 appear consistent with the data provided by the Mongolian Statistics Office, which is also the source used by the IMF. There is therefore no reason to distrust this important data that the IMF chooses not to publish.

Early 1947, in an astonishing mental and political turnaround in the United States, the Morgenthau Plan was ditched. The Secretary of State, George Catlett Marshall, projected its substitute, The Marshall Plan, which had precisely the opposite objective of that of the Morgenthau Plan, during a speech at Harvard on June 5th of the same year. According to the Marshall Plan – officially the European Recovery Plan – the industrial production of Germany should, as soon as possible, and at all cost, be brought back to its 1936 level, the last year that was considered ‘normal’ (European Cooperation Administration 1949; Balabkins 1964).

Mongolia only holds 2,500,000 people, so the disaster is not of the magnitude of the spectre of 25,000,000 human beings exterminated or forced into migration. The matter-of-fact and pragmatic way in which Herbert Hoover presented this drama to the United States had a remarkable impact on allied economic policy towards the loser of WW II. But the fundamental moving forces behind the drama of Germany in 1945 and the drama of Mongolia in 2001 are exactly the same: the carrying capacity of an industrialised nation – both in number of human beings and in terms of ecological sustainability – is infinitely higher than in a nation which lives off its agriculture alone. A relatively inefficient manufacturing sector provides much higher welfare to a nation than having no manufacturing sector at all. The important synergies between manufacturing and agriculture, as visualised by the collapse of the Mongolian agriculture, are but one reason for this. The solution is therefore also the same as it was in post-war Germany: The only way to save both the people and the ecology of
Mongolia will have to be the same type of plan as was finally agreed to provide for the vanquished of World War II: a re-industrialisation with a prolonged transition period before free trade is introduced, just like in post-WWII Europe.

The big difference is that today there is no Herbert Hoover around; no person or institution with the common sense and authority to overcome what Hoover managed to overcome in 1947: ‘all the fallacies of logic, the evasion of issues, and the deliberate disregard of essential economic relationships’ (Balabkins 1964: 13). The same type of zealots that today fight the cause for instant free trade at any cost also propelled Morgenthau’s strategy. Balabkins describes the fanatics then, who ‘freely substituted normative views for positive propositions, and out of this mixture arose (a) ‘scientific’ mixture for the treatment of post-war Germany’. The economic theory behind the deindustrialisation of Mongolia and large parts of the Second and Third World is mostly concerned with the manipulation of monetary phenomena, with a very limited regard for the whole productive apparatus of which these monetary phenomena are but superficial ripples.

Imagine national economies as vehicles moving ahead at different growth rates. A parable to the management of the Second and Third World since the early 1990’s would be that of someone who has learned a theory on how to steer the US economy like a vehicle. Then this person attempts to apply the same steering principles to the economies of Mongolia, but without having given any thought whatsoever to what forces actually propel the vehicle. It is taken for granted that a production system like that of the United States and Europe—which has needed centuries of conscious and deliberate curing and caring—with all its knowledge and all its technologies, will appear spontaneously with ‘the market’.

This is the type of problem that Stanford economist Moses Abramowitz called to the attention of the profession in 1956: standard economic theory explains a fraction of the economic growth actually observed (Abramowitz 1956). Only about 10 to 15 per cent of economic growth can be explained by the traditional factors of production, the balance became the unexplained ‘residual’ that Abramowitz called ‘a measure of our ignorance about the causes of growth’. Many years later, Abramowitz returned again to the same argument. His comment on the progress of economic science since 1956 was not positive:

‘...the old primitive Residual is really an understatement, a lower-bound measure of our ignorance about the sources of growth....Perhaps some of you are thinking “If we are already ignorant of 90 percent of the sources of per capita growth, how much worse can it be? Can it be worse than 100 per cent?” In a sense, it can...”’It ain’t what we don’t know that bothers me so much; it’s all the things we do know that ain’t so.” That is really the nub of the matter.’ (Abramowitz 1993)

Abramowitz here points to the very shaky theoretical foundations on which the uncompromising policies imposed on Mongolia rest. ‘Laying the policy foundations for sustained growth’ in Mongolia (World Bank 2000: 2) has, in practice, meant eliminating many previous institutions without putting anything in their place. Economically, a belief in ‘spontaneous order’ has produced something closer to ‘spontaneous chaos’.

The structure of the balance of this paper is as follows: A short chapter one outlines the basic mechanisms that create the downward vortex of economic contraction starting in the early 1990’s. Chapter two describes how economic theory lost the categories that are needed in order to explain both economic growth and economic contraction, as the one experienced by
Mongolia. Chapter three explains the important synergies between increasing and diminishing return activities. These synergies were reversed in Mongolia in the 1990’s. The collapse of the industrial sector starting in 1990 led to a partial and parallel collapse of the agricultural sector as well. The causal mechanisms leading into this vicious circle are described in theory. Chapter four gives a description of the Mongolian setting, history and economy. Chapter five gives a detailed description of how the vicious circles described in theory in chapter four developed, interacted, and mutually reinforced each other in Mongolia during the 1990’s. Chapter six narrates how the Washington Institutions fail to meet the challenges that the Mongolian economy presents, using policies that effectively block the market mechanisms that, in theory, are supposed to bring relief. Chapter seven discusses what we consider to be the mismanagement and negligence of the Mongolian economy by the Washington Institutions, and chapter eight discusses the implications on the global periphery as a whole, and outlines a way out.

Appendix one gives an account of the theory of economic thought as it applies to the understanding of uneven economic development, a theory that is highly relevant for this case. Appendix two gives statistical data for the Mongolian economy from 1989-1998. These data, taken from the records produced by the Mongolian Statistical Office, are of great importance, since, as already mentioned, the official IMF data have eliminated all documentation on the collapse of the manufacturing sector that took place from 1990-1995 (IMF 2000). Appendix three gives a numerical example of a main mechanism at work in Mongolia during the 1990’s from Frank Graham’s 1923 article, and appendix four gives stylised version of the vicious circles at work.

1. The Basic Mechanisms at Work.

The mechanisms at work in Mongolia are the same that have reduced the standard of living during the 1990’s in a number of countries, particularly in former communist countries and in Latin America. According to UNCTAD, 90 nations were poorer in 1997 than in 1990. 37 of them were poorer in 1997 than they were in 1970. Mongolia is a typical, but in many ways, extreme case of this kind of economic policy. The economy is not very complex, which makes it a good case for illustration purposes. Comparing the economic post-Cold War economic policies with the policies carried out after World War II, we argue that Mongolia and large parts of the Second and Third worlds have, in effect, been subjected to a Morgenthau Plan rather than to a Marshall Plan. The core of the Marshall Plan was not the transfer of funds; it was the reconstruction of manufacturing industry and a focused strategy towards increasing the productivity of this industry.

Successful economic policy since the Renaissance had recognised the fundamental difference between diminishing return industries, where specialisation increases unit costs, and increasing return industries, where specialisation decreases unit costs. A policy basing a national strategy on the distinction between these two categories of goods has been successfully practiced at least since 1485 in England (Reinert 1994). A remarkably clear statement of the theory and the vicious and virtuous mechanisms that emanate from the two types of economic activities was published in 1613 (Serra 1613). This type of consideration dominated the 19th Century discourse on economic policy (Schumpeter 1954: 259). The importance of these mechanisms was reiterated by Alfred Marshall (Marshall 1890; 452), and shown in a numerical example by Frank Graham, a chairman of the American Economic Association (Graham 1923, appendix 3 to this paper).
In the history of economic thought over the last 500 years, the dichotomy increasing/diminishing returns being a proxy for good/bad exports was only absent in economic theory for a brief period from the mid 1930’s until the late 1970’s. In the 1930’s Harvard economist Jacob Viner eliminated increasing returns from international trade theory on the account that it was not compatible with equilibrium (Viner 1937: 475-482). In this way a real world phenomenon that economists for centuries had seen as a key to explaining wealth, was sacrificed in order to keep the ‘purity’ of the model. A key aspect of the economic terrain was cancelled from all maps, and this only in order to accommodate the weaknesses of the technical tools that the mapmakers insisted on using. The logical alternative would have been to change tools, but this would have meant sacrificing equilibrium and opening up for a type of market that not only no longer created harmony, but also potential disharmony. The abstract principles of the profession created an analytical framework where the factor left out, increasing returns, was crucial in explaining the growth of welfare. It was indeed a paradox that this happened in the middle of the ‘Fordist’ paradigm, where increasing returns were at the very core of the wealth-creating economy.

The attitude of Viner and his followers, i.e. virtually all neo-classical economists, was very different from the attitude of the founder of neo-classical economics, Alfred Marshall. In his celebrated Principles of Economics, Marshall clearly recognizes that a nation could improve its position by subsidising economic activities subject to increasing returns, and tax those subject to diminishing returns, e.g. agriculture (Marshall 1890: 452). During the 20th Century, neo-classical economics was backsliding away from its founder into Ricardian and Walrasian models. When increasing returns again was brought back into the theory, it formed a new ‘fashion’ in economics modelling (Krugman 1980, 1988 & 1996). However, in practical policy this economic fashion had no influence whatsoever on the policy recommendations of the Washington Consensus. This was to have a devastating effect on Mongolia’s economy.

The loss of increasing return activities has often been observed in nations having lost wars. Devastating effects of de-industrialisation in France after the Napoleonic Wars convinced the young Friedrich List – previously a free trader – of the need to build a national industry before the final goal of global free trade could be achieved. After wars, ‘Morgenthau Plans’ may occur spontaneously. In 1947, Herbert Hoover was rephrasing what economists had known since the 16th Century: a pastoral nation could not by far support the population of an industrial/agricultural/pastoral state. If industry is killed off, a nation’s ability to support its population would be seriously curtailed.

The economic mechanisms set in motion by the free trade shock in Mongolia, were the same as those normally observed when free trade is suddenly opened between a relatively advanced nation and a relatively backward one. Experience shows that the first casualty of free trade, the first industry to close, tends to be the most advanced industry in the least advanced country. This was the case e.g. in the 19th Century unification of Italy and in the Czech computer industry after the fall of the Berlin wall. Reinert has described this as the ‘winner-killing effect’ and Jaroslav Vanek has called it ‘the herbicide effect of international trade’ (Reinert 1980) and ‘destructive trade’. This ‘Vanek-Reinert’ effect is fully compatible with standard international trade theory: Under free trade each nation reinforces its comparative advantage, the wealthy First World in its comparative advantage in higher skills in increasing returns industries, while the poor nations fall back on their comparative advantage in diminishing return industries. A comparative advantage in a diminishing returns activity is a ‘natural advantage’, based on Nature’s bounties, whereas a comparative advantage in an increasing returns activity is a ‘created advantage’, based on Man’s inventiveness and skills.
The problems facing a nation specialising in diminishing return industries, with a relatively weak industrial sector as Mongolia, can be observed in appendix 3 of this paper. This primary, or ‘first-round effect’, is followed by secondary effects which tend to mutually reinforce each other, creating a downward spiral of underdevelopment. We shall return to these secondary effects and the vicious circles in the case of Mongolia.


‘Just as we may avoid widespread physical desolation by rightly turning a stream near its source, so a timely dialectic in the fundamental ideas of social philosophy may spare us untold social wreckage and suffering.’

H. S. Foxwell, Cambridge University Economist, 1899.

A striking feature of the economic theory followed by the Washington Institutions in the 1990’s, is that, implicitly and explicitly, all economic activities are considered as being qualitatively alike in terms of creating economic development. This is the outgrowth of an economic theory that increasingly came to focus on monetary and trade phenomena at the expense of the real economy producing goods and services. Periodical crises in the economy had apparently been brought under control through the fine-tuning of monetary factors, and the fundamental engine of economic wealth, the growth of new knowledge and technology, thus became marginalised in the theory. Controlling the ripples of the economic cycles of the industrial world gave the economics profession the illusion of having understood and controlled the extremely complex and varied underlying productive machinery.

The productive machinery underlying the industrial economies is, however, being propelled by factors that are all external to standard economic theory: new knowledge, technical change under enormous scale effects, and human initiative. All these ‘true’ factors of production had been excluded from the neo-classical production function. Economic theory thus came to externalise the real factors that create economic wealth, and focused on superficial monetary factors. The ‘real economy’ of production of goods and services was tucked away in a black box, the content of which was assumed to be completely homogeneous, void of scale effects, and fully accessible to all individuals inhabiting the planet (‘perfect information’). The illusion after the Cold War was that ‘perfect’ markets – ‘getting the prices right’ – and ‘sound fiscal and monetary policy’ would automatically fill the black box of production of goods and services in the poor nations. Paradoxically, the enormous productive powers of capitalism were taken for granted by capitalist theory; the focus was on superficial movements of trade and of monetary quantities. To use Schumpeter’s term: Mainstream economics and the Washington Consensus suffered from ‘the pedestrian view that it is the accumulation of capital per se that propels the capitalist engine’ (Schumpeter 1954: 468). A naïve view of the economy as an automatic harmony-making machinery led to a disregard for the productive apparatus in the Second and Third World.

This simplification of economics to monetary and trade phenomena was not harmful in nations where the ‘true’ factors of production were in abundant supply; in the industrialised world. But to nations with weak and non-existent industrial sectors, a dangerous and enduring illusion was created that economic development could be produced by adding capital to labour in a process similar to adding water to soluble coffee. The activity-specific element of
economic welfare, the fact that all rich nations were riding on an industrial wave where rapid innovations and increasing returns were the key factors, was forgotten. The mature economic activities pursued in the poor countries did not present attractive investment opportunities. In other words these nations could not absorb capital in a profitable way, and therefore ceased to attract capital. Having lost touch with the real economy of production, many to mistake the symptom of capital shortage for the root cause explaining the lack of development. The causal arrows of economic change had been inverted; the agent was considered the true cause.

In this paper we apply a different and contrasting set of principles from that of standard economic theory to the Mongolian case – that of ‘The Other Canon’ of economics (see the introduction to this volume). We shall attempt to show how development policies based on the principles of The Other Canon would have prevented the poverty, social suffering and environmental degradation that presently haunt Mongolia. The principles applied in The Other Canon are those applied by the United States during its period of spectacular catching up from 1820 until World War I. We are, in this sense, holding up the theories of economic policy of Abraham Lincoln as the example to follow for the poor world, rather than those of IMF, The World Bank and the present US Treasury.

A key stumbling block in mainstream economics is the loss of categories. The fact that all economic activities were seen as being qualitatively alike represents a curious break with long-standing scientific tradition. Early scientists saw it as a main task to order observable objects and phenomena into categories and components. Classification put an end to an impression of chaos, creating a perceived order in Man’s world. Starting in the Renaissance, scientists embarked on a huge, but slow, project of mapping and classification of the natural world. Carl von Linné’s classification of the world of plants is a well-known example. The completion of the human genome project in 2000 can be seen as a milestone in this project of mapping and classification of Nature. A later project was directed towards the quantification of this surrounding world, of measurement of distance, volume, temperature, and of the construction of instruments that could measure them.

Medicine and economics are the two sciences that most acutely affect human welfare. Medical science and, thus, human welfare benefited enormously from the early classification project. Symptoms were described and classified into different illnesses or syndromes. This classification was a prerequisite for the later development of medicines directed specifically at specific clusters of symptoms. Our great advances in medicine would not have been possible without a prior project of classification of medical symptoms. Here mainstream economics of the 1990’s again differed: the same medicine was prescribed in all nations, regardless of their different symptoms and degrees of poverty.

Traditional medicine depended on centuries of experience, as when, starting in the 12th Century, lemons and oranges were used against scurvy in the Mediterranean. The scientific explanation as to why lemons remedied scurvy was only found with the discovery of Vitamin C in the late 1920’s. In economic policy as in medicine, remedies were used without knowing why they worked. As English economist Edward Misselden put it 1622: ‘Before we knew it by sense, now we know it by science’. By dividing all economic activities into two categories – those subject to increasing vs. those subject to diminishing returns – Antonio Serra did in 1613 to economics what Linné did to the world of plants. It was fundamental for a nation to understand if cost would increase if a nation specialised in them (diminishing returns) or if the cost would decrease and create formidable ‘barriers to entry’ in your favour (increasing
returns). However, in practice the targeting of increasing return activities had already been going on for centuries.

In the 18th Century scurvy was again the biggest threat to long voyages. Knowledge of traditional medicine had been lost for a period. Generic medical treatment, ‘cure-alls’, like bleeding came to dominate medicine. This was in a sense a ‘Dark Age’ when some useful traditional knowledge was lost, and before ‘scientific’ medicine had developed. When Captain Cook sailed around the world from 1768 to 1771 traditional knowledge had been forgotten, and scurvy was again a big killer.

Today’s debate on the benefits of ‘open economies’ is in a sense similar to the long European debate about bleeding sick patients. In his treatise about bleeding (Quesnay 1750), economist and physician Francois Quesnay (1694-1774) praises the great curative effects of bleeding on most diseases, including inflammatory diseases and fevers, maladies chaudes. The discussion then was not whether to bleed sick patients or not, but how to bleed them, how much, where and when. The principle of bleeding was not questioned. In much the same way the principle of ‘openness’ of all national economies is not questioned today. In the tradition from Serra all the way up to World War II, it was accepted that no nation could ever grow out of poverty without an increasing return sector. Only when the increasing returns sector was firmly established, the nation was to ‘graduate’ to free trade. As the 20th Century advanced, the habit of dividing economic activities into two categories disappeared from economic theory, essentially because the increasing returns variety was incompatible with equilibrium. The true engine of development – technological change under increasing returns (Schumpeter’s historical increasing returns) – was thrown out because it did not fit the tools of textbook economics.

Today we observe the clustering of the world’s nations in two convergence groups, one rich and one poor. This process can never be understood as long as the Washington Institutions insist on using an economic theory that is void of any categories, a theory where all economic activities are qualitatively alike as carriers of economic development. Everyone intuitively understands that a nation of stockbrokers will be richer than a nation of people specialised in washing dishes. Pre-Serra economic policy was based on such intuition, Henry VII of England (from 1485) being a prime example. However, this insight is not compatible with the theory on which the world economic order rests. The increasing poverty of the ‘middle income nations’ which all got poorer during the 1990’s is directly related to the enforcement of neoclassical economics in these nations. The middle-income nations had some manufacturing activities, but these were too inefficient to survive the sudden shock of openness. In many former planned economies, the people in charge of these increasing return industries probably did not even have the time to figure out what their real costs were, before their firm was wiped out.

With the loss of categories in economics, depth and quality of understanding is also lost. Antonio Serra’s simple model gave him the extremely important insight that the very same economic policy can have very different effects in different industries: ‘Like the sun makes clay hard, but makes wax soft, like a low whistle which irritates the dog, but quiets the horse’ (Serra 1613). In Mongolia this type of insight, that a specialisation in pastoral activities would have a very different outcome than a specialisation in manufacturing, would have spared the country from much damage. Standard economics works under what Nobel Laureate Buchanan calls the ‘equality assumption’, and the models operate in a straightjacket: the theory can only operate at a level of abstraction where all economic activities are assumed to be identical.
The foundations of the present world economic order theories are fundamentally ahistorical, void of any categories that would help understanding economic phenomena. The underlying theory is, in Kuznets’ term, not a ‘tested theory’. Too often the main variable discussed is the relative openness of the economy, in a setting where the beginning of time is around 1973. In its most simple form, the argument is that rich countries are open economies, therefore openness is the key to riches. This kind of reasoning is typical of scientific scholasticism (see Reinert 2000b for a discussion). What the Washington Institutions fail to recognise, is that this combination of wealth and openness is, without any historical exception, the result of a prolonged period of conscious building of increasing return activities, whether by this or by another name. In the next section we shall see how a simple system of dividing economic activities into two categories provided important policy guidance in Europe for centuries.


‘Promoting husbandry..is never more effectually encouraged than by the increase of manufactures’ says David Hume, Adam Smith’s close friend, in his History of England (Hume; 1768, Vol. III, p. 65). The economic changes which have taken place in The Republic of Mongolia in the 1990’s show us that the reverse is also true: The destruction of husbandry and agriculture is never more effectually encouraged than by the destruction of manufacturing. The application of standard economic theory of the Washington Consensus in Mongolia in the 1990’s has given us a chance to observe – as in a laboratory experiment – how the classical vicious circles of poverty and environmental degradation take root and reinforce each other in a downward spiral of underdevelopment. The Mongolian experience follows the theoretical framework in Reinert (1980) almost as a textbook case.

During the early industrialisation of Europe, agriculture and industry were often seen as being in competition. The first economist who expressed Hume’s view above, the complementarity of national investments in agriculture and manufacturing, was Gottfried Wilhelm von Leibniz (Roscher 1874: 337). This view, later spread by authors as different as Johan Peter Süßmilch, James Stueart and Hume, was to influence profoundly both economic policy and economic development all over Europe. Later, Mathew Carey, starting in 1820, propagated the same basic view in the United States: the mutually beneficial and synergetic effect of manufacturing and agriculture in a nation. This idea was to make the industrial policy of the United States acceptable to the farmers of that country through the rest of the 19th Century. Leibniz’ insight came to have an enormous impact on 19th Century economic policy. Undoing these synergies, as in Mongolia in the 1990’s, would for hundreds of years have been seen as an obvious recipe for economic disaster. Like the simple cure for scurvy from eating lemons disappeared, so did this long tested economic knowledge. The Mongolians are in the same situation as Captain Cook’s sailors were: they must suffer because age-old knowledge has been unlearned.

Building the complimentary of agriculture and manufacturing from a purely agricultural nation required a period of protecting and nurturing manufacturing. The principle ‘import raw materials, export manufactured goods’ for centuries took the place of economic theory in England, as Friedrich List correctly observed (List 1841, Reinert 1998). This principle had been applied in economic policy since Henry VII came to power in England in 1485. The theoretical principle behind this was worked out by Antonio Serra (Serra 1613). In England
one important theoretical foundation was Charles King’s three volume work, *The British Merchant, or Commerce Preserved*, (King 1721). To King and his contemporaries, exporting raw materials was ‘bad trade’ while exporting manufactured products was ‘good trade’. Interestingly, exchanging manufactured goods for other manufactured goods was also considered ‘good trade’.

In fact, King’s recommendations make eminent sense if we assume that raw materials are produced subject to diminishing returns, whereas manufactured goods are produced under increasing returns. In Germany a stream of authors consistently presented the same conclusions on this issue. Johan Friedrich von Pfeiffer’s monumental five volume *Lehrbegriff sämtlicher Ökonomischer und Cameralwissenschaften* (Pfeiffer 1764-1778) is one example. All European nations, large and small, attempted to follow these same principles for centuries. As Alfred Marshall points out (Marshall 1890), the forces of diminishing returns, presently at work producing increasing poverty in Mongolia, are clearly explained already in the Bible: ‘The land was not able to bear them that they might dwell together; for their substance was great so they could not dwell together’ (Genesis; xiii 6).

We suggest that the falling living standards experienced in a large number of world nations since the 1990’s are a result of fundamental flaws in the economic models which support the Washington Consensus, and consequently the management of the economies of the Third World. As indicated, the core idea of this paper is that economic activities are qualitatively different, and that economic development therefore is highly activity specific. Some economic activities create development, others not. And, to complicate the matter, some types of economic activities create wealth only if other activities are present, as the above quote from David Hume suggests.

The role of increasing and diminishing returns in creating, respectively self-reinforcing, circuits of wealth and poverty also gives us the clue to one of the major puzzles to which the economics profession owes an explanation: how it was possible for the notoriously inefficient centrally planned economies to produce standards of living which were considerably higher (in the case of Russia and Mongolia twice as high) than the living standards produced under capitalism today? The theoretical framework used here was first published in Reinert (1980) and later discussed and elaborated in Reinert (1994, 1996a, 1996b, 1998).

We also claim that evolution of the institutions enabling development is activity specific. As was the mid-18th Century consensus in European economic policy, it is the presence of certain economic activities that gives birth to institutions. Insurance was created 2000 BC because camel caravans and sea trading created a demand for such an institution, not the other way around. Insurance was not created, in turn creating the possibility of launching caravans and long distance trading. Getting the causal mechanisms of this apparent chicken and egg problem right is highly significant. Today there is a tendency to try to create in poor countries, based on traditional agriculture, institutions which are the product of centuries of advanced manufacturing and commercial activities. As it was put in a German price essay to the King of Prussia in 1749: ‘It is not that a primitive people civilise, later to introduce manufacturing. **It is the other way around**’. (See Reinert 2000b) The understanding of this crucial causality is indispensable in order to understand economic development. In this paper – using Mongolia in the 1990’s as an example – we try to explain why.

Continuing a long economic tradition, starting with Antonio Serra in 1613, we claim that economic wealth and poverty can only be understood if ‘Malthusian Activities’ (subject to
diminishing returns with international specialisation) are separated from ‘Schumpeterian Activities’ (subject to increasing returns with international specialisation). ‘New Trade Theory’ in the early 1980’s (Krugman 1980) essentially resurrected the existence of increasing and diminishing returns, an argument that had been important, if not crucial, for economic policy through the 19th Century. However, in ‘New Trade Theory’ the dichotomy increasing/diminishing returns was, for all practical purposes, lost: The ‘equality assumption’ in neo-classical theory – the fact that all economic activities are seen as qualitatively alike – as usual came to overrule any other tendency in economic theory.

<table>
<thead>
<tr>
<th>Characteristics of Schumpeterian Activities (= ‘good’ export activities)</th>
<th>Characteristics of Malthusian Activities, (= ‘bad’ export activities unless a Schumpeterian sector is present)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing Returns</td>
<td>Diminishing Returns</td>
</tr>
<tr>
<td>Dynamic imperfect competition</td>
<td>Perfect competition ('commodity competition')</td>
</tr>
<tr>
<td>Stable prices</td>
<td>Extreme price fluctuations</td>
</tr>
<tr>
<td>Irreversible wages ('stickiness' of wages)</td>
<td>Reversible wages</td>
</tr>
<tr>
<td>Technical change leads to higher wages for the producer ('Fordist wage regime')</td>
<td>Technical change tends to lower price to consumer</td>
</tr>
<tr>
<td>Creates large synergies (linkages, clusters)</td>
<td>Creates few synergies</td>
</tr>
</tbody>
</table>

The elements in each of the two columns mutually reinforce each other and create the virtuous and vicious circles of development and underdevelopment respectively. In Mongolia, the de-facto Morgenthau Plan started in 1991 virtually wiped out the Schumpeterian activities that had slowly been built up over fifty years, and the Malthusian mechanisms took over.

Antonio Serra pointed out these mechanisms when he explained the relative poverty of Naples compared to the wealth of Venice, which he saw as a result of Increasing Returns. To German authors the principle of diminishing returns was equally important. In the 1850’s, Wilhelm Roscher again highlights diminishing returns and relates this to the ‘bearing capacity’ or ‘carrying capacity’ of lands and nations - terms strikingly close to today’s ‘sustainability’ (Roscher 1882, Reinert 1996a). Not only do different economic activities at any point in time...
present widely different potentials for economic growth, the presence of some types of activities are also crucial for the successful development of others, just as David Hume claims above. The same principle of increasing returns and cumulative causations used by Serra now underlies the theories of W. Brian Arthur (1994).

Indirectly we also revisit the ‘golden age’ of development economics, with its ‘vicious circles’ and ‘perverse backwashes’ development economics of the 1950’s and 60’s, where Gunnar Myrdal (1956) perhaps represents the most concise expression. We claim that at the core of the mechanisms causing Myrdalian virtuous circles are increasing returns, and at the core of vicious circles are diminishing returns. Curiously, just like Friedrich List (1841), Myrdal describes the effects of diminishing returns without pinpointing the core mechanisms themselves.

4. Mongolia: A Brief Description.

4.1. The Mongolian Setting.

Ulaanbaatar, the capital of Mongolia, is nestled in a spacious valley at 1,300 meters above sea level. Its 650,000 inhabitants are far from filling up the valley. The average altitude of the country is 1,600 meters. At this latitude and altitude (about 48 degrees North) the inland landscape is bleak, and nature appears to be fragile as in the sub-Arctic, where the tracks of a car remain visible for centuries. Mongolia’s highest mountain, Khuiten, rises to 4,374 meters above sea level.

When arriving in Ulaanbaatar, the association that comes to mind is Andean mining towns at 4,000 meters altitude. German geographer Karl Troll once described the climate in the high Andes as ‘winter every night and summer every day’. This description also fits well the extreme continental climate of the Mongolian altiplano. When we visit during late March, night temperatures still fall below minus 20, rising to a few degrees above zero during daytime. Shielded from the oceans by high mountain chains, the Mongolian climate is very dry, so the bitter cold is the dry and least unpleasant form of cold.

Mongolia is blessed with an enormous variety of natural landscapes, ecosystems, and fauna. The climate ranges from the Gobi desert, via steppe and taiga (cedar and lark tree forests), to the sub-Arctic mountain world of glaciers and frozen rivers, in all inhabited by the very impressive number of 665 species of vertebrates.

On the steppe, only July is frost-free, but the dry climate still offers unique possibilities for herding and raising animals. The animals graze outside all year, on what appears to be grass that has been naturally freeze-dried on root. The little snow that falls in flurries is extremely light, and tends to blow away from the plains. The total population of 2.5 Million Mongolians share an enormous territory of 1.5 Million square kilometres, more than the combined territories of Italy, France, Germany, Austria and Great Britain. In 1998 the 2,420,500 Mongolians shared their land with 32,897,500² heads of domestic animals: 356,500 camels, 3,059,100 horses, 3,725,800 cattle, 14,694,200 sheep and 11,061,900 goats. In 1998 the animals outnumbered people in a ratio of 14 to 1. The precipitous de-industrialisation of the

1990’s was accompanied by a population growth of 16 per cent and a growth in heads of animals of 33 per cent.

The Mongolian sky is intensely blue, and the sun shines about 250 days a year. The dark blue sky in this dry climate is almost like a second national symbol. However, on the outskirts of Ulaanbaatar this image is tarnished by symbols of industrialisation: four gigantic smokestacks spew out smoke. The smokestacks belong to four power plants that provide electricity and heating to the city. The heating is by hot water, distributed through a city-wide system of water pipes. The different plants produce smoke in varying shades of brown, testifying to various generations of technology, and thus to the age of each plant. The World Bank recommendation is to privatise the most modern plant, the one which produces the least brown smoke. This is a truly ‘Fordist’ and centralised heating system. For the newly poor of the 1990’s the heating conduits that run underground through the city provide shelter from the bitter cold at night. Here is where the growing number of homeless children finds refuge. The Japanese social workers call them ‘man-hole children’, from their dwellings.

4.2. Brief History.

After having spent 10 years uniting the tribes of Mongolia, Genghis Kahn proclaimed the Mongolian Empire in 1206. Under his grandson Kublai Khan (1215-1294) The Mongolian Empire reached its largest territorial extension, including a large part of the former Soviet Union, China, Korea, Turkey and Persia. In Europe the Mongols arrived far into Poland. Marco Polo, the Venetian, stayed in the old capital of Kharakhorum from 1236-1240, and gives us a good description of life in old Mongolia.

Like the Scandinavian Vikings, the Mongolians ended their period of colonising hundreds of years before Europe’s colonial period started. The Mongolian Empire deteriorated after the Chinese invasions starting in 1380, and in 1691 Mongolia became itself a colony to the Manchu Empire. Eastern and Western Mongolia split up, and the Western Mongolian state later joined the Chinese Empire. This part, Inner Mongolia, today forms the Autonomous Republic of Inner Mongolia in China. When the Russian tsars invaded Siberia, Outer Mongolia remained relatively independent. What we refer to here as Mongolia, is in fact Outer Mongolia.

In December 1911, Manchu domination ended, and Mongolia was declared an independent kingdom. Ten years later, in 1921, a communist revolution led to the development of the socialist republic that was to last until 1990. During World War II, Soviet-Mongolian troops fought against the Japanese. Prisoners taken in this war built the huge building that today houses both Parliament (The Great Hural) and the government offices in today’s capital Ulaanbaatar. This is the building where the economics conference took place in March 2000. The main religion of Mongolia has been Tibetan Buddhism since the mid-17th Century.

Communism was the first foreign induced shock for 20th Century Mongolia. The communist purges in Mongolia in the 1930’s were brutal. The Buddhist temples and statues were destroyed, and the monks massacred. The traditional Mongolian script was outlawed and substituted by the Cyrillic alphabet that is still used today to write the Mongolian language. Mongolians also lost their family names and thereby their traditional clan identity, because the communist rulers believed that clan identification could constitute a threat to the system. Only in 1999 new last names were officially put back into use.
4.3. The Economy.

The traditional Mongolian lifestyle is that of a nomadic herder who gets all of his essentials from his animals. Nomadic life in Mongolia is organised around five species of animals: sheep, goats, cattle, horses and camels, the largest number being sheep, the smallest number being camels. The traditional household follows the livestock along the vast steppes in search of new pastures and water. Still today only 4 per cent of rural Mongolian households have access to electricity.

The Mongolian house is traditionally the *ger*, a round tent with a wooden frame covered with animal felt. Smallish from the outside, once inside, the *ger* is surprisingly spacious. The growing shantytowns of Ulaanbaatar consist of a mixture of traditional shantytown buildings and *gers*. Traditional Mongolian food is the food of the herdsmen. Tea with milk and salt is a traditional drink, while the favourite drink is *airag*, fermented mare’s milk (horse milk), which is generously served at weddings, parties, and ceremonies. Meat is the staple diet, where mutton appears to dominate. Horse milk is very rich in Vitamin C, which presumably compensates for the lack of vegetables in the diet. Vegetables like cucumbers are grown in small greenhouses surrounding Ulaanbataar. The true Mongolian barbecue – as opposed to the mock Mongolian barbecue that has spread in the western world during recent years – consists of whole animals roasted over the fire. The special local feature is that boiling hot stones are added inside the animal in order to cook the meat from both sides. The hot stones from this process are given to the arriving guests so they can warm up.

The Soviets carried through an ambitious industrialisation programme in Mongolia. The country was to convert its raw materials into finished products: Canned and other processed meat, leather products, jacket, boots, etc., and wool products like carpets, mostly machine-made, but also some hand made. Luxury products processed from wool from mohair goats and camel hair are also traditional export items. In addition typical import substitution industries – from soap to clothing and matches – were set up. The non-luxury items were largely traded within the COMECON, which had an advanced division of labour. The machinery used in Mongolian industry came mainly from Czechoslovakia and from East Germany. As mentioned in the introduction, this policy had reduced the nation’s dependence on husbandry and agriculture considerably. The share of agriculture in GDP was reduced from over 60 per cent in 1940 to about 16 per cent in the mid-1980’s.

5. Meeting the ‘Flexible Wall’: Mongolia and the Vicious Circles of the 1990’s.

In 1990, Mongolia embarked on two simultaneous transitions; one economic and one political. In this sense, Mongolia is more similar to most Eastern European countries than to the former planned economies in Asia. While the Republic of China and Vietnam essentially started with an economic transition only, Mongolia – true to tradition – looked West rather than South. In 1991 Mongolia embraced democracy and a minimalist laissez-faire market economy, in strong contrast to her big neighbour in the South, the People’s Republic of China.

Mongolia has embraced full financial liberalisation and capital account convertibility. Starting in May 1997, a zero tariff regime was implemented, except on alcohol. The country has more than fulfilled the requirements foreseen in the Multilateral Agreement on Investment (MAI).
In short, Mongolia has followed the rules for success as spelled out by the Washington Institutions: Mongolia has been a ‘model pupil’. Why, then, did the 1990’s bring the Mongolian economy close to the brink of collapse, see real wages plummet and make ‘real jobs’ a rarity, while simultaneously destroying the fragile ecological balance of the sub-Arctic country, risking permanent desertification?

We claim that these problems are not of a transitory nature. In our opinion the forced advice of the Washington Institutions has unleashed classical Malthusian mechanisms of vicious circles of poverty and environmental degradation. We shall attempt to show that while 19th Century classical economics understood the mechanisms that today make Mongolia increasingly poorer, the economics of the Washington Institutions have failed to apply the basic insights of their founding fathers, the classical economists. The Washington Institutions have ignored centuries of theory and evidence testifying to the different behaviour of economic activities under international specialisation: an international specialisation in diminishing return activities, without a national increasing return sector, has never failed to be a formula for economic and social disaster.

John Stuart Mill clearly warned against underestimating the role of diminishing returns in explaining poverty. This was not kept in mind when the economic strategy for Mongolia was established:

‘I apprehend (the elimination of Diminishing Returns) 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 matter be thoroughly understood, it is to no purpose proceeding any further in our inquiry’ (Mill 1848).

The only strong institution in Mongolia for most of the 20th Century was the state. Other institutional pillars – like family/clan and religion – were consciously built down under the Soviet-influenced regime. The communist regime had achieved impressive human development indicators, especially social indicators like health, education, maternal and infant mortality and tertiary education. This achievement was all the more remarkable since it took place in a nation with a relatively low level of GDP and with a widely scattered rural population (see Malhotra 1998 for a discussion).

1990 brought the collapse of the COMECON trading system, and opened up for trading in dollars. Mongolia’s manufacturing industry, geared to adding value to the country’s raw materials, immediately felt the impact of the loss of foreign markets. It is unclear to what extent the overvalued currencies of the former COMECON countries contributed to the collapse of their manufacturing industry. Exchanging the currencies of the COMECON nations at their official exchange rate, rather than at their value on the black market, seemed like a gesture of generosity to the East Germans who had their Marks converted 1:1 to the West German Mark. To the extent the same policy was followed, it was a disaster to the local manufacturing industry in the former communist countries.

Table 1 shows the precipitous fall in important sectors of Mongolian manufacturing industry. Table 2 shows an index of industrial production (1989 = 100) in all industrial branches where output is measured in quantities. (Due to problems with previous inflation, a few sectors where output is only measured in value were not included). As can be observed, in the majority of industrial sectors (29 out of 52), output has been reduced by more than 90 per cent
since 1989. No manufacturing industry, other than the production of alcohol, has declined less than 50 per cent. In 15 manufacturing industries production has either ceased completely or been reduced to less than 1% of 1989 level. The only industries showing an increase in production are the mining sector, alcohol production (the only industry still enjoying some protection), and the collection of bird down. As we shall see, the growth of the latter category – down collection – corresponds with a general ‘primitivisation’ of the economy, back to the traditional animal herding. While animal herding combined with a growing manufacturing sector produced growing standards of living under the communist regime, the virtual disappearance of manufacturing has caused a precipitous economic decline, also in the herding sector.

In real (as opposed to monetary) terms, the economic shock that hit Mongolia and the other COMECON countries, was initially twofold. First the fairly elaborate internal division of labour system collapsed with the open border and dollarisation of trade. This hit the export sector of all previously centrally planned nations. Secondly the industries producing for the internal market were hit by a combination of overvalued currencies, relative inefficiency, lack of knowledge of their own costs and of marketing skills, and the faltering demand from people who had lost their jobs in the export sector. In 1991 the IMF planned increasing the imports of consumer goods (IMF 1991: 30).

Herein lies the enormous difference between the transitions of the 1990’s and the reconstruction of a war-torn Europe after World War II: In the late 1940’s, every economist and policy maker still internalised the 17th to 19th Century common sense that a nation with an inefficient manufacturing sector will be infinitely better off than a nation with no manufacturing sector. No one would have dreamt about demanding free trade between Europe and the Unites States in May 1945. It was obvious that the manufacturing sector of Europe had to be rebuilt first. This was the very essence of the European Reconstruction Programme, the Marshall Plan. From the Washington Institutions Mongolia received a Marshall Plan in reverse: a fairly conscious and pre-mediated destruction of its manufacturing sector which laid the country open for the classical grim Malthusian mechanisms of increasing poverty.

The solution for the increasing number of Mongolians who had lost their livelihood in the manufacturing sector was to return to the way of life of their forefathers as herdsmen. The number of herdsmen tripled during the 1990’s (Table 7), adding 8 Million grazing animals to the fragile steppe. However, while the number of herdsmen tripled, the increase in the number of animals only represented a 33 % increase. The traditional agricultural sector could only absorb the labour shed by manufacturing and by a shrinking public sector at the cost of greatly reducing the number of animals per herder. With no alternative employment, labour productivity thus becomes the first victim as the diminishing return activity – in this case raising animals – pushes towards the limits of ecological sustainability. Avoiding this problem, running resource-based industries into diminishing returns, was at the core of the Australian argument for building a manufacturing sector (see Reinert 1980 & 1996a for a discussion). Today the economic policy of escaping the traps of diminishing returns – which was crucial for the building of European civilisation for centuries – has seemingly not even been considered by the Washington Institutions. The overhanging dangers of diminishing returns in a globalised economy are totally ignored in today’s discussion (Reinert 1996a). Also gone without leaving even an intuitive trace is the common sense that rebuilt European manufacturing after World War II before opening up for ‘free trade’.
During the 1990’s many Mongolians were driven back into subsistence agriculture. The
average size of the animal herds has decreased from 182 to 94 animals between 1989 and
1998. Today 80 per cent of the herdsmen possess less than 200 heads of livestock. 67 per
cent of these families have less than 100 heads of livestock. ‘In other words, (the) majority of
herdsmen just survive without being involved in productive activities’ (Bathisig 2000, 45).
We observe the kind of ‘primitivisation’ of the economy that is typical when a whole
community is pushed against the ‘flexible wall’ of diminishing returns. The same
phenomenon can be observed with the depletion of fish stocks in Asian fisheries: so little fish
is left that modern fishing boats can no longer be profitably used. At the same time the wages
collapse to an extent that the only way to survive for the fishermen is to go back to their
traditional ways: subsistence fishery (Endresen 1994, Reinert 1996a). In the mines of Bolivia
the same phenomenon appears when jobless miners with picks and spades manually start
reworking the refuse from old mining activities in the search for minerals.

For communities specialised in diminishing return activities – without the presence of an
industrial sector – ‘globalisation’ will, almost as a natural law, bomb their productive sectors
‘back to the Stone Age’. Without allowing for free labour migration, this is the inevitable
effect of specialising in an economic activity subject to diminishing returns, be it herding,
agriculture, mining or fisheries. Neoclassical economics and The Washington Institutions fail
to distinguish between activities that, under specialisation, behave like those of Microsoft and
those that have one factor of production limited by an act of God, as do the Mongolian
herdsmen. The almost religious application of this simplified model is presently the source of
much human suffering. The big paradox is that the politicians who are proudly featured on the
US dollar bills, George Washington, Alexander Hamilton, Benjamin Franklin, and Abraham
Lincoln all fully understood the need for a nation to engage in non-diminishing return
activities, and indeed they championed the nurturing and protection of increasing return
activities in the United States. Not only are the Washington Institutions undermining the
economies of many poor nations; by refusing the Third World to follow the strategy followed
by the United States they are also breaking faith with the economic ideals that built the United
States.

During the mid-1990’s, Mongolia experienced several mild winters. These mild winters
helped accommodating the more than 8 Million additional animals on the steppe. When a
winter struck which was normal, or slightly colder than normal, in 1999-2000, a disaster of
biblical proportions struck Mongolia: between 2 and 3 Million animals starved to death.
Typical of the present mainstream Zeitgeist – never questioning the Washington Institutional
wisdom, but possessed by fear of climatic change – the Western press without exception
reported the mass starvation in Mongolia as yet another sign of changing global weather. No
one even hinted at the important piece of information that the dead animals only corresponded
to the increased number of animals over the last 2-3 years.

In the winter of 1999/2000, Mongolia had reached what John Stuart Mill calls ‘the flexible
wall of diminishing returns’. If diminishing returns are reached e.g. in fisheries, there are
always a few more fish which can be caught, but at rapidly increasing costs. Diminishing
returns constitute ‘a highly elastic and extensible band, which is hardly ever so violently
stretched that it could not possibly be stretched any more, yet the pressure of which is felt
long before the final limit is reached, and felt more severely the nearer that limit is
approached.’ (Mill 1848; 177) Mongolia was grazing animals at the outer limits of this elastic
band, and a climatic change that was within the normal range, wiped out between 2 and 3
Million animals.
Crucial in Malthusian mechanisms of underdevelopment, is the fact that all of Nature’s bounties – land, fishing areas, mines – are available in different ‘qualities’. Malthus assumes that the best land is cultivated first, and as a nation specialises in a resource-based activity, poorer land, mines or fishing areas will automatically lead the nation down the diminishing returns part into more and more poverty: ‘the productive powers of labour as applied to the cultivation of land must gradually diminish and as a given quantity of labour would yield a smaller and smaller return, there would be less and less produce to be divided (Malthus 1836; 273-274). This is clearly an important mechanism at work in Mongolia, as 8 Million heads of animals were added to the fragile ecosystem during the 1990’s. Having unlearned both history and the history of their own profession, today’s economists fail to connect the age-old paradox of the economic poverty of resource-rich nations to diminishing returns, as was the tradition from Antonio Serra up to and including Alfred Marshall. Today’s explanation of this phenomenon, centred around ‘Dutch Disease’ (Sachs & Warner 1995), totally misses the core mechanisms at work in the poor nations.

These were only the first rounds of deterioration that followed Mongolia’s path into Malthusian diminishing returns. The further rounds of ‘vicious circles’ in Mongolia are deeply tragic, but very interesting from a theoretical point of view. We find traditional theoretical arguments from industrialisation, both from Europe and the US, come true as Mongolia’s development process was put into reverse gear. As already quoted, David Hume – when discussing the economic policy of Henry VII, starting in 1485 – states that ‘promoting husbandry..is never more effectually encouraged than by the increase of manufactures’ (Hume; 1768, Vol. 3, p. 65). In Mongolia in the 1990’s we could observe that the reverse is also true: as Mongolian manufacturing died out, Mongolian agriculture deteriorated. Not only did husbandry move into diminishing returns, the productivity of the agricultural sector also deteriorated dramatically. We observe a ‘primitivisation’ of the whole economy.

In Mongolia we also find that one historically important argument for protection of the manufacturing sector both in Europe and the United States still to be true: During the latter half of the 19th Century many economists claimed that industry was of crucial importance to national wealth, because if a nation specialised only in agriculture, she would not afford to import fertilisers. This was part of a very large and most important debate around the qualitative differences of agriculture and manufacturing as agents of economic development (see Esslen 1905 for a detailed discussion). Now when we find that Mongolian agriculture deteriorates for exactly the same reasons pointed out 150 years ago, it is time to unearth the same arguments, based on solidly observed facts over centuries. When the manufacturing sector was gone, the Mongolian agricultural sector could no longer afford to purchase fertilisers and agricultural machinery (see below). A very common observation in 19th Century Europe and the United States, along the same lines, was that the only farmers who achieved a reasonable degree of wealth were those working near increasing return activities (see e.g. Leslie 1888). Again: in Mongolia we see how these synergies are reversed.

Agricultural yield per acre in Mongolia fell by more than 50 per cent during the 1990’s (Table 5). For cereals, the fall was 50 per cent, for oats 75 per cent. Yield per acre for the important animal fodder crops fell by an incredible 71 per cent, no doubt aggravating the situation for the 8 Million pasturing animals added due to the collapse of the manufacturing sector.
The next round of the screw of Malthusian/Myrdalian poverty mechanisms involves five parallel and simultaneous downward movements. In most cases these factors interact: each one reinforces the others in a downward spiral:

1) **The break-down of the capacity to import** (in Celso Furtado’s terminology): As the manufacturing sector was treated to an extreme shock, almost overnight, exports collapsed. Also Mongolian imports have been falling very rapidly during the 1990’s, by more than 50% in current dollars (from 963 Million dollars in 1989 to 472 Million dollars in 1998). Exports fell even more, though, by 56% (from 722 Million dollars in 1989 to 317 Million dollars in 1998, current dollars). The exports left are largely from the diminishing return sectors, mining and raw mohair and cashmere. The permanent trade deficit now amounts to 50% of the value of exports.

2) **Collapse of agricultural productivity.** Combined with the lack of foreign exchange follows, as a natural law, the increasing poverty of herders and farmers, as more and more marginal land is being used (Malthus 1836) The combined effects of these two factors on agricultural productivity were enormous; both total harvest and yield collapsed (Tables 4 and 5). Addressing Mongolian agriculture in general, one of the participants at the March 2000 seminar in Ulaanbaatar writes: ‘Activities like fertilization and applications of herbicides were terminated due to lack of funds, fuel and petroleum. (The) majority of equipment and machinery became obsolete. 90 percent of equipment and machinery currently utilized in crop producing business were purchased before 1990’ (Batkhisig 2000 : 46)

3) **Institutional collapse.** Institutions previously handling agricultural extension and animal vaccination programmes disappear as government activities are being reduced, further aggravating animal health and agricultural productivity. The same type of institutional collapse hits human health, particularly support to women and young children (Malhotra 1998)

4) **A sharp deterioration in the terms of trade** (World Bank 2000; 3), both because of a decline in international copper prices, and the fact that, compared to before, only a very small percentage of wool and cashmere is being elaborated locally.

5) **A collapse in real wages.** Estimates indicate that overall real purchasing power of the average Mongolian has been halved since 1991 (Malhotra 1998 : 40). A wage freeze came into effect in 1996, despite a 56% inflation rate that year, and a 17.5% increase in inflation in 1997. This phenomenon is well known also in Latin America since the 1980’s; wage freezes are kept while inflation continues. The effect of this is unfortunately difficult to measure, as many poor countries do not break down their GDP data into the shares of incomes to wages and to other factors. In the 1980’s and 1990’s, increasing profits of the FIRE sector (Finance, Real Estate, Insurance) often compensate for the collapse of real wages in the national data, and the phenomenon is not picked up. When Peru stopped publishing these data in 1990, wages and earnings of the self-employed had fallen continuously for 10 years, in the end amounting to less than 25% of GDP (Normal industrial country average is between 60 and 70%)

As indicated, these factors all interact, and mutually reinforce each other. As manufacturing continues to shed jobs, more and more people have to take up their old ways of living. However, the land is not able to carry the increased number of animals, and marginal land is
put into use. As marginal land enters into production and overgrazing increases, the animals grow more slowly, and are sicker. As manufacturing exports collapse, foreign currency is not available for purchase of fertilizers and agricultural machinery. As wages collapse, the demand for the local industrial production is severely reduced. As even more people leave their jobs in the manufacturing sector to engage in subsistence agriculture, tax income is also reduced. As tax income is reduced, the government has to cut extension services to the agricultural sector, which again reduces the productivity of the agricultural sector, etc. etc. At the core of these lock-in effects are diminishing returns. There is, at present, no indication that these vicious circles are not going to continue. In the 2000 seminar there was not even an indication that the local representatives of the Washington Institutions in Mongolia understand them, and the winter of 2001 seems to offer no better prospects.

It may be argued that diminishing returns is the only factually-based assumption in the whole structure of neo-classical economics. Yet, when dealing with the Third World, this fact of life is ignored by the Washington Institutions. The only way out of the vicious circles – as it has been for the last 500 years of world history – is for Mongolia to engage in increasing return activities again. This will, however, be impossible without some targeted support for this sector, like for instance the reintroduction of a ban or a tax on the export of raw materials. Such a tax on the export of raw wool was the policy measure which moved England out of poverty, starting more than 500 years ago. In 1995, the Asian Development Bank held up 17 Million dollars of a 30 Million dollar loan to Mongolia until Mongolia had dropped the export ban (Washington Post: 2000). More than 50 textile mills were closed, and now the Chinese process virtually all Mongolian wool. At the same time the European Community uncontested continues the same kind of policy that Mongolia is not allowed to follow: Many raw materials – like fresh salmon – are allowed duty free into the European Community, whereas industrialised products from the same raw material, as e.g. smoked salmon, are subject to high tariffs. Through the Washington Institutions, the industrialised nations prohibit types of economic policies which the industrialised nations themselves engage in all the time.

Whereas the Washington Institutions blindly apply neo-classical economics, the economic policy actually carried out by the wealthy countries themselves is continuously mitigated by common sense. As regards US economic policy, Paul Krugman complains:

'It is not just that economists have lost control of the discourse; the kinds 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 is right: standard textbook economics generally is only applied in the Third World, through the Washington Institutions. Here is also where it does the most possible harm. In an industrialised country, which already has its comparative advantage in increasing return activities, the failure to distinguish increasing from diminishing return activities is relatively harmless in the short run. To a country like Mongolia the same failure is fatal.

The targeted support of increasing return activities has been a mandatory passage point for all economies that have raised themselves out of poverty. Now this road is closed to the Third World through the conditionalities imposed by the IMF:

XXVI. IMF to continue including policies on trade liberalization, elimination of state-directed lending on non-commercial terms to favored industries, enterprises or
institutions, and provision of non-discriminatory insolvency regimes, in its conditionality.

The rich countries have, in effect, pulled up the ladder: the Washington Institutions consistently refuse the poor countries to employ the same development policies as the rich nations used themselves when they moved out of poverty.

The Washington Institutions appear to see themselves as managers of neoclassical black box economies, inside which all economic activities are qualitatively alike. In the theory and policy of the Washington Institutions there is no difference between the economic activities taking place in Silicon Valley and that of raising camels in the Gobi Desert. Today’s global economy is based on a theory which ‘proves’ that a monoculture nation of animal herders in a sub-Arctic climate will achieve the same standard of living as the employees in Silicon Valley. We can only repeat with John Stuart Mill:

'It often happens that the universal belief of one age of mankind.. 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 any grown person.' (Mill 1848; 3)

We claim that the economic management of the Third World countries since the early 1990’s is indeed such a palpable absurdity as John Stuart Mill refers to. While the industrialized world experiences a new wealth explosion based on the increasing returns from a new ‘productivity explosion’, the majority of the world’s population is struggling daily in national economies with all their main activities butting against diminishing returns (see Reinert 1980). The universal belief of the economics profession behind the policies of the Washington Institutions – a theoretical tradition where the observation of historical facts is absent – is that the market under all circumstances will create economic harmony.

Had it been ethically acceptable to use human beings as guinea pigs, staging an experiment like Mongolia in the 1990’s would have been highly interesting. We would have been able to test out a theory and observe that centuries of economic theories based on observations of the real world were correct: the removal of increasing return activities from Mongolia would unleash vicious circles of poverty, institutional collapse and environmental degradation. It is almost too cruel to be true that this experiment was actually carried out under the supervision and forced advice of the Washington Institutions, in the belief that free trade in this situation would cause increased welfare and ‘factor price equalisation’.

By treating all economic activities as being qualitatively alike, the economics profession fails to recognize the age-old mechanisms which cause the nations of the world to cluster in two convergence groups: One wealthy group is engaged in Schumpeterian increasing return activities clustering at the top in increasing wealth. This group is mainly engaged in activities where all factors of production are expandable at costs that do not increase at the margin. The other convergence group of nations, the poor group, consists of nations that are principally engaged in activities subject to Malthusian diminishing returns, where one factor of production is limited by an act of God. The underlying mechanisms of increasing and diminishing returns will – if the process is left to the market alone – automatically produce this effect.
The notoriously inefficient communist planned economies again proved the same point: Their inefficient manufacturing sector provided a much higher national standard of living than what capitalism with a decimated manufacturing sector does today in the same nations. The salient feature of the 1980’s and 1990’s has been the loss of ‘middle income’ countries in the Second and Third World. The main explanation for this loss of the middle class lies in the development of economic theory. Starting in the late 15th Century, economic development in Europe became associated with increasing return activities. It was recognised that not only were people working with machinery able to pay more taxes than the farmers and artisans, also the farmers and artisans working in manufacturing communities were richer than other farmers and artisans. Although challenged by Adam Smith and David Ricardo, the increasing/diminishing returns dichotomy was a cornerstone of economic policy all through the 19th Century. In the 1950’s it was still part of the common sense behind the reconstruction of Europe.


As mentioned in the introduction to this paper, in March 2000 this author was invited to Mongolia, to present the paper ‘The Role of The State in Economic Growth’ (Reinert 1999) at the conference ‘Mongolian Development Strategy: Capacity Building’. The conference took place in the combined parliamentary building and presidential palace in Ulaanbaatar. Most of the papers for this conference are reproduced in the book ‘Renovation of Mongolia at The Eve of the XXI century and Future Development Patterns’ which was produced both in Mongolian (in the Cyrillic alphabet), and in English. (Batbayar: 2000). The conference was organised by the Mongolian Development Research Center, a non-governmental organisation established in 1998, financed by The Nippon Foundation, a private entity.

Very distinguished Mongolian authors presented papers. Prof. D. Byambasuren, the former Prime Minister of Mongolia, presented ‘National Factors Affecting Development Strategy of Mongolia’ (Byambasuren 2000), and Prof. Ochirbat, the former President of Mongolia, presented a paper on the role of the mining sector in Mongolian development (Ochirbat 2000).

Japanese authors at the conference contributed creatively to the evaluation of the Mongolian situation. A very positive aspect of the Japanese experts working in Mongolia was their long experience in practical matters, e.g. in banking. One paper raised the issue of the damaging effect of the high interest rates, 35% in real terms at the time (Fujimoto 2000). Other papers were on the agricultural development (Kuribayashi 2000), and one compared the development in the republic of Mongolia with that of the Inner Mongolia Autonomous Region of China (Shinichi 2000).

Inner Mongolia (i.e. China) now processes virtually all of Mongolia’s cashmere and mohair. As opposed to the Soviet Union, which used to buy Mongolian manufactured goods, the Chinese only purchase raw materials. Not canned meat, but live animals on hoof, etc. In Inner Mongolia agriculture has intensified at the expense of herding. When flying from Ulaanbaatar to Beijing, this can be clearly verified from the air. The Chinese, however, seem aware of the problem of desertification. Grass areas in Inner Mongolia are strictly managed, and Inner Mongolia’s cattle management and breeding practices are modern. Inner Mongolian farmers appear to have settled permanently, and have managed to increase the number of cattle per head to almost twice that of Mongolia (Shinichi 2000: 4).
Towards the end of the conference, the Washington Institutions – in this case also including USAID – were scheduled to present their views on the future development of Mongolia. Having spent some time perusing the extensive statistical data available on Mongolia, I was keen to hear the analyses of the ‘professionals’. I was disappointed. First of all, none of the expatriate experts working in Mongolia bothered to show up in person addressing this conference, held for the parliamentarians and the highest national expertise and policy makers. They sent their bright and well-paid Mongolian assistants to present in English.

Secondly; the opening salvo and basic message of the World Bank and IMF representatives was to declare victory. The reason was that inflation had been stopped. There was no mention that real wages had been halved, no mention of the collapse neither of the manufacturing sector, of agricultural productivity being more than halved, of the collapse of the balance of payment, nor of the 2-3 Million animals that at the time were dying from starvation almost outside the windows of the conference room. The Washington Institutions simply presented three scenarios for the future development of Mongolia: Mongolia would either grow by 3 per cent per year, by 5 per cent per year or by 7 per cent per year. The graphs were presented and discussed, and no mention at all was made to how the present downward spirals could be stopped to give place for growth. Not only had the Washington Institutions lost history, this presentation bore very little relationship with Mongolian reality, and could have been (and probably is) presented in any country whatsoever. In addition, the World Bank presented a generic document where the problems of the financial sector in Mongolia were built in (World Bank 2000).

References to the problems in the real economy were few, but in his paper the USAID representative scorned the Mongolians for their lack of entrepreneurship. On the other hand a local politician complained that Mongolia was becoming a nation of cafés. Entrepreneurship was surfacing in the only sector where an overvalued currency was not sucking in imports; the traditional service sector. One cannot expect an entrepreneurial spirit to arise overnight, especially not with a 35 % real interest rate. It took Europe centuries to build up a spirit of entrepreneurship, one Prussian king used to complain that he had to grab his subjects by their nostrils and lead them to the profits.

The USAID representative also scorned the Mongolians for ‘spending today all that they have today and not worry about tomorrow’ (Bikales 2000: 6). This would seem like a fairly normal attitude for families who have seen their real income halved over a few years, and where more than a third live on under 17 dollars a month. Too many comments on Mongolia come across as providing recommendation along the lines of the proverbial why don’t they eat cake? in the situation during the French Revolution when the poor had no bread. The USAID paper – read by a Mongolian employee – points to the need for ‘fostering a dynamic private sector, which will be the engine of growth’ (Bikales 2000: 2). USAID does not mention the virtual impossibility of creating such a sector when the real interest rate is kept at 35 %, a rate where not even General Motors would have been able to make money. These complaints from a US official – whose government is the main architect and supporter of this IMF policy – there and then come across as an unusual combination of arrogance and lack of perception. Reading the US economic literature from the time England was attempting to keep the US from manufacturing – when the US was trying to avoid a trap of diminishing returns and commodity competition – would have been enlightening reading for the USAID mission. (e.g. Carey 1869 & 1876)
In the important cashmere industry, ‘Chinese processors can freely borrow money at 5% p.a. or less, while (their) Mongolian counterparts can borrow a limited amount at 40% p.a. (Fujimoto 2000a: 2) This obvious block to any development is not discussed at all, neither in the papers nor in the oral presentations of the enlarged Washington Institutions (i.e. including USAID). As the IMF, the USAID presentation initially holds up the strong image of the mythical ‘paths of annual growth rates of at least 5%, and preferably 7-8%’ (Bikales 2000: 1).

It becomes clear that the assumption underlying the presentations of the extended Washington Institutions is that ‘the market’ will automatically grant these growth paths to all nations that follow their rules of openness, regardless of what they produce. We are back to the previous image of an economics profession attempting to steer a vehicle by manipulating monetary phenomena, without having any interest whatsoever in its propulsion system. The undeniable historical fact is that no nation has ever reached a sustained growth path without a period of nurturing and protecting increasing return activities. The USAID paper also scorns the Mongolians for regretting the loss of manufacturing (incorrectly claiming that no other transition economy discusses this matter). The rhetoric is clear and straightforward, like a somewhat perverted protestant ethic: the ‘painful adjustments’ imposed on Mongolia inevitably will lead to growth. The papers all insist that this must all take place ‘based on integration in the world economy’, with no understanding whatsoever that historically no nation has ever come near the growth rates they hold up for the Mongolians without the presence of a manufacturing sector. The United States itself is the prime example of this.

Witnessing the presentations from the Washington Institutions, I find myself feeling increasingly estranged. These people are hardly addressing the realities of Mongolia at all, and when they do, it is with the realism of ‘why don’t they eat cake’. The association which comes to mind then and there is that I am in a theatre watching Kafka’s Prozess being performed. Like Joseph K. – Kafka’s ‘hero’ and victim – the Mongolians are overwhelmed by the decisions of institutions that appear to be basing their decisions on a non-existent reality. The growth paths that every country will hook on to – 3, 5 or 7 % per year – if they just ‘open up’ and globalise are not real, they are illusory and completely out of reach for a country only engaged in diminishing return activities. In the case of Mongolia, Kafka’s impersonal ‘Courts’ are the Washington Institutions who impose the laws of a ‘reality’ based on neo-classical economic theory. In this parallel ‘reality’ there is no reason why the Mongolians should not be able to create a new Silicon Valley based on goat raising. In the non-existent reality of neo-classical economics these activities are qualitatively alike, and equally good as carriers for economic development. In the harsh reality of Ulaanbaatar – where poverty is increasing visibly and the newspapers are filled with images of dying animals and their suffering owners – the whole scene acquires a dimension of surrealism.

In the same slightly surrealistic vein, Jeffrey Sachs suggested in The Economist that Mongolia should specialise in software, not considering that most people here do not even have electricity or telephones. The idea is of course good if we work in a neoclassical framework that is void of any context, and additionally assume ‘perfect information’ between Mongolian herdsmen and Silicon Valley engineers. The real context is that only 4 per cent of the mainly rural population have access to electricity, and that the 1.8 Million inhabitants outside the capital only have 37,000 telephones between them, not to mention the lack of money for computers and education.

As in Kafka, the imposition of impersonal outsiders and their concealed rules have effects that are just as destructive to the Mongolians as they were to Kafka’s Joseph K. In Der Prozess
there is no correlation between what the authorities (here: The Washington Institutions) describe and the reality of Mongolia. In the end Joseph K. is destroyed through laws that he was never meant to understand. (Kafka 1935/1994)


Modern legal traditions in the United States admirably protect its citizens from the perils of professional malpractice and corporate irresponsibility. A 2.9 Million dollar compensation for a cup of hot coffee spilled in a lady’s lap at a MacDonald outlet may seem exaggerated, but to an outsider the US legal system as it applies to medical malpractice appears more logical. In this section we shall ask the following question, which is only partly rhetorical: what would happen if we apply the legal standards imposed on the medical professionals also to economists?

As we have seen, the perils suffered by a society only producing in diminishing return industries has been documented from Genesis in The Holy Bible, by the ancient Greek economists, and in European economic policy since the late 15th Century. It certainly was a key feature in US economic theory and policy starting with Alexander Hamilton and Benjamin Franklin, and all through the 19th Century, where Abraham Lincoln was a dominant politician supporting this view, and through most of the 20th Century. The core of the European Economic Recovery Plan – the Marshall Plan – was to reconstruct Europe’s manufacturing industries back to the pre-WW II level and beyond. The perils of subjecting a nation to a Morgenthau-type plan were acknowledged. The goal was to re-establish Europe in increasing return activities in order to create enough wealth to withstand the communist advances. The Marshall Plan – named after the US Secretary of State George Marshall – was also in line with Alfred Marshall’s suggestion of subsidizing increasing return activities and taxing diminishing return activities (Marshall 1890: 452). In 1953 George Marshall was given the Nobel Peace Price for this work. From this perspective, the conditions imposed on Mongolia truly represent a Marshall Plan in reverse, both in the sense of the European Reconstruction Programme and in the sense of Alfred Marshall’s economics.

Mongolia was only given assistance from the Washington Institution on the conditions that the country did not attempt to follow the principles of the Economic Recovery Programme (The Marshall Plan). We quote again:

XXVI. IMF to continue including policies on trade liberalization, elimination of state-directed lending on non-commercial terms to favored industries, enterprises or institutions, and provision of non-discriminatory insolvency regimes, in its conditionality.

A typical progress report for the Marshall Plan, published by the Economic Cooperation Administration in 1949, would focus on the reconstruction of the increasing returns sector. The output of every industrial sector was recorded every month and carefully compared with previous months and with the basis year of 1936, the last ‘normal’ year. (Economic Cooperation Administration 1949: 28-29. The progress report for the Washington Institutions in Mongolia appears to have focused narrowly on financial stability and lack of inflation. An exclusive focus on financial issues – virtually destroying the real economy by imposing a real interest rate of 35 % as of March 2000 – represents a total break both with long standing economic theories, with the traditional practice of good economic policy, and with good judgement based on common sense.
One US college textbook in international trade theory seriously suggests that the nations producing under increasing returns should pay compensation to the nation specialising in diminishing return activities:

‘Thus the country which eventually specializes completely in the production of X (that is, the commodity whose production function is characterized by increasing returns to scale) might agree to make an income transfer (annually) to the other country, which agrees to specialize completely in Y (that is, the commodity whose production function is characterized by constant returns to scale).’ (Chacholiades 1978: 199, see also Reinert 1980)

We would argue that the perils of forcing a nation to specialize exclusively in diminishing return activities, especially in a fragile ecosystem like that of Mongolia, are extremely well documented both in economic theory and economic history. ‘The Tragedy of the Commons’ is a well-known phenomenon, and diminishing returns is to this very day one of the earliest concepts to be introduced in introductory economics at the universities where IMF and World Bank economists are educated. How could the economists of the Washington Institutions fail to see this peril? How is it possible – like James Galbraith observes (Galbraith 2000) – that the economists who created this economic and environmental disaster are still the only economists who are listened too?

Economic policy in the core nations is never applied dogmatically. As Lionel Robbins – later Lord Lionel – shows in his book on economic policy, the English classical economists did not follow a laissez-fair dogma in actual policy. These economists were sufficiently close to real life that economic policy was always filled with ad-hoc interventions based on ‘common sense’. (Robbins 1952). This is even more true in the United States today, where – as we have seen – theoreticians like Paul Krugman complain that textbook trade theory is virtually neglected as a basis for US economic policy. As the 20th Century advanced, neo-classical theory became more and more rigid, and the economic practice of the First World countries diverged more and more from textbook ideals. Only the Third World, and after 1990 also the Second World, became the testing grounds for the unmitigated application of ‘pure theory’, historically never before a ‘tested theory’ to this extent. Joseph Stiglitz – the former Chief economist of the World Bank – recently compared the IMF’s handling of the Asian Crisis with the Holocaust (North 2000). The comparison could easily be extended to Mongolia.

However, even in ‘pure economic theory’, diminishing returns is a core phenomenon. After World War II, the US, whose short-term business interest would have dictated free trade with Europe from May 1945, granted Europe a 15-20 year grace period before free trade was imposed. The European nations were for a long time permitted to look at foreign exchange as a scarce commodity, subject to rationing. In Norway the import of clothing was totally prohibited for 11 years after World War II in order to prepare the industry for free trade, and the import of cars for non-commercial use was freed only in 1960. European industrial tradition was much sturdier than Mongolia’s, yet Mongolia was given no such grace period. Not allowing Mongolia a period of adjustment, like Western Europe received after WW II, seems to amount to gross negligence both of economic theory and of recent historical facts.

The Mongolians are a hardy race. The huge loss of jobs both in the manufacturing sector and in the government sector has left people with little choice but to go back to their old ways. The number of herdsmen – the traditional Mongolian occupation – has more than trebled.
since 1990. The number of animals has increased by more than 1/3, by 8 Million heads, during the same period. But, the land cannot also feed the population who previously worked in the manufacturing and state sectors. More and more herdsmen with smaller and smaller flocks compete for a deteriorating and environmentally extremely fragile habitat. The annual population growth rate has fallen from 1.8 % in 1991 to 1.4 % in 1997, as people can no longer afford children. Support for children has gradually been withdrawn, increasing this problem (Malhotra 1998; 3). The support of the West will again be ‘development assistance’ which merely attempts to alleviate symptoms of problems that have been caused by the West in the first place.

In order to qualify for the world community – in order to receive financial assistance – Mongolia was forced to give up her manufacturing sector. This writer has also closely observed the same phenomenon in Ecuador, where assistance from the Washington institutions was only given on the condition that all assistance to increasing return activities was terminated. In practice, no equivalents to the US government institutions assisting small business, of subsidies to small businesses in particular sectors, of help to high tech industries, etc. are allowed in Third World. On the federal level, the US gets away with many of the subsidies of high-tech increasing return activities since they come under the guise of defence, but there is little doubt that if IMF conditionality had been imposed on the level of US states, many, if not all, of the 50 states would have been disqualified from receiving IMF and World Bank assistance. While the World Bank follows the recommendations of Chicago economists, Mayor Daley of Chicago uses city and state money to finance and subsidise an incubator that is targeted for increasing return hi-tech activities. If the Unites States had been a poor country, this policy would have disqualified the country from any assistance from the Washington Institutions. It is, in our view, crucial to understand how the industrialised countries, as part of their day-to-day economic policy, continuously break the rules that they themselves force upon the Second and Third Worlds.

We would argue that there are clear parallels between the Mongolian case as it has been handled by the Washington Institutions and the US court cases which the tobacco industry recently lost: It can be demonstrated that the institutions in question acted with the knowledge that the product they were promoting – in this case imposing a shock therapy and restrictions which forced the closing down of all increasing return activities in Mongolia – would seriously damage the health and well being of their customers, i.e. the Mongolian people. As shown above, the knowledge of the mechanisms that were set in motion has been there since biblical times.

A Mongolian class action against the IMF and the World Bank in a US court could focus on five aspects:

a) The Washington Institutions have showed gross negligence by not flagging the risk of forcing Mongolia into exclusive specialisation in diminishing return activities. The detrimental effects of specialising exclusively in diminishing return activities, such as Mongolia was forced into, are well documented in economic theory and economic history, and are taught starting in Economic 101 at all US universities.

b) A conditionality, like that imposed by the IMF, refusing Mongolia the right to any kind of support in favour of increasing return activities does not grant Mongolia the same rights as that enjoyed and practiced by all US states, cities and municipalities, and is consequently discriminatory.
c) The negligence shown by the Washington Institutions is considerably exacerbated because no action has been taken even now at this very advanced stage of the problems, when the diagnosis is clearly visible to anyone showing a minimum of interest in Mongolian economic data. The arrogance shown by the Washington Institutions towards Mongolian civil society and institutions – as the Mongolian Development Research Center – indicates a complete lack of interest in the productive side of the economy as long as the short-term financial goals are met. The incentive structure in the Washington Institutions, which judge economic success exclusively on financial issues, has lead to the collapse of all increasing return activities and to a real interest rate of 35% in Mongolia. This incentive structure is applied contrary to economic theory and to all traditions of macro-economic management in the developed world.

d) Fundamentally this is also an issue of Human Rights of the Mongolians, individually and as a nation. As one of the Japanese experts in Mongolia argues: ‘As there are human rights for individuals living in a country, so should all countries have a right to live and prosper’ (Fujimoto 2000b: 2). In view of the accumulated experience of Mankind, Mongolia is the victim of an ‘experiment against reality’. To say it with former Archbishop Helder Camara of Brazil, these people are made poor in the name of economics (quoted in Reinert 1980). Arbitrary abstract principles of standard economics are, in practice, given precedence above human welfare.

e) The textbook solution to assist Mongolia’s failing industry, to help her be more competitive on the world market and to cure the permanent balance of payment deficit, would be to lower the price of the local currency. Today the IMF is preventing this from happening, partly by keeping the real interest rate at 35 per cent. So Mongolia gets the worst of all worlds: a ‘free market’ when the market destroys her productive capacity, but no free market when the forces of the market would have helped her regain competitiveness. In a way that Thorstein Veblen would have recognised, we observe ‘financial capitalism’ destroying ‘industrial capitalism’, a development that in the long term also will prove destructive to the financial side of the economy.

Reparations to the Mongolian people could focus on the huge share of GDP which has permanently disappeared, on the permanent loss of 50% of purchasing power of the Mongolian people, of the permanent loss of manufacturing capacity, and the permanent trade deficit amounting now to 50% of the value of exports (i.e. on the simultaneous break-down of the capacity to import and the collapse of the country’s ability to produce manufactured good itself), and of the permanent damage to the environment through increased desertification in the fragile Mongolian ecosystem.

If a cup of hot coffee spilled at MacDonald’s qualifies one person for 2.9 Million dollars, the prospects for a Mongolian class action suit against the gross negligence of economic theory, of economic history and of common sense, that has been shown by the Washington Institutions, should have good chances of succeeding in a US court.
8. Towards the Global Version of 1848 and a Possible Way Out.

19th Century industrialisation brought with it social ills of huge proportions. Books and articles addressing ‘The Social Question’ abounded in all languages well into the 20th Century. The social problems peaked in 1848, when most European nations experienced revolutions, England and Russia being the notable exceptions. Manchesterian liberalism and communism were the opposite poles in the econo-political discussions, but very different forces solved the social ills. Both in the United States and in Germany dedicated politicians and economists consciously constructed institutions that were to create welfare states. The German Verein für Sozialpolitik (Verein für Sozialpolitik 1872-1932) created the operative institutions of the welfare state which were later to be copied all over Europe. The theoretical foundations for this type of economic theory can also be found in the first sixty years of Schmollers Jahrbuch (1871-1972) and in the writings of the pre-war US Institutional School of Economics. On the political side Bismarck saw that the socialists were right about the huge social problem, and the alliance between the enlightened and idealistic economists in the Verein für Sozialpolitik and Bismarck over time actually managed to resolve most of Europe’s social ills.

More than half of the world’s nations were poorer in the late 1990’s than in 1990. A new technological wave is creating the ‘Social Question’ all over again. This time, however, the social question is not within every industrialised state, it is between the industrialised states and the poor world in the Second and Third Worlds. We are moving towards a new crisis in income distribution, a new 1848, but this time on a global scale. It is our firm conviction that only the same type of theories and the same type of attitudes that created the national welfare states will be able to move the world towards a global welfare state. Manchesterian liberalism had no chance of solving the social ills of 19th Century Europe. The present version of Manchesterianism – we could call it Washingtonianism – is based on the very same principles as Manchesterianism, and its chances of solving the poverty problems of the world are equally nil.

What brings the world out of a similar deadlock? Economists of the kind that formed the Verein für Sozialpolitik in 1872, people who disliked communism just as much as they disliked liberalism, cured the ills of Manchesterianism, the equivalent of the system today promoted by the Washington Institutions. An individual whistle-blower, like Herbert Hoover in the case of Germany, no doubt helped spare thousands of life and prevented much human suffering (Baade 1955). We have mentioned that Joseph Stiglitz, the former Chief Economist of the World Bank, compared the intervention of the IMF in Asia to the Holocaust (North 2000). Stiglitz plays the role of the insider whistle blower, as in Henrik Ibsen’s An Enemy of the People (Ibsen 1882) As in Ibsen’s play, the very community he is in effect helping chastises Stiglitz, who makes the public aware that something is terribly wrong. This kind of whistle-blowing is unusual in the economics profession, because the appointment systems and career paths are structured in such a way that any person getting into a senior position in the system – and thus achieving credibility as a whistle-blower – will, almost by definition, have thoroughly absorbed the core assumptions of the ruling canon, in which the market is defined as a mechanism creating automatic harmony.

The fact that more than half of the world’s nations were poorer in the late 1990’s than in 1990 attracts as little press coverage as the German concentration camps did in the 1930’s. Yet, there are people who know. Last year’s report Transition 1999 (UNDP 1999) asserts that the transition to capitalism has ‘literally been lethal for a great many people’. 9.7 million men are
‘missing’ in the transition economies, compared to what the demographic profiles and life expectancy recorded before 1990. The ‘transition’ of Eastern Europe – in most cases from being inefficient producers of increasing returns products to being a diminishing returns economy – has been accompanied by a great loss of lives. Like in the 1930’s, those who want to know, know, but the matter is not publicly discussed.

The statistical records of the 1990’s by now show beyond any doubt that the market fundamentalism – the quasi-religious thesis that preaches markets as harmony-making machines – has caused great damage. A reaction is slowly mounting. Joseph Stiglitz’ whistleblowing, and the refusal of the editor of the World Bank’s Development report to yield to the pressures from the US Government to change the report, are two examples of a mounting reaction. So are the protests in Seattle and Davos, and the establishing of Attac. These events, however, tend to be protests which do not lead to a better understanding of the problems at hand. In our opinion a large obstacle to a better understanding on practical policy solutions is that the alterative and _factually based_ economic theory – the _Other Canon_ type of theory that built the United States – has virtually disappeared. A better policy can only be produced if we have a theory of what causes development to be so uneven.

Since the economics profession is void of categories of economic activities, today’s profession fails to understand that ‘openness’ of an economy is a necessary and indispensable policy ingredient for a nation with a strong presence of increasing return activities, while in a backward country the same ‘openness’ may initiate a maelstrom of Malthusian vortices as the weak increasing return activities wither away, bringing the economy towards the flexible wall of diminishing returns.

Already in 1867 US economist Henry Carey pointed out that the Ricardian economics, from which today’s standard economic theory descends, has a lot in common with quacks of the medical science: They live in a world without _categories_ of diseases and remedies, and therefore only have one medicine which they claim will cure all illnesses. (Carey 1867). That backward nations needed a different economic policy from that of an advanced nation, was a standard claim made in 19th Century US and Canada.

The gestalt-switch – the turnaround – in economic theory that is suggested by The Other Canon Group is not new. The market fundamentalism that swiped the policy of the OECD countries towards the rest of the world during the 1990’s carries strong similarities with the Ricardian euphoria that built across Europe from the 1820’s, peaking in 1846. The backlash of 1848 followed in the form of widespread revolutions. Just like in the 1840’s, the source of today’s problems in economic theory originates with the abstract system of Ricardo. In the year 1900, looking back at the human suffering caused last time the Ricardian system had been allowed to overrule common sense, the eminent Cambridge economics professor H. S. Foxwell wrote the following:

‘Ricardo, and still more those who popularised him, may stand as an example at all time of the extreme danger which may arise from the unscientific use of hypothesis in social speculations, from the failure to appreciate the limited applications to actual affairs of a highly artificial and arbitrary analysis. His ingenious, though perhaps over-elaborated reasonings became positively mischievous and misleading when they were unhesitatingly applied to determine grave practical issues without the smallest sense of the thoroughly abstract and unreal character of the assumptions on which they were founded.’ (Foxwell 1899; p. xlii):
This criticism could indeed have been tailor-made to criticise the devastating affects on welfare in the Second and Third World produced by neo-classical economics. It is this kind of theoretical ‘mischief’ that has caused the loss of welfare in so many countries in the 1990’s. The industrialised world has, for the last 50 years, attempted to cure the symptoms of underdevelopment in the Third World, rather than its causes. The Third World was ‘put on the dole’, like the unemployed of the European welfare states.

As it now is, NGOs move into the newly impoverished countries like Mongolia, attempting to ease the economic pain. Also the World Bank now enters into alleviating the symptoms of poverty, rather than to cause development. We are experiencing the rise of palliative economics; a science that eases pain without even attempting to understand or address the root causes of that pain. In this way the many parts of the Third World are slowly turned into gigantic hospices where the Florence Nightingales of the First World – both on the spot and through donations – do an admirable job in alleviating the pain of those who must die too early. Our alternative is to develop the latecomers in the 21st Century just as was done with the countries lagging behind England in the 19th Century: letting the economic periphery become core by spreading the increasing return activities also to them. This, however, requires an understanding and segregation of what are the true causes and what are mere symptoms of the phenomenon we call economic development.

The Washington conditionalities effectively make it impossible for any developed nation today to make the step into economic development. The policy of targeting increasing return activities – whether identified under that label or not – has been a mandatory passage point for all nations, with no exception. The lack of historical sense of the Washington Institutions and their standard economic theory fails to see that a policy like the one forced on Mongolia amounts to an attempt to defy the laws of economic gravity as they have been observed since biblical times. No nation beyond the size of a city-state has ever reached economic development without targeting and nourishing the ‘good’ economic activities (Reinert 2000a). Today’s conditionality effectively outlaws the strategies that made it possible for Venice, England, The United States, continental Europe, Japan and Korea in sequence to catapult out of poverty on the virtuous circles created by increasing return mechanisms. These mechanisms are, at any point in time, found in some activities rather than others. This makes for the activity specific nature of economic development. Since institutions co-evolve with these economic activities, economic institutions are also activity specific.

In order to acknowledge this crucial fact, standard economics has to go back to the roots of its own equilibrium theory, to Carl Menger. The tendency towards equilibrium must be seen as Menger and Marshall saw it, as a very rough map of the economic forces at work. To Menger the equilibrium metaphor produces only an extremely inaccurate map of the forces that would be at work if nothing happened, if no innovations and no economic progress were to take place. Menger saw this map as so inaccurate that no quantification should be attempted. After the economy had stopped changing, Menger envisioned a system with vacillation for decades before settling. Unfortunately the economics profession chose to work with Walras’ version of equilibrium theory of split-second equilibrium. The adoption of this thesis made the economics profession lose three important dimensions: time, space, and the unevenness of economic growth.
The research of the 1990’s shows that the world is converging into two groups of nations: a clustering of extremely wealthy nations on top, and a cluster of increasing size where the majority of nations are indeed getting poorer. Standard economics is utterly helpless in explaining this phenomenon. The Other Canon approach suggests that the main driving force of this phenomenon – the core of the forces creating the increasing gulf between the two groups of counties – are two economic vortices: Nations specialised in Schumpeterian Goods are catapulted towards ever increasing welfare through a sequence of periodic productivity explosions, interspersed by quieter intervening periods of incremental innovation (Schumpeter 1942). On the other hand the nations specialised in Malthusian Goods are – as in the Mongolian case – through the natural forces of the market driven into a downward spiral increasing poverty and increasing environmental degradation. In this Malthusian setting, Malthus was indeed right: the natural wage level will be at the brink of starvation.

From the mid-18th Century the writings of economists like James Steuart (Steuart 1767), the rulers of Europe – the ‘enlightened despots’ in Wilhelm Roscher’s term – had understood the fundamental symbiosis between manufacturing and agriculture, between increasing return activities and diminishing return activities. This created the understanding that a nation with an inefficient and undeveloped manufacturing sector would be much better off than a nation without any manufacturing sector at all. The targeting and nourishing incipient manufacturing allowed the creation of ‘middle income countries’. The sudden dismantlement of any targeting and nourishing of increasing return activities – i.e. of manufacturing – in the Second and Third World through the shock therapy of the 1980’s and 1990’s in many cases effectively made their position as middle income nation impossible.

Where do we go from here? The Washington Consensus has been through a slow learning process since the fall of the Berlin Wall. The first theory was ‘get the prices right’ and development would appear as out of a magician’s hat. A first modification to this belief in spontaneous order saw to it that the dictum ‘get the property rights right’ was added. A third modification in the late 1990’s was ‘get the institutions right’. This position fails to grasp the activity-specific nature of economic institutions, what Richard Nelson calls the co-evolution of activities and institutions. It is virtually impossible to create among a hunting and gathering people an institution that has taken centuries to evolve in an industrial setting. On the other hand, the traditional institution distributing wealth in a family clan of a non-market society becomes in the eyes of the West ‘corruption’. Attempting to understand human institutions outside the logic provided by their respective productive systems is a key methodological flaw in today’s development economics. Such understanding calls for an understanding also of non-market societies.

The next step – after ‘get the institutions right’ – will, in our view, have to be ‘get the economic activities right’. In today’s divided world we face two possible strategic options: We can either globalise the labour market and let the poor come to where the economic activities are that are able to create prosperity. Alternatively we can follow the 19th Century path: Spread the increasing return activities that have a potential for technological change also to the countries where the poor live. In our view these are the only two possible options. The third option, instant globalisation combined with palliative economics, is neither ethical nor feasible.

In order to spread wealth-creating economic activities to the poor, the theoretical foundations of the Washington Consensus will have to be faded out, to be substituted by the principles of the Other Canon type. A succinct recommendation for an Other Canon economic policy can
be found in Marshall’s *Principles of Economics* (Marshall 1890; 452): **Tax economic activities subject to Diminishing Returns and give bounties to activities subject to Increasing Returns.** As the taxable base in the Third World is not very healthy, the support to build increasing return activities will have to come from the First World. We suggest that this ‘new deal’ in development ought to be financed by extending the normal US standards of product liability and medical malpractice reparations to the nations which collectively – through the economic malpractice of the Washington Institutions – were led into the precipitous fall in living standards that hit a large number of the world’s nations starting in the 1980’s or the 1990’s.
Appendix 1. Antonio Serra: A Note on the History of Economic Theory as it Relates to Uneven Economic Growth.

The first economist who explained uneven development – why the natural working of a market economy would produce some nations that are rich and some that are poor – was Neapolitan economist Antonio Serra in 1613. Serra’s work was republished in 1803, and already the year before a volume of eulogies was published in his honour (Salfi 1802).

Serra’s work was written at a time when ‘public misery and crime spread (in Naples). more and more people gave themselves over to public and ecclesiastic idleness… and assassinations increased’ (Salfi 1802: 21). In his book, Serra explains how the poverty of Naples and the wealth of Venice originate in the fact that the economic activities in which the two states specialize behave according to different laws: as The Republic of Venice specialised in manufacturing, its unit costs fell increasingly, unleashing a virtuous circle of increasing sales, increasing production, and increasing welfare. The volume-based low costs in Venice provided formidable ‘barriers to entry’ for her competitors. As Naples specialised in harvesting the products of nature, the opposite phenomenon could be observed: Unit costs increased and Naples was thrown into a vicious circle of falling income and poverty.

European economic policy had followed Serra’s principles starting already in the late 1400’s. They were expressed in the 16th and 17th Century theories of ‘good’ and ‘bad’ trade (See King 1721, Pfeiffer 1764-1778 and Reinert 1998). However, Serra was the first to present a scientific explanation of how the mechanisms of wealth and poverty evolved around vortices moving economies up or down.

The rediscovery of Serra in 1802-1803 was timely. The industrial revolution had again produced a few pockets of wealth and masses of poverty, and in 1798 Thomas Malthus had published his highly pessimistic view on the possibilities for mass welfare. Serra’s idea of increasing returns delivered the opposite message, and the 19th Century economists who laid the theoretical foundations for mass economic welfare all based their theories on Serra’s dichotomy: wealth could be created and spread only by spreading the economic activities which obeyed the laws of increasing returns to all nations. Friedrich List and Wilhelm Roscher – the economist who put increasing returns back into economic theory – both repeatedly quote Antonio Serra. Based on his ideas it was possible slowly to solve the scourge of 19th Century Europe: ‘The Social Question’. There is massive amount of literature on this type of economics (e.g. Verein für Sozialpolitik 1872-1932, Schmollers Jahrbuch for the same period, and the writings of the US Institutional School).

In terms of understanding the causes of uneven economic development, the latter part of the 20th Century was a Dark Age. In economic policy Serra’s principle of distributing and rebuilding increasing return activities was a core principle behind the European Recovery Program (The ‘Marshall Plan’), but in economic theory this insight was lost. Just as Fordist mass production started to dominate the industrialised world – where Serra’s principle of increasing returns could be observed on a scale never before seen or imagined – the dichotomy of increasing/diminishing returns was lost in economic theory. Since increasing returns was not compatible with the arbitrary choice of making ‘equilibrium’ into the only economic tendency, the historically observable fact that increasing and diminishing returns produced opposite results (wealth on the one hand and poverty on the other) was thrown out of economic theory. (See Reinert 1980, 1996a & 1998 for a more detailed discussion). This opened up for the belief that globalisation would produce ‘factor price equalisation’, that all
nations would be equally wealthy under a regime of global free trade. In fact, according to late 20th Century theory, the poor would benefit the most, since they lagged the most behind. In this paper – using Mongolia as an example – we attempted to describe why the opposite results are produced as the few increasing returns activities in Mongolia were closed down by sudden world competition.

With the coming of ‘New Trade Theory’ in the early 1980’s (Krugman 1980), increasing returns was again put back on the map. Frank Graham’s 1923 article (Graham 1923, see appendix 3) was the basis for this revival, but while Frank Graham (a President of the American Economic Association) showed – just as Antonio Serra had – that increasing and diminishing returns would produce opposite effects, by the 1980’s the idea of equilibrium was so deeply entrenched that only half of Serra’s and Graham’s argument was resurrected. The diminishing return side of the argument was essentially left out. By only resurrecting half of the practice and theory that had dominated economic policy in Europe for centuries and in the US since 1820, the mechanisms that create poverty on one side and wealth on the other were lost. The half of the theory that was forgotten was the half concerning the mechanisms that kept the poor nations poor, and neoclassical economics continued to view the world market as a machine creating automatic harmony. In *International Trade and the Economic Mechanisms of Underdevelopment* (Reinert 1980) both increasing and diminishing returns were resurrected, based on Serra’s theoretical insights.

As already pointed out, the increasingly globalised economy produces the opposite effects of what standard economic theory predicts. Instead of a convergence of world income (towards factor-price equalisation), we find that the nations of the world tend to cluster in two convergence groups, one rich and one poor. In many Latin American countries, ‘real jobs’ are becoming a rarity, and poverty is on the rise. Poverty and disease increase sharply in Sub-Saharan Africa, most of the former communist nations are considerably poorer than they were under the inefficient centrally planned economy, and we see a creeping ‘Africanisation’ in parts of Latin America. We would claim that a core element in this negative development in the majority of the world’s nations lies in the failure by the Washington Institutions – The IMF and the World Bank – to recognise what most 19th Century economists would have agreed to:

> A nation with an inefficient increasing returns sector will be infinitely wealthier than a nation with no increasing returns sector at all. Just as the spread of increasing returns activities to all European nations starting in the 16th Century created even development, the loss of former ‘middle income’ nations originates in the wholesale closing of increasing return activities in Latin America and in the former centrally planned economies.

The purpose of this paper has been to use the precipitous economic decline of the Republic of Mongolia during the 1990’s as an illustration of the economic mechanisms by which the conditions imposed by the Washington Institutions create vortices of increased poverty. Increasing and diminishing returns are at the core of the mechanisms that make globalisation a blessing – indeed a necessity for further welfare creation – for some nations, but a curse for many others. A continuation of the present policies against the Second and Third World can only reinforce the present tendencies of a world deeply divided into two convergence groups steadily moving apart in wealth and income.
20th Century economic theory came to conceive of economics as a *Harmonielehre* (Robbins 1952): the world economy was assumed to be a machine producing automatic harmony. This is a natural result of the basic model. A model where all inputs are alike all through the process will never produce anything but an equality of outcome. During the first half of the 20th Century the common sense of the past prevailed over this model in practical policy. During the second half, mainstream economics had generally lost both their collective memory of the past and the habit of checking theory against reality. 'Pure theory' had been mistaken for 'science', and being relevant gradually came to be considered 'unscientific'. While common sense and practical men continued to dominate policy-making of the industrialised North, through the Washington Institutions the South was given an unprecedented diet of neoclassical economics in its pure form, unmitigated by the common sense of the past. The simplifying assumptions of standard economics are ostensibly there to clarify the conclusion. The Mongolian case shows that assuming that all economic activities are qualitatively alike as carriers of economic development is a wrong conclusion that has caused much harm. Only by leaving the highly abstract standard theory behind, by reintroducing ‘The Other Canon’ of economics that produced massive wealth in the 19th Century, will it be possible to lift the majority of the world population out of acute poverty.

**Joseph Schumpeter on Antonio Serra’s 1613 Treatise.**

'This man must, I think, be credited with having been the first to compose a scientific treatise, though an unsystematic one, on Economic Principles and Policy. Its chief merit does not consist in his having explained the outflow of gold and silver from the Neapolitan Kingdom by the state of the balance of payments, but in the fact that he did not stop there but went on to explain the latter by a general analysis of the conditions that determine the state of an economic organism. Essentially, the treatise is about the factors on which depend the abundance not of money but of commodities - natural resources, quality of the people, the development of industry and trade, the efficiency of government - the implication being that if the economic process as a whole functions properly, the monetary element will take care of itself and not require any specific therapy.' (Schumpeter 1954: 195)

'Before this, a general law of increasing returns in manufacturing industry, also in the form of a law of decreasing unit cost, had been stated explicitly and in full awareness of its importance by Antonio Serra3, **much as it was to be stated in the nineteenth-century textbook.** The restriction of increasing returns to manufacturing should be particularly noticed. Serra did not indeed assert that agrarian production was subject to decreasing returns. But the idea that **industrial and agrarian production as such follow different 'laws'** was as clearly expressed by him as if he had. Thus he foreshadowed an important feature of nineteenth-century analysis that was not completely abandoned even by A. Marshall.'


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3 Breve trattato (1613), Part I, ch. 3: nell'artefici vi può essere moltiplicazione...e con minor proporzione di spesa (in manufacturing industry, output may be increased at less than proportional increase in expense)
Appendix 2.


Table 1: Mongolia: Output of Selected Industrial Commodities, 1989-1998.

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</thead>
<tbody>
<tr>
<td>Sawn wood, thous. m</td>
<td>553.1</td>
<td>509.0</td>
<td>61.2</td>
<td>70.2</td>
<td>36.5</td>
<td>35.5</td>
</tr>
<tr>
<td>Leather jacket, thous. pieces</td>
<td>212.8</td>
<td>264.5</td>
<td>18.9</td>
<td>6.5</td>
<td>1.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Skin coats, thous. pieces</td>
<td>180.2</td>
<td>138.1</td>
<td>16.8</td>
<td>14.9</td>
<td>2.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Canned meat, tons</td>
<td>1682.3</td>
<td>1108.5</td>
<td>431.7</td>
<td>339.2</td>
<td>650.8</td>
<td>322.0</td>
</tr>
<tr>
<td>Salt, tons</td>
<td>4818.8</td>
<td>3811.9</td>
<td>497.3</td>
<td>429.3</td>
<td>240.4</td>
<td>201.6</td>
</tr>
<tr>
<td>Publications, mln. pages</td>
<td>376.6</td>
<td>312.8</td>
<td>50.9</td>
<td>36.5</td>
<td>38.7</td>
<td>79.1</td>
</tr>
<tr>
<td>Porcelain, thous. pieces</td>
<td>3747.3</td>
<td>3138.3</td>
<td>688.5</td>
<td>150.6</td>
<td>49.3</td>
<td>24.2</td>
</tr>
<tr>
<td>Carpet, thous. m3</td>
<td>2128.1</td>
<td>1971.2</td>
<td>595.7</td>
<td>667.0</td>
<td>643.6</td>
<td>587.7</td>
</tr>
<tr>
<td>Felt boots, thous. pairs</td>
<td>592.3</td>
<td>588.5</td>
<td>79.0</td>
<td>57.6</td>
<td>48.0</td>
<td>47.9</td>
</tr>
<tr>
<td>Suits, thous. Pairs</td>
<td>182.6</td>
<td>201.8</td>
<td>1.2</td>
<td>1.0</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Sheep skin, thous m2</td>
<td>1151.1</td>
<td>1510.5</td>
<td>193.5</td>
<td>22.4</td>
<td>5.2</td>
<td>-</td>
</tr>
<tr>
<td>Leather boots, thous. pairs</td>
<td>4140.0</td>
<td>4222.5</td>
<td>245.5</td>
<td>86.6</td>
<td>41.7</td>
<td>33.1</td>
</tr>
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</table>

Table 2. Mongolia: Index of Industrial Production. 1989 = 100.

<table>
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<tr>
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<tr>
<td>Electricity, in mln KW/h</td>
<td>100</td>
<td>94</td>
<td>73</td>
<td>73</td>
<td>75</td>
<td>75</td>
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<tr>
<td>Thermo-energy, in thous. Gk</td>
<td>100</td>
<td>107</td>
<td>100</td>
<td>94</td>
<td>95</td>
<td>96</td>
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<tr>
<td>Coal, thous. ton</td>
<td>100</td>
<td>89</td>
<td>61</td>
<td>64</td>
<td>61</td>
<td>63</td>
</tr>
<tr>
<td>Flour spar, thous. ton</td>
<td>100</td>
<td>79</td>
<td>91</td>
<td>98</td>
<td>98</td>
<td>106</td>
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<td>Copper concentrate</td>
<td>100</td>
<td>101</td>
<td>98</td>
<td>100</td>
<td>101</td>
<td>102</td>
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<tr>
<td>Molybdenum concentrates</td>
<td>100</td>
<td>125</td>
<td>116</td>
<td>139</td>
<td>126</td>
<td>126</td>
</tr>
<tr>
<td>Brick, million pieces</td>
<td>100</td>
<td>88</td>
<td>12</td>
<td>15</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Cement, thous. ton</td>
<td>100</td>
<td>86</td>
<td>21</td>
<td>21</td>
<td>22</td>
<td>21</td>
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<tr>
<td>Lime, thous. ton</td>
<td>100</td>
<td>108</td>
<td>54</td>
<td>57</td>
<td>60</td>
<td>58</td>
</tr>
<tr>
<td>Steel and concrete block,</td>
<td>100</td>
<td>101</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Thous. m³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Match, million boxes</td>
<td>100</td>
<td>76</td>
<td>58</td>
<td>36</td>
<td>6</td>
<td>3</td>
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<tr>
<td>Mineral cotton, thous.m³</td>
<td>100</td>
<td>90</td>
<td>13</td>
<td>11</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Khurmen Block, thous. pieces</td>
<td>100</td>
<td>111</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Spun thread, tons</td>
<td>100</td>
<td>77</td>
<td>12</td>
<td>6</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Combed down, tons</td>
<td>100</td>
<td>96</td>
<td>168</td>
<td>207</td>
<td>173</td>
<td>201</td>
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<tr>
<td>Camel woollen blanket, thous.m</td>
<td>100</td>
<td>100</td>
<td>21</td>
<td>34</td>
<td>26</td>
<td>24</td>
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<tr>
<td>Scoured wool, thous.t.</td>
<td>100</td>
<td>96</td>
<td>12</td>
<td>8</td>
<td>8</td>
<td>5</td>
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<tr>
<td>Carpet, thous.m²</td>
<td>100</td>
<td>93</td>
<td>28</td>
<td>31</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>Knitted goods, thous.pieces</td>
<td>100</td>
<td>103</td>
<td>13</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Felt, thous.m.</td>
<td>100</td>
<td>115</td>
<td>12</td>
<td>15</td>
<td>12</td>
<td>16</td>
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<tr>
<td>Felt boots, thous.pairs</td>
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<td>99</td>
<td>13</td>
<td>10</td>
<td>8</td>
<td>8</td>
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<tr>
<td>Woollen fabrics, thous.running m.</td>
<td>100</td>
<td>56</td>
<td>4</td>
<td>2</td>
<td>&lt;1</td>
<td>&lt;1</td>
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<tr>
<td>Overcoat, thous.pieces</td>
<td>100</td>
<td>121</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>2</td>
<td>&lt;1</td>
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<tr>
<td>Suits, thous.pieces</td>
<td>100</td>
<td>111</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
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<tr>
<td>Hides large, thous.t.</td>
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<td>100</td>
<td>0</td>
<td>10</td>
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<td>-</td>
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<tr>
<td>Sheep skin, thous.m²</td>
<td>100</td>
<td>131</td>
<td>17</td>
<td>2</td>
<td>&lt;1</td>
<td>-</td>
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<tr>
<td>Chevreau, thous.m²</td>
<td>100</td>
<td>101</td>
<td>9</td>
<td>7</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Leather boots, thous.pairs</td>
<td>100</td>
<td>102</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Leather coat.thous.pieces</td>
<td>100</td>
<td>86</td>
<td>31</td>
<td>11</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Leather jacket, thous.pieces</td>
<td>100</td>
<td>124</td>
<td>9</td>
<td>3</td>
<td>&lt;1</td>
<td>&lt;1</td>
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<tr>
<td>Skin coat, thous.pieces</td>
<td>100</td>
<td>77</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Meat and meat products, thous.t.</td>
<td>100</td>
<td>94</td>
<td>18</td>
<td>14</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Canned meat, t.</td>
<td>100</td>
<td>66</td>
<td>26</td>
<td>20</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>Sausages, t.</td>
<td>100</td>
<td>95</td>
<td>11</td>
<td>12</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>Spirit, thous.l.</td>
<td>100</td>
<td>101</td>
<td>62</td>
<td>60</td>
<td>78</td>
<td>82</td>
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<tr>
<td>Alcohol, thous.l.</td>
<td>100</td>
<td>131</td>
<td>75</td>
<td>73</td>
<td>90</td>
<td>102</td>
</tr>
<tr>
<td>Flour, thous.l.</td>
<td>100</td>
<td>95</td>
<td>80</td>
<td>46</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>Small intestine, thous.roll</td>
<td>100</td>
<td>97</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Salt mining, t.</td>
<td>100</td>
<td>51</td>
<td>6</td>
<td>6</td>
<td>11</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Salt, t.</td>
<td>100</td>
<td>79</td>
<td>10</td>
<td>9</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Bakery goods, thous.t.</td>
<td>100</td>
<td>95</td>
<td>55</td>
<td>45</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Product</td>
<td>100</td>
<td>91</td>
<td>24</td>
<td>25</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Confectionery, thous. t.</td>
<td>100</td>
<td>96</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Milk, dairy products, mil.l.</td>
<td>100</td>
<td>56</td>
<td>22</td>
<td>9</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Mixed fodder, thous. t.</td>
<td>100</td>
<td>79</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Washing soap, thous. t.</td>
<td>100</td>
<td>83</td>
<td>14</td>
<td>10</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>Toilet soap, thous. t.</td>
<td>100</td>
<td>100</td>
<td>30</td>
<td>30</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Publication, mil. signatures</td>
<td>100</td>
<td>84</td>
<td>18</td>
<td>4</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Porcelain, thous. pieces</td>
<td>100</td>
<td>101</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Installed metal constructions, thous. m^3</td>
<td>100</td>
<td>95</td>
<td>2</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Building door and windows, Thous. m^2</td>
<td>100</td>
<td>67</td>
<td>47</td>
<td>43</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>Railway sleeper, thous. m^3</td>
<td>100</td>
<td>92</td>
<td>11</td>
<td>13</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Sawn wood. Thos. M^3</td>
<td>100</td>
<td>78</td>
<td>11</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Candle, thou.s.pieces</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>Metal Steel, thou.s.t.</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>123</td>
</tr>
<tr>
<td>Metal foundries, thou.s.t.</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>52</td>
</tr>
<tr>
<td>Injection syringe, min.(mill?)pieces</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>214</td>
</tr>
<tr>
<td>Injection needle, thou.pieces</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>79</td>
</tr>
</tbody>
</table>


Table 4. Mongolia: Index of Total Harvest. 1985 = 100.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total crop</td>
<td>100</td>
<td>81</td>
<td>67</td>
<td>56</td>
<td>54</td>
<td>37</td>
<td>29</td>
<td>25</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Wheat</td>
<td>100</td>
<td>87</td>
<td>78</td>
<td>66</td>
<td>65</td>
<td>47</td>
<td>37</td>
<td>31</td>
<td>34</td>
<td>28</td>
</tr>
<tr>
<td>Potato</td>
<td>100</td>
<td>116</td>
<td>86</td>
<td>69</td>
<td>53</td>
<td>48</td>
<td>46</td>
<td>41</td>
<td>48</td>
<td>58</td>
</tr>
<tr>
<td>Vegetables</td>
<td>100</td>
<td>100</td>
<td>56</td>
<td>39</td>
<td>54</td>
<td>54</td>
<td>66</td>
<td>56</td>
<td>83</td>
<td>110</td>
</tr>
<tr>
<td>Fodder</td>
<td>100</td>
<td>88</td>
<td>35</td>
<td>23</td>
<td>19</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Batkhishig, p. 46.

Table 5. Mongolia: Index of Agricultural Yield. 1989 = 100.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereals, total</td>
<td>100</td>
<td>88</td>
<td>58</td>
<td>53</td>
<td>61</td>
<td>50</td>
</tr>
<tr>
<td>Wheat</td>
<td>100</td>
<td>86</td>
<td>57</td>
<td>51</td>
<td>58</td>
<td>49</td>
</tr>
<tr>
<td>Barley</td>
<td>100</td>
<td>93</td>
<td>71</td>
<td>70</td>
<td>67</td>
<td>50</td>
</tr>
<tr>
<td>Oats</td>
<td>100</td>
<td>101</td>
<td>6</td>
<td>10</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Potato</td>
<td>100</td>
<td>87</td>
<td>68</td>
<td>54</td>
<td>66</td>
<td>65</td>
</tr>
<tr>
<td>Fodder crops</td>
<td>100</td>
<td>111</td>
<td>43</td>
<td>49</td>
<td>56</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 6. Mongolia: Index of Number of Livestock. 1989 = 100.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Camel</th>
<th>Horse</th>
<th>Cattle</th>
<th>Sheep</th>
<th>Goat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1990</td>
<td>105</td>
<td>96</td>
<td>103</td>
<td>106</td>
<td>106</td>
<td>103</td>
</tr>
<tr>
<td>1991</td>
<td>103</td>
<td>85</td>
<td>103</td>
<td>105</td>
<td>103</td>
<td>106</td>
</tr>
<tr>
<td>1992</td>
<td>104</td>
<td>74</td>
<td>100</td>
<td>105</td>
<td>103</td>
<td>113</td>
</tr>
<tr>
<td>1993</td>
<td>102</td>
<td>66</td>
<td>100</td>
<td>101</td>
<td>97</td>
<td>123</td>
</tr>
<tr>
<td>1994</td>
<td>109</td>
<td>66</td>
<td>110</td>
<td>117</td>
<td>97</td>
<td>146</td>
</tr>
<tr>
<td>1995</td>
<td>116</td>
<td>66</td>
<td>120</td>
<td>123</td>
<td>96</td>
<td>172</td>
</tr>
<tr>
<td>1996</td>
<td>119</td>
<td>64</td>
<td>126</td>
<td>129</td>
<td>95</td>
<td>184</td>
</tr>
<tr>
<td>1997</td>
<td>127</td>
<td>64</td>
<td>132</td>
<td>134</td>
<td>99</td>
<td>207</td>
</tr>
<tr>
<td>1998</td>
<td>133</td>
<td>64</td>
<td>139</td>
<td>138</td>
<td>103</td>
<td>223</td>
</tr>
</tbody>
</table>

Source: Calculated from Batkhishing, p. 45.

Table 7. Mongolia: Number of Herdsmen & Herdsmen’s Households.

<table>
<thead>
<tr>
<th></th>
<th>Herdsmen</th>
<th>Index</th>
<th>Households</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>135.420</td>
<td>100</td>
<td>68.963</td>
<td>100</td>
</tr>
<tr>
<td>1990</td>
<td>147.508</td>
<td>109</td>
<td>74.710</td>
<td>108</td>
</tr>
<tr>
<td>1995</td>
<td>390.539</td>
<td>288</td>
<td>169.308</td>
<td>245</td>
</tr>
<tr>
<td>1996</td>
<td>395.355</td>
<td>292</td>
<td>170.084</td>
<td>247</td>
</tr>
<tr>
<td>1997</td>
<td>410.078</td>
<td>303</td>
<td>183.636</td>
<td>266</td>
</tr>
<tr>
<td>1998</td>
<td>414.433</td>
<td>306</td>
<td>187.147</td>
<td>271</td>
</tr>
</tbody>
</table>

Appendix 3. 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:

<table>
<thead>
<tr>
<th>Country</th>
<th>Output per Production</th>
<th>Country</th>
<th>Output per Production</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>days</td>
<td></td>
<td>days</td>
</tr>
<tr>
<td>A</td>
<td>man-day</td>
<td>B</td>
<td>man-day</td>
</tr>
<tr>
<td>200</td>
<td>4</td>
<td>200</td>
<td>4</td>
</tr>
<tr>
<td>wheat</td>
<td>800</td>
<td>wheat</td>
<td>800</td>
</tr>
<tr>
<td>watches</td>
<td>800</td>
<td>watches</td>
<td>600</td>
</tr>
</tbody>
</table>

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 specialises according to its comparative advantage:

<table>
<thead>
<tr>
<th>Country</th>
<th>Output per Production</th>
<th>Country</th>
<th>Output per Production</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>days</td>
<td></td>
<td>days</td>
</tr>
<tr>
<td>A</td>
<td>man-day</td>
<td>B</td>
<td>man-day</td>
</tr>
<tr>
<td>100</td>
<td>4.5</td>
<td>300</td>
<td>3.5</td>
</tr>
<tr>
<td>wheat</td>
<td>450</td>
<td>wheat</td>
<td>1050</td>
</tr>
<tr>
<td>watches</td>
<td>1.350</td>
<td>watches</td>
<td>200</td>
</tr>
</tbody>
</table>

World production w. 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
Appendix 4: The Mongolian Vicious Circles Condensed.

1991: Free trade shock and collapse of COMECON trading area > fall in exports leads to galloping de-industrialisation and loss of most activities subject to increasing returns (manufacturing) > lower demand and lower tax receipts lead to massive loss of other urban jobs, both in services and government sector > declining demand for people with higher education > wages collapse > lower wages reduce demand for manufactured goods even further > an overvalued currency favours imports over locally manufactured goods, increasing the crisis > return to the pastoral economy in the countryside > fast growth in diminishing return activities, 8 Million pasturing animals added by urban unemployed attempting to create a new living > fragile ecosystem cannot support the increase in heads of animals (more than 2 million animals, roughly the increase in number of animals over the last two years, starve to death during the winter 1999/2000) > environmental degradation, perhaps permanent desertification > exports collapse even further (exports down by 56% in current dollars since 1989) > break-down of the capacity to import (trade deficit in 1998 equal to 49% of exports) > terms of trade deteriorate as exports are now raw materials > very limited foreign exchange available to agricultural sector for industrial inputs like fertilisers > institutional collapse in agricultural sector (animal vaccines programmes, agricultural extension) > complete collapse in agricultural productivity due to lack of fertilisers and the institutional collapse (yield per acre of important fodder crop down by 71% since 1989, the least affected crop is potatoes with ‘only’ a 35% fall in productivity, all other crops register a fall by at least 50%) > fear of inflation and of bank failures cause IMF to keep both interest rates (real interest rate is 35%) and exchange rate high, blocking the natural mechanisms which should now have made Mongolian labour and Mongolian products cheap on the world market. In this way, the ‘market fundamentalists’ effectively block the market mechanisms that would have given Mongolia a chance to be more competitive on the world markets. There appears to be no factor in sight that may invert these causal mechanisms.
The "Vicious" Circle of Economic Underdevelopment

Engaged in Production of Technologically Mature Products and Products Subject to Diminishing returns
Little Productivity Increase

Perfect International Competition
Reversible Wages
Productivity Increases Taken Out As Lowered Prices

No Increase in Real Wages

Demand Low
Savings Low
Low Possibility for Taxation - (Poor Health, Education, etc.)
Investment in Labor Saving Technology Unprofitable

Small Scale of Production (Imports Cheaper Due to Scale Economies)
No Diversity of Production

Low Investments
Low Capital, Labor Ratio

Balance of Payment Problems
Break-down of the Capacity to Import

Low Wages vs. Other Nations
Comparative Advantages in Labor-Intensive Activities

Note: It is futile to attack the system at any one point, e.g., increasing investment when wages are still low and demand is absent. An instance of this is poor capital utilization and excess capacity in Latin American LDCs.

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