

## 6. Globalization in the periphery as a Morgenthau Plan: the underdevelopment of Mongolia in the 1990s

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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.

(Mill 1848)

‘Woe to the vanquished’ – a saying of the ancient Romans – came to mind when I attended a conference in the Mongolian Parliament building in March 2000.<sup>1</sup> 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 2 million animals pasturing on the plains were starving to death in the bitter cold. Permanent desertification threatened the country, and it was clear that this disaster was manmade. What was not reported was the important fact that the 2 million animals dying during the winter of 1999–2000 were only the increase in the animal population over the previous 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 was fixed. Rooted in this phenomenon, vicious circles of poverty were already well established.

In terms of economic theory, the Mongolian situation takes us back to 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 1990s apparently were not recognized, 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 that followed, the clearer it became that this nation, vanquished in the Cold War, for all practical purposes was being subjected to a Morgenthau Plan (Morgenthau 1945). The subjugated Germany of the Second World War was, according to this plan, to be deindustrialized and made into an agricultural and pastoral nation. Early in 1947, in an astonishing mental and political turnaround, the United States ditched the Morgenthau Plan when former President of the United States Herbert Hoover 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, 18 March 1947, quoted in Baade 1955). Secretary of State George Catlett Marshall announced the Marshall Plan, which had precisely the opposite objective of that of the Morgenthau Plan, during a speech at Harvard on 5 June 1947. According to the Marshall Plan – officially the Economic Recovery Program – the industrial production of Germany should, as soon as possible and at all costs, be brought back to its 1936 level, the last year that was considered 'normal' (Economic Cooperation Administration 1949, Balabkins 1964).

During the 50 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-1980s (International Monetary Fund 1991, p. 13). However, the *de facto* Morgenthau Plan proved exceedingly successful in deindustrializing Mongolia. In Mongolia 50 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 Tables 6.2–6.4 in Appendix 2).

An unexpected effect of the Morgenthau Plan in Germany was that a reduction in agricultural productivity paralleled the decline in industrial production (Balabkins 1964, p. 87). This phenomenon – which would not have surprised nineteenth-century economists – was extremely strongly felt in Mongolia, as well. The jobless industrial workers were forced to take up the pastoral way of living of their ancestors, adding 8 million pasturing animals during the 1990s. This depressed productivity and strongly increased the ecological pressure on the pastures of the sub-Arctic steppe (Tables 6.7–6.8). 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 6.5–6.6). Real wages are difficult to estimate meaningfully, since a 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, 36 per cent of the Mongolian population lived below the weighted national poverty line of US\$17 per month (World Bank 2000b).

The Mongolian balance of payment deficit equals 50 per cent of annual exports. Still the normal market mechanisms which, in the textbooks, are supposed to correct this situation have not been allowed to do their job. An artificially overvalued currency coupled with a real interest rate of 35 per cent make it impossible for the productive structure to regain international competitiveness. Priority is given to short-term financial stability, a choice which, 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 – the International Monetary Fund (IMF) and the World Bank – only start in 1994 or 1995 (International Monetary Fund 2000). By then most of the economic damage had already been done. The picture of deindustrialization *à la* Morgenthau becomes clear only when we study the official Mongolian statistics (National Statistical Office of Mongolia 1999). IMF data after 1994 appear consistent with the data provided by the National Statistical Office of Mongolia, which is the source used by the IMF. There is therefore no reason to distrust these important data that the IMF chooses not to publish.

Mongolia only has 2.5 million people, so the disaster is not of the magnitude of the spectre of 25 million 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 the Second World War. But the fundamental forces behind the drama of Germany in 1945 and the drama of Mongolia in 2001 were the same: the carrying capacity – in terms of both number of human beings and ecological sustainability – is infinitely higher in an industrialized nation than in an agricultural nation. Even a relatively inefficient manufacturing sector provides much greater welfare to a nation than having no manufacturing sector at all. The important synergies between manufacturing and agriculture, as made visible by the collapse of Mongolian agriculture, are but one reason for this. The solution is the same as it was in post-war Germany: the only way to save both the people and the ecology of Mongolia is reindustrialization with a prolonged transition period before free trade is introduced.

The big difference is that today there is no Herbert Hoover, 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, p. 13). The same type of zealots who today fight 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’ (ibid.). The economic theory behind the deindustrialization of Mongolia and large parts of the Second and Third Worlds 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 for the management of the Second and Third Worlds since the early 1990s 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 cultivation – with all its knowledge and all its technologies will appear spontaneously with ‘the market’.

This is the type of problem that the Stanford economist Moses Abramowitz called to the attention of the profession in 1956: standard economic theory explains only 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 to the same argument. His comment on the progress of economic science since 1956 was not positive:

[T]he 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 percent?’ 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 points to the shaky theoretical foundations on which the uncompromising policies imposed on Mongolia rest. ‘Laying the policy foundations for sustained growth’ in Mongolia (World Bank 2000a, p. 2) has, in practice, meant eliminating many institutions without putting any-

thing in their place. Economically, a belief in 'spontaneous order' has produced something closer to spontaneous chaos.

The structure of the rest of this chapter is as follows: section 1 outlines the basic mechanisms that created the vortex of economic contraction in Mongolia starting in the early 1990s. Section 2 discusses how economic theory lost the categories needed in order to explain both economic growth and economic contraction. Section 3 explains the synergies between increasing- and diminishing-return activities. These synergies were reversed in Mongolia in the 1990s. The collapse of the industrial sector starting in 1990 led to a partial and parallel collapse of the agricultural sector as well. I describe in theory the causal mechanisms leading into this vicious circle. Section 4 gives a description of the Mongolian setting, history and economy. Section 5 discusses in detail how the vicious circles described in theory in section 4 developed, interacted and reinforced each other in Mongolia during the 1990s. Section 6 argues that the Washington institutions have failed 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. Section 7 discusses the mismanagement of the Mongolian economy by the Washington institutions. Finally, section 8 discusses the implications for the global periphery as a whole and outlines a way out.

Appendix 1 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 to this case. Appendix 2 gives statistical data for the Mongolian economy from 1989 to 1998. These data, taken from the records produced by the National Statistical Office of Mongolia, are of great importance, since the official IMF data have eliminated all documentation on the collapse of the manufacturing sector that took place from 1990 to 1995 (International Monetary Fund 2000). Appendix 3 gives a numerical example of one of the main mechanisms at work in Mongolia during the 1990s from an article published in 1923 by Frank Graham, and Appendix 4 gives a stylized 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 1990s in a number of countries, particularly in the former communist countries and in Latin America. According to the United Nations Conference on Trade and Development, 90 nations were poorer in 1997 than they had been in 1990. Thirty-seven of them were poorer in 1997 than they had been in 1970. Mongolia is a typical, but in

many ways extreme case. Mongolia's economy is not very complex, which makes it a good case for illustration purposes. Comparing the post-Cold War economic policies with the policies implemented after the Second World War, I 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 strategy focused on increasing the productivity of this industry.

Successful economic policy since the Renaissance had recognized the fundamental difference between diminishing-return industries, in which specialization increases unit costs, and increasing-return industries, in which specialization decreases unit costs. A policy basing a national strategy on the distinction between these two categories of goods has been successfully practised 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 nineteenth-century discourse on economic policy (Schumpeter 1954, p. 259). The importance of these mechanisms was reiterated by Alfred Marshall (Marshall 1890, p. 452) and shown in a numerical example by Frank Graham, a president of the American Economic Association (Graham 1923; see also Appendix 3 in this chapter).

In the history of economic thought over the last 500 years, the dichotomy of increasing versus diminishing returns as a proxy for good versus bad exports was absent in economic theory for only a brief period, from the mid-1930s until the late 1970s. In the 1930s the Harvard economist Jacob Viner eliminated the concept of increasing returns from international trade theory because it was not compatible with equilibrium (Viner 1937, pp. 475–82). Thus a real-world phenomenon that economists for centuries had seen as a key to explaining wealth was sacrificed in order to maintain the 'purity' of the model. A key aspect of the economic terrain was air-brushed out of all maps 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 the assumption of equilibrium and opening up economic theory to a type of market that not only no longer created harmony, but also potentially created disharmony. The abstract principles of the profession created an analytical framework in which 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 ascendancy of the 'Fordist' paradigm, which placed increasing returns at the core of the wealth-creating economy.

The attitude of Viner and his followers – that is, virtually all neoclassical

economists – was very different from the attitude of the founder of neoclassical economics, Alfred Marshall. In his celebrated *Principles of Economics*, Marshall clearly recognizes that a nation could improve its position by subsidizing economic activities subject to increasing returns and taxing those subject to diminishing returns, such as agriculture (Marshall 1890, p. 452). During the twentieth century, neoclassical economics slid away from its founder into Ricardian and Walrasian models. When the concept of increasing returns was brought back into the theory, it formed a new fashion in economics modelling (Krugman 1980, 1988, 1996). This economic fashion had no influence whatsoever on the policy recommendations of the Washington Consensus, however, which had a devastating effect on Mongolia's economy.

The loss of increasing-return activities has often been observed in nations that have lost wars. After wars, 'Morgenthau Plans' may occur spontaneously. The devastating effects of deindustrialization 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. In 1947, Herbert Hoover was rephrasing what economists had known since the sixteenth century: a pastoral nation could not come close to supporting as dense a population as an industrial/agricultural/pastoral state. If industry is killed off, a nation's ability to support its population is 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, for example, in the nineteenth-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' and 'destructive trade' (Reinert 1980). 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 reinforces its comparative advantage in higher skills in increasing-return industries, while poor nations fall back on their comparative advantage in diminishing-return industries. A comparative advantage in a diminishing-return activity is a 'natural advantage' based on nature's bounty, whereas a comparative advantage in an increasing-return activity is a 'created advantage', based on human innovation and skill.

The problems facing a nation specializing in diminishing-return industries with a relatively weak industrial sector, such as Mongolia, can be

observed in Appendix 3 of this chapter. This primary or ‘first-round’ effect is followed by secondary effects which tend to 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.

## 2. KNOWLEDGE LOST: NEOCLASSICAL ECONOMICS AND EARLY MEDICINE

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.

(Foxwell 1899)

A striking feature of the economic theory followed by the Washington institutions in the 1990s, is that, implicitly and explicitly, all economic activities are considered to be 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. Periodic 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 – became marginalized in 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 industrial economies is, however, 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 were excluded from the neo-classical production function. Economic theory thus came to externalize the real factors that create economic wealth and to focus 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, devoid of scale effects and fully accessible to all individuals inhabiting the planet (under the assumption of ‘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 poor nations. Paradoxically, the enormous productive powers of capitalism were taken for granted by capitalist theory; the focus was on superficial move-



ments of trade and of monetary quantities. 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, p. 468). A naive view of the economy as automatically creating harmony led to a disregard for the productive apparatus in the second and third worlds.

This reduction of economics to monetary and trade phenomena was not harmful in the industrialized world, where the ‘true’ factors of production were in abundant supply. But for nations with weak or non-existent industrial sectors it created a dangerous and enduring illusion that economic development could be produced by adding capital to labour in a process analogous to adding water to instant coffee. The activity-specific element of economic welfare, the fact that all rich nations were riding on an industrial wave in which rapid innovation and increasing returns were the key factors, was forgotten. The mature economic activities pursued in 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 mistook the symptom of capital shortage as the root cause of their lack of development. The causal arrows of economic change had been inverted; the agent was considered the cause.

In this chapter I apply to the Mongolian case a set of principles different from those of standard economic theory – the principles of the ‘Other Canon’ of economics (see Chapter 1). I 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 haunt Mongolia. The principles of the Other Canon were applied by the United States during its period of spectacular catching up from 1820 until the First World War. I am, in a sense, holding up the economic policy theories of Abraham Lincoln as the example to follow for the poor world, rather than those of the 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 are seen as being qualitatively alike represents a curious break with long-standing scientific tradition. Early scientists saw it as their main task to order observable objects and phenomena into categories and components. Classification put an end to an impression of chaos, creating perceived order in the world. Starting in the Renaissance, scientists embarked on a huge but slow project of mapping and classifying the natural world. Linnaeus’s classification of the world of plants is a well-known example. The completion of mapping the human genome in 2000 can be seen as a milestone in this project of classification of nature.

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 1990s again differed: the same medicine was prescribed for all nations, regardless of their different symptoms and degrees of poverty.

Traditional medicine depended on centuries of experience, as when, starting in the twelfth century, lemons and oranges were used against scurvy in the Mediterranean. The scientific explanation for why lemons prevented scurvy was found only with the discovery of vitamin C in the late 1920s. In economic policy as in medicine, remedies were used without knowing why they worked. As the English economist Edward Misselden put it in 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 versus those subject to diminishing returns – Antonio Serra in 1613 did for economics what Linnaeus did for botany. It was crucial for a nation to understand whether costs would increase if it specialized in a certain activity (diminishing returns) or whether costs would decrease and create formidable 'barriers to entry' in its favour (increasing returns). In practice, however, the targeting of increasing-return activities had already been going on for centuries before Serra.

In the eighteenth century when Captain Cook sailed around the world, scurvy was again the biggest threat to long voyages. Knowledge of traditional medicine had been lost. Generic 'cure-all' medical treatment such as bleeding had come to dominate medicine. This was, in a sense, a 'Dark Age', when useful traditional knowledge had been lost and before 'scientific' medicine had developed.

Today's debate on the benefits of 'open economies' is similar to the long European debate about bleeding sick patients. In his treatise on bleeding, economist and physician François Quesnay (1750) praises the great curative effects of bleeding on most diseases, including inflammatory diseases and fevers. The discussion then was not whether to bleed sick patients but how to bleed them – how much, where, 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 other canon tradition from Serra all the way up to the Second World War, it was accepted that no nation could ever grow out of poverty without an increasing-return sector. Only when the increasing-return sector was firmly established should the nation 'graduate' to free trade. As the

twentieth century advanced, the habit of dividing economic activities into two categories disappeared from economic theory, essentially because the dichotomy between increasing and decreasing returns 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 devoid of categories of economic activity, a theory in which 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 specialized in washing dishes. Pre-Serra economic policy was based on this intuition, that of 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 got poorer during the 1990s, 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 open markets. In many former planned economies, managers in charge of these increasing-return industries probably did not even have time to figure out what their real costs were before their firms were wiped out.

With the loss of categories in economics, depth and quality of understanding are 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 which makes clay hard but makes wax soft, like a low whistle which irritates the dog but quiets the horse' (Serra 1613). In Mongolia this insight that specializing in pastoral activities would have a very different outcome than specializing in manufacturing would have spared the country much damage. Standard economics works under what the Nobel laureate James M. Buchanan calls the 'equality assumption' and its models operate in a straitjacket: 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's theories are fundamentally ahistorical, devoid of any categories that would help in understanding economic phenomena. The underlying theory is, in Kuznets's 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 simplest 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 recognize is that this combination of wealth and openness is, without exception, the result of a prolonged period of conscious building of increasing-return activities, under whatever 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.

### 3. DEVELOPMENT SYNERGIES: HOW THE PRESENCE OF INCREASING-RETURN ACTIVITIES BENEFITS DIMINISHING-RETURN ACTIVITIES

‘Promoting husbandry . . . is never more effectually encouraged than by the increase of manufactures’ wrote David Hume, Adam Smith’s close friend, in his *History of England* (Hume 1768, vol. 3, p. 65). The economic changes which have taken place in the Republic of Mongolia in the 1990s show us that the reverse is also true: the destruction of animal husbandry and agriculture is never more effectually ensured than by the destruction of manufacturing. The application of the standard economic theory of the Washington consensus in Mongolia in the 1990s has given us a chance to observe – as in a laboratory experiment – how the classic vicious circles of poverty and environmental degradation set in and reinforce each other in a downward spiral of underdevelopment. The Mongolian experience is almost a textbook case for the theoretical framework in Reinert (1980).

During the early industrialization of Europe, agriculture and industry were often seen as being in competition. The first economist who expressed Hume’s view of the complementarity of national investments in agriculture and manufacturing was Gottfried Wilhelm von Leibniz (Roscher 1874, p. 337). This view, later spread by authors as different as Johan Peter Süssmilch, James Steuart 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 synergistic effect of manufacturing and agriculture in a nation. This idea made US industrial policy acceptable to US farmers throughout the rest of the nineteenth century. Leibniz’s insight had an enormous impact on nineteenth-century economic policy. For centuries, undoing these synergies – as in Mongolia in the 1990s – would have been seen as a recipe for economic disaster. Just as knowledge of the simple cure for scurvy of 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 forgotten.

Building the complementarity 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. In England one important theoretical foundation was Charles King’s (1721) three-volume work, *The British Merchant, or Commerce Preserved*. To King and his contemporaries, exporting raw materials was ‘bad trade’ whereas exporting manufactured products was ‘good trade’. Interestingly, trading manufactured goods for other manufactured goods was also considered ‘good trade’.

In fact, King’s recommendations make excellent 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 (1764–78) monumental five-volume *Lehrbegriff sämtlicher Ökonomischer und Cameralwissenschaften* is one example. All European nations, large and small, attempted to follow these same principles for centuries. As Alfred Marshall (1890) points out, the forces of diminishing returns, presently at work producing increasing poverty in Mongolia, are clearly set forth 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 13:6).

I suggest that the decline in living standards experienced in many nations since the 1990s is a result of fundamental flaws in the economic models that support the Washington Consensus and consequently the management of the economies of the Third World. As indicated, the core ideas of this essay are that economic activities are qualitatively different and that economic development therefore is highly activity-specific. Some economic activities create development, others do not. And to complicate the matter, some types of economic activities create wealth only if other activities are present, as the quotation from David Hume at the beginning of this section suggests.

The role of increasing and diminishing returns in creating self-reinforcing cycles of, respectively, wealth and poverty also gives us a clue to one of the major puzzles confronting the economics profession: how was it possible for the notoriously inefficient centrally planned economies to produce standards of living that were considerably higher – in the case of Russia and Mongolia two times higher – 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).

I also claim that evolution of the institutions enabling development is activity-specific. It is the presence of certain economic activities that gives birth to institutions (a view that represents the mid-eighteenth-century consensus in European economic policy). Insurance was created around 2000 BC because camel caravans and sea trading created demand for such a financial tool and the institutions that provided it, not the other way around. 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 that are the product of centuries of advanced manufacturing and commercial activities. As it was put in a German price essay written for 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). Understanding this causality is indispensable to understanding economic development. In this chapter, using Mongolia in the 1990s as an example, I try to explain why.

Continuing a long economic tradition starting with Antonio Serra in 1613, I claim that economic wealth and poverty can be understood only if 'Malthusian activities' (subject to diminishing returns with international specialization) are separated from 'Schumpeterian activities' (subject to increasing returns with international specialization). 'New trade theory' in the early 1980s (Krugman 1980) essentially resurrected the existence of increasing and diminishing returns, an argument that had been important, if not crucial, to economic policy through the nineteenth century. However, in new trade theory the dichotomy between increasing versus diminishing returns was, for all practical purposes, lost: the 'equality assumption' in neoclassical theory – the fact that all economic activities are seen as qualitatively alike – overruled any other tendency in economic theory.

The elements in each of the two columns 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 50 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 1850s, Wilhelm Roscher highlighted diminishing returns and related them 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 eco-

*Table 6.1 'Good' and 'bad'; economic activities from the point of view of a nation-state*

Characteristics of Schumpeterian activities ('good' export activities)	Characteristics of Malthusian activities ('bad' export activities unless a Schumpeterian sector is present)
Increasing returns	Diminishing returns
Dynamic imperfect competition	Perfect competition ('commodity competition')
Stable prices	Extreme price fluctuations
Irreversible wages ('stickiness' of wages)	Reversible wages
Technical change leads to higher wages for the producer ('Fordist wage regime')	Technical change tends to lower price to consumer
Create large synergies (linkages, linkages, clusters)	Create few synergies

conomic activities at any point in time present widely different potentials for economic growth, the presence of some types of activities is also crucial to the development of others, as David Hume claimed. The principles of increasing returns and cumulative causations now underlie the theories of W. Brian Arthur (1994).

Indirectly we also revisit the 'golden age' of development economics of the 1950s and 1960s, with its 'vicious circles' and 'perverse backwashes', of which Gunnar Myrdal (1956) gives perhaps the most concise expression. I 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, 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 1300 metres above sea level. Its 650000 inhabitants do not come close to filling

the valley. The country's average altitude is 1600 metres. At this altitude and latitude (about 48 degrees north) the landscape is bleak and nature seems fragile as in the sub-Arctic, where the tracks of a car remain visible for centuries. Mongolia's highest mountain, Khuiten, rises to 4374 metres above sea level.

When one arrives in Ulaanbaatar, the association that comes to mind is an Andean mining town at 4000 metres altitude. The German geographer Karl Troll once described the climate in the high Andes as 'winter every night and summer every day'. This description fits the extreme continental climate of the Mongolian *altiplano*. When I visited during late March, night temperatures still fell below minus 20 degrees Centigrade, rising to a few degrees above zero during the daytime. Because the country is shielded from the oceans by high mountain chains, its climate is very dry, so the cold, though bitter, is less unpleasant than a clammy cold would be.

Mongolia is blessed with an enormous variety of natural landscapes, ecosystems and fauna. The climate ranges from the Gobi desert, through steppe and *taiga* (cedar and larch forests), to the sub-Arctic mountain world of glaciers and frozen rivers. The country is inhabited by 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 grass that appears to have been naturally freeze-dried on the 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 shares 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 2420 500 Mongolians shared their land with 32 897 500 domesticated animals: 356 500 camels, 3 059 100 horses, 3 725 800 cattle, 14 694 200 sheep and 11 061 900 goats.<sup>2</sup> In 1998 animals outnumbered people by a ratio of 14 to 1. The precipitous deindustrialization of the 1990s was accompanied by a human population growth of 16 per cent and an animal population growth of 33 per cent.

The Mongolian sky is an intense 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 industrialization: four gigantic smokestacks spew smoke. The smokestacks belong to four power plants that provide electricity and heat to the city. Heating is by hot water, distributed through a citywide system of water pipes. The different plants produce smoke in varying shades of brown, testifying to different generations of technology and thus to the age of each plant. The World Bank recommendation is to privatize the most modern plant, the one which produces the least brown smoke.



This is a truly 'Fordist' and centralized heating system. For the newly poor of the 1990s 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 'manhole children', from their dwellings.

## **4.2 Brief History**

After having spent ten years uniting the tribes of Mongolia, Genghis Kahn proclaimed the Mongolian Empire in 1206. Under his grandson Kublai Khan (1215–94) 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 penetrated far into Poland. The Venetian Marco Polo stayed in the old capital of Kharakhorum from 1236 to 1240 and wrote a good description of life in old Mongolia.

Like the Vikings, the Mongolians ended their period of colonizing 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 of 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 I 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 establishment of a socialist republic that lasted until 1990. During the Second World War, Soviet-Mongolian troops fought against the Japanese. Prisoners taken in this war built the huge building which today houses both Parliament (the Great Hural) and the government offices in the present-day capital, Ulaanbaatar. This is the building where the economics conference took place in March 2000.

Communism was the first foreign-induced shock to twentieth-century Mongolia. The communist purges in Mongolia in the 1930s were brutal. Buddhist temples and statues were destroyed and monks massacred. The communists outlawed the traditional Mongolian script and substituted 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 were new last names 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 organized 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. Even today only 4 per cent of rural Mongolian households have access to electricity.

The traditional Mongolian house is the *ger*, a round tent with a wooden frame covered with animal felt. Though it appears smallish from the outside, the *ger* is surprisingly spacious inside. The growing shantytowns of Ulaanbaatar consist of a mixture of traditional shantytown buildings and *gers*.

Traditional Mongolian food is the food of the herdsmen. Meat – predominantly mutton – is the staple diet. Tea with milk and salt is a traditional drink, while the favourite drink is *airag*, fermented mare's milk, which is generously served at weddings, parties, and ceremonies. Horse milk is very rich in vitamin C, which compensates for the lack of vegetables in the diet. Vegetables such as cucumbers are grown in small greenhouses surrounding Ulaanbaatar. 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 industrialization programme in Mongolia. The country was to convert its raw materials into finished products: canned and other processed meat, leather products (jackets, boots and so on), and wool products such as carpets, mostly machine-made but also some handmade. Luxury products processed from mohair goat wool 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 former communist countries which made up the Council for Mutual Economic Cooperation (COMECON), which had an advanced division of labour. The machinery used in Mongolian industry came mainly from Czechoslovakia and East Germany. This policy considerably reduced Mongolia's dependence on husbandry and agriculture. The share of agriculture in the gross domestic product (GDP) was reduced from more than 60 per cent in 1940 to about 16 per cent in the mid-1980s.

## 5. MEETING THE 'FLEXIBLE WALL': MONGOLIA AND THE VICIOUS CIRCLES OF THE 1990s

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 People's 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 its big neighbour in the south, the People's Republic of China.

Mongolia has embraced full financial liberalization 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 1990s bring the Mongolian economy 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?

These problems are not of a transitory nature. In my opinion the coercive advice of the Washington institutions has unleashed classical Malthusian mechanisms leading the country into vicious circles of poverty and environmental degradation. I shall attempt to show that although nineteenth-century classical economics understood the mechanisms that today make Mongolia increasingly poorer, the economists 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 specialization: an international specialization in diminishing-return activities, without a national increasing-return sector, has never failed to be a formula for economic and social disaster.

The only strong institution in Mongolia for most of the twentieth century was the state. Other institutional pillars – such as family or clan, and religion – were consciously deconstructed under the Soviet-influenced regime. The communist regime achieved impressive scores on human development indicators, especially on social indicators such as health, education, maternal and infant mortality, and higher education. This achievement was all the more remarkable because 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).

The year 1990 brought the collapse of the COMECON trading system and opened up Mongolia 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 West German marks. To the extent that this policy was followed, it brought disaster to the local manufacturing industry in the former communist countries.

Table 6.2 shows the precipitous fall in important sectors of Mongolian manufacturing industry. Table 6.3 shows an index of industrial production 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 alcohol has declined less than 50 per cent. In 15 manufacturing industries production has either ceased completely or been reduced to less than 1 per cent of its 1989 level. The only industries showing an increase in production are mining, 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 to a general 'primitivization' of the economy back to traditional animal herding. Whereas animal herding combined with a growing manufacturing sector produced increasing standards of living under the communist regime, the virtual disappearance of manufacturing has caused a precipitous economic decline, even 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 within the Council collapsed with the opening of borders and the dollarization of trade. This hit the export sector of all the previously centrally planned nations. Second, the industries producing for the domestic market were hit by a combination of overvalued currencies, relative inefficiency, lack of knowledge of their own costs and of marketing skills, and faltering demand from people who had lost their jobs in the export sector. In 1991 the IMF planned to increase the imports of consumer goods (International Monetary Fund 1991, p. 30).

Herein lies the enormous difference between the transitions of the 1990s and the reconstruction of a war-torn Europe after the Second World War: in the late 1940s, economists and policy-makers still internalized the seven-

teenth- to nineteenth-century common sense that a nation with even an inefficient manufacturing sector will be infinitely better off than a nation with no manufacturing sector at all. No one would have dreamed of demanding free trade between Europe and the United States in May 1945. It was obvious that the manufacturing sector of Europe had to be rebuilt first. This was the essence of the European Reconstruction Programme (Marshall Plan). The Washington institutions subjected Mongolia to a Marshall Plan in reverse: a fairly conscious and premeditated destruction of Mongolia's manufacturing sector, which laid the country open to the grim Malthusian mechanisms of increasing poverty.

The solution for the increasing number of Mongolians who had lost their livelihoods in the manufacturing sector was to return to the way of life of their forefathers as herdsmen. The number of herdsmen tripled during the 1990s (Table 6.8), adding 8 million grazing animals to the fragile steppe. While the number of herdsmen tripled, the number of animals increased only 33 per cent, however. 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 – pushed towards the limits of ecological sustainability. Avoiding this problem of running resource-based industries into diminishing returns was at the core of the Australian argument for building a manufacturing sector (see Reinert 1980 and 1996a for discussion). Today the economic policy of escaping the traps of diminishing returns – which was crucial for the building of European civilization for centuries – has seemingly not even been considered by the Washington institutions. The overhanging dangers of diminishing returns in a globalized economy are totally ignored in today's discussion (Reinert 1996a). Also gone without a trace is the common sense that rebuilt European manufacturing after the Second World War before opening those countries up for 'free trade'.

During the 1990s many Mongolians were driven back into subsistence agriculture. The average size of the herds decreased from 182 to 94 animals between 1989 and 1998. Today 80 per cent of herdsmen possess fewer than 200 head of livestock, and 67 per cent have fewer than 100 head of livestock. 'In other words, [the] majority of herdsmen just survive without being involved in productive activities' (Batkhishig 2000, p. 45). We observe the kind of 'primitivization' 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 few fish are left that modern fishing boats can no longer be profitably used. At the same time, wages collapse so the only way for

fishermen to survive is to go back to their traditional ways: subsistence fishing (Endresen 1994, Reinert 1996a). In the mines of Bolivia the same phenomenon appears when jobless miners with picks and spades manually rework the refuse from old mining activities in search of minerals.

For communities specialized in diminishing-return activities without the presence of an industrial sector, globalization 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 specializing in an economic activity subject to diminishing returns, be it herding, agriculture, mining or fishing. Neoclassical economics and the Washington institutions fail to distinguish between activities that, under specialization, behave like those of Microsoft and those that have one factor of production – such as land – 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 US paper currency – George Washington, Alexander Hamilton, Benjamin Franklin and Abraham Lincoln – all 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. The Washington institutions are not only undermining the economies of many poor nations, but by refusing to allow 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-1990s, Mongolia experienced several mild winters. These mild winters helped to accommodate 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 befell 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 number of dead animals corresponded to the increased number of animals over the previous two to three 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 for example 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, p. 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 specializes in a resource-based activity, poorer land, mines or fishing areas will automatically lead the nation via diminishing returns into greater and greater 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, pp. 273–4). This is clearly an important mechanism at work in Mongolia, as 8 million animals were added to the fragile ecosystem during the 1990s. Having forgotten both global economic 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. Today's explanation of this phenomenon, centred on 'Dutch disease' (Sachs and Warner 1995), totally misses the core mechanisms at work in 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 that traditional theoretical arguments about industrialization, both from Europe and the United States, proved correct as Mongolia's development process was put into reverse. As quoted earlier, 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 1990s 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, but the productivity of the agricultural sector also deteriorated dramatically. We observe a 'primitivization' of the whole economy.

In Mongolia we also find that one historically important argument for protection of the manufacturing sector is still true: during the latter half of the nineteenth century many economists claimed that industry was of crucial importance to national wealth because if a nation specialized only in agriculture, it could not afford to import fertilizer. This was part of an important debate about 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 facts solidly observed over centuries. With the manufacturing sector gone, the Mongolian agricultural sector could no longer afford to purchase fertilizer and agricultural machinery. A very common observation in nineteenth-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 for example Leslie 1888). Again in Mongolia we see these synergies reversed.

Agricultural yield per acre in Mongolia fell by more than 50 per cent during the 1990s (Table 6.6). For cereal crops, the decline 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 turn 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 breakdown 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 fell rapidly during the 1990s, by more than 50 per cent in current dollars (from \$963 million in 1989 to \$472 million in 1998). Exports fell even more, though, by 56 per cent (from \$722 million in 1989 to \$317 million 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 per cent of the value of exports.
2. Collapse of agricultural productivity: combined with the lack of foreign exchange, increasing poverty of herders and farmers follows inevitably, as more and more marginal land is used (Malthus 1836). The combined effects of these two factors on agricultural productivity in Mongolia were enormous; both total harvest and yield collapsed (Tables 6.5 and 6.6). Addressing Mongolian agriculture in general, one of the participants in 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' (Batkhishig 2000, p. 46).
3. Institutional collapse: institutions that previously handled agricultural



extension and animal vaccination programmes disappear as government activities are reduced, further eroding animal health and agricultural productivity. The same type of institutional collapse hits human health, particularly support to women and young children (Malhotra 1998).

4. Sharp deterioration in the terms of trade (World Bank 2000b, p. 3): Mongolia has experienced a sharp reduction in its balance of payments because of both a decline in international copper prices and the fact that, compared to before, only a very small percentage of wool and cashmere is being processed 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, p. 40). A wage freeze went into effect in 1996, despite 56 per cent inflation that year and 17.5 per cent inflation in 1997. This phenomenon is well known also in Latin America since the 1980s; wage freezes are kept while inflation continues. The effect of this, unfortunately, is difficult to measure, as many poor countries do not break down their GDP data into the shares of income to wages and to other factors. In the 1980s and 1990s, increasing profits of the FIRE sector (Finance, Insurance, Real Estate) often compensated for the collapse of real wages in the national data, and therefore the phenomenon of real wage decline is not picked up in GDP figures. When Peru stopped publishing these data in 1990, wages and earnings of the self-employed had fallen continuously for ten years, in the end amounting to less than 25 per cent of GDP. (The normal industrial country average is between 60 and 70 per cent.)

These factors interact and reinforce each other. As manufacturing continues to shed jobs, more and more people have to take up traditional means of livelihood. However, the productive land is not able to carry the increased number of animals and therefore marginal land is put into use. As marginal land enters into production and overgrazing increases, the animals grow more slowly and become sickly. As manufacturing exports collapse, foreign currency ceases to be available for purchase of fertilizer and agricultural machinery. As wages collapse, demand for local industrial products 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. And so on.

At the core of these lock-in effects are diminishing returns. There is no indication that these vicious circles will not continue indefinitely. In the

2000 seminar there was no indication that the local representatives of the Washington institutions in Mongolia understood them.

It can be argued that diminishing returns is the only factually based assumption in the whole structure of neoclassical 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, such as, 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 of a \$30 million loan to Mongolia until Mongolia had dropped its export ban (Pomfret 2000). More than 50 textile mills closed, and now the Chinese process virtually all Mongolian wool. At the same time, the European Community uncontested follows the same kind of policy that Mongolia is not allowed to follow: many raw materials – such as fresh salmon – are allowed to be imported duty-free into the European Community, whereas industrialized products from the same raw material – for example, smoked salmon – are subject to high tariffs. Through the Washington institutions, the industrialized nations prohibit the Third World from following the types of economic policies that the industrialized nations themselves follow all the time.

Whereas the Washington institutions blindly apply neoclassical 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, p. 6). Krugman is right: standard textbook economics generally is applied only in the Third World, through the Washington institutions. Here is also where it does the greatest possible harm. In an industrialized 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 conditions imposed by the IMF: 'XXVI. IMF to continue including policies on trade liberalization, elimination of state-directed lending on non-commercial terms to favoured 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 to allow poor countries to employ the same development policies that the rich nations used 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 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. I 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, p. 3)

I propose that the economic management of the Third World countries since the early 1990s is just such a palpable absurdity. 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 in national economies in which all the major activities butt up against diminishing returns (see Reinert 1980). The universal belief of the economics profession that lies behind the policies of the Washington institutions – a theoretical tradition in which 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 1990s would have been highly interesting. We would have been able to test 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 coercive advice of the Washington institutions, in the belief that free trade in this situation would cause increased welfare and 'factor price equalization'.

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 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 1980s and 1990s has been the loss of middle-income countries in the Second and Third Worlds. The main explanation of this loss of the middle class lies in the development of economic theory. Starting in the late fifteenth century, economic development in Europe became associated with increasing-return activities. It was recognized that not only were people working with machinery able to pay more taxes than the farmers and artisans, but also that 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 nineteenth century. In the 1950s it was still part of the common sense behind the reconstruction of Europe.

## 6. A PARALLEL REALITY: THE WASHINGTON INSTITUTIONS OBSERVED

As mentioned in the introduction to this chapter, in March 2000 I 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 Parliament building and presidential palace in Ulaanbaatar. Most of the papers for this conference are reproduced in the book *Renovation of Mongolia on the Eve of the XXI Century and Future Development Patterns*, which was published both in Mongolian (in the Cyrillic alphabet) and in English (Batbayar 2000). The conference was organized by the Mongolian Development Research Center, a non-governmental organization established in 1998, financed by the Nippon Foundation, a private entity.

Very distinguished Mongolian authors presented papers. Professor D. Byambasuren, the former Prime Minister of Mongolia, presented ‘National

factors affecting development strategy of Mongolia' (Byambasuren 2000), and Professor P. 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 characteristic of the Japanese experts working in Mongolia was their long experience in practical matters, for example in banking. One paper raised the issue of the damaging effect of the high interest rates, 35 per cent in real terms at the time (Fujimoto 2000a). Another paper addressed 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 (that is, 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 purchase only raw materials: not canned meat but live animals on the hoof, and so on. In Inner Mongolia agriculture has intensified at the expense of herding. When flying from Ulaanbaatar to Beijing, one can clearly verify this 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 capita to almost twice that of Mongolia (Shinichi 2000, p. 4).

Towards the end of the conference, the Washington institutions – in this case also including the United States Agency for International Development (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, none of the expatriate experts working in Mongolia bothered to show up in person to address this conference, held for members of Mongolia's Parliament and the highest-ranking national experts and policy-makers. Instead, the Washington institutions sent their bright, well-paid Mongolian assistants to present in English.

Second, the basic message of the World Bank and IMF representatives was a declaration of victory because inflation had been stopped. There was no mention that real wages had declined by half or that agricultural productivity had declined by more than half, no mention of the collapse of the manufacturing sector and of the balance of payments, nor of the 2 to 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 grow by either 3 per cent per year, 5 per cent per year or 7 per cent per year. Graphs were presented and discussed with no mention at all of how the present downward spirals could be stopped to allow for growth. Not only had the Washington institutions lost history, but this presentation bore very little relationship with Mongolian reality; it could have been (and probably is) presented in any country whatsoever. In addition, the World Bank presented a generic document in which the problems of the financial sector in Mongolia were built in (World Bank 2000a).

References to the problems in the real economy were few, but in his paper the USAID representative derided 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 per cent real interest rate. It took Europe centuries to build up a spirit of entrepreneurship. One Prussian king complained that he had to grab his subjects by their nostrils and lead them to profits.

The USAID representative also derided the Mongolians for 'spending today all that they have today and not worrying about tomorrow' (Bikales 2000, p. 6). This would seem fairly normal for families who have seen their real income cut in half over a few years, in a country where more than a third of families live on less than \$17 per month. Too many comments on Mongolia sound like Marie Antoinette's dictum, 'If they have no bread, let them eat cake.' 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, p. 2). USAID does not mention the virtual impossibility of creating such a sector when the real interest rate is kept at 35 per cent, conditions under which not even General Motors would be able to make money. These complaints from a US official – whose government is the main architect and supporter of IMF policy – combined arrogance and lack of perception. Reading the US economic literature (for example Carey 1869, 1876) from the time England was attempting to keep the United States from manufacturing – when the United States was trying to avoid the trap of diminishing returns and commodity competition – would have been enlightening for the USAID mission.

In the important cashmere industry, 'Chinese processors can freely borrow money at 5 per cent p.a. or less, while [their] Mongolian counterparts can borrow a limited amount at 40 per cent p.a.' (Fujimoto 2000a, p. 2). This obvious block to any development is not discussed at all in either

the papers or the oral presentations of the Washington institutions including USAID.

Like the IMF, the USAID presentation initially holds up the image of the mythical 'paths of annual growth rates of at least 5 per cent, and preferably 7–8 per cent' (Bikales 2000, p. 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 spectacle 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 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 found myself feeling increasingly estranged. These people hardly addressed the realities of Mongolia at all, and when they did, it was with the unrealistic, careless cynicism of 'let them eat cake'. It felt like being 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 achieve – 3, 5 or 7 per cent per year – if they just 'open up' and globalize are not real; they are illusory and completely out of reach for a country engaged only in diminishing-return activities. In the case of Mongolia, Kafka's impersonal 'Courts' are the Washington institutions which 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 herding. In the non-existent reality of neoclassical economics goat herding and software engineering are qualitatively alike and equally good as carriers for economic development. In the harsh reality of Ulaanbaatar – where poverty was increasing visibly and the newspapers were filled with images of dying animals and their suffering owners – the whole scene seemed surreal.

In the same slightly surrealistic vein, Jeffrey Sachs suggested in *The Economist* that Mongolia should specialize in software, not considering that most people here do not even have electricity or telephones. The idea is a good one if we work in a neoclassical framework devoid of context and 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 have only 37000 telephones between them, not to mention a lack of money for computers and education.

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 (in Mongolia’s case, the Washington institutions) describe, and reality. In the end Joseph K. is destroyed through laws that he was never meant to understand (Kafka 1935/1994).

## 7. MONGOLIA: THE MARSHALL PLAN IN REVERSE AND THE CASE FOR REPARATIONS

Modern legal traditions in the United States admirably protect its citizens from the perils of professional malpractice and corporate irresponsibility. A jury award of \$2.9 million in damages for the third-degree burns suffered by an elderly woman who spilled a cup of scalding hot coffee from McDonald’s in her lap may seem exaggerated (and, indeed, it was later knocked down to \$640000 by the judge), but to an outsider the US legal system as it applies to medical malpractice appears more logical. In this section I shall ask the following question, which is only partly rhetorical: what would happen if we applied the legal standards imposed on the medical profession to economists?

As we have seen, the perils suffered by a society producing only in diminishing-return industries has been documented in Genesis and in European economic policy since the late fifteenth century. It was a key feature in US economic theory and policy starting with Alexander Hamilton and Benjamin Franklin, throughout the nineteenth century, when Abraham Lincoln was a dominant politician supporting this view, and through most of the twentieth century. The core of the Economic Recovery Program (Marshall Plan) was to rebuild Europe’s manufacturing industries to their pre-Second World War levels 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 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, p. 452). In 1953 George Marshall was given the Nobel Peace Prize for this work. From this perspective, the conditions imposed on Mongolia truly represent a Marshall Plan in reverse, both in the sense of the Economic Recovery Program and in the sense of Alfred Marshall's economics.

Mongolia was given assistance by the Washington institutions only on condition that the country not attempt to follow the principles of the Economic Recovery Program (Marshall Plan). A typical progress report for the Marshall Plan, published by the Economic Cooperation Administration in 1949, focused on the reconstruction of the increasing-return 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, pp. 28–9). The progress report for the Washington institutions in Mongolia, in contrast, 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 per cent as of March 2000 – represents a total break with longstanding 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 nations producing under increasing returns should pay compensation to nations specializing 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, p. 199; see also Reinert 1980)

I would argue that the perils of forcing a nation to specialize exclusively in diminishing-return activities, especially in a fragile ecosystem such as Mongolia's, are extremely well documented both in economic theory and in economic history. 'The Tragedy of the Commons' is a well-known phenomenon, and the concept of diminishing returns continues to be one of the first 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, as James Galbraith (2000) observes, that the economists who created this economic and environmental disaster are still the only economists who are listened to?

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 such as Paul Krugman complain that textbook trade theory is virtually neglected as a basis for US economic policy. As the twentieth century advanced, neoclassical theory became more and more rigid and the economic practice of 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’, which had never before been tested to this extent. Joseph Stiglitz, the former chief economist of the World Bank, compared the IMF’s handling of the Asian crisis of the late 1990s to the Holocaust (North 2000). The comparison could easily be extended to Mongolia.

However, even in ‘pure’ economic theory, diminishing returns is a core concept. After the Second World War, the United States, whose short-term business interest would have dictated free trade with Europe from May 1945, granted Europe a 15- to 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 the Second World War 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 such as Western Europe received after the Second World War amounts to gross negligence and ignorance both of economic theory and of recent history.

The Mongolians are a hardy race. The huge loss of jobs in both the manufacturing sector and 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 one-third, by 8 million head, during the same period. But the land cannot feed the population of people who previously worked in the manufacturing and government 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 per cent in 1991 to 1.4 per cent in 1997, as people can no longer afford children. Support for children has gradually been withdrawn, increasing this problem (Malhotra

1998, p. 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 financial assistance, Mongolia was forced to give up its manufacturing sector. I have closely observed the same phenomenon in Ecuador, where assistance from the Washington institutions was given only on the condition that all assistance to increasing-return activities be terminated. In practice, no equivalent to the US government assistance to small business, subsidies to small businesses in particular sectors, assistance to high-tech industries, and the like are allowed in the Third World. On the federal level, the United States gets away with many subsidies of high-tech increasing-return activities since they come under the guise of defence, but there is little doubt that if IMF conditions were imposed on the level of US states, many if not all of the 50 states would be disqualified from receiving IMF and World Bank assistance. While the World Bank follows the recommendations of the University of Chicago economists, Mayor Daley of Chicago uses city and state money to finance and subsidize an incubator that is targeted at increasing-return high-tech activities. If the United States had been a poor country, this policy would have disqualified it from receiving any assistance from the Washington institutions. It is, in my view, crucial that we understand how the industrialized countries, as part of their day-to-day economic policy, continually break the rules that they themselves force upon the Second and Third Worlds.

I 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 that the tobacco industry 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 increasing-return activities in Mongolia – would seriously damage the health and well-being of their customers, the Mongolian people.

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

1. The Washington institutions have showed gross negligence by not flagging the risk of forcing Mongolia into exclusive specialization in diminishing-return activities. The detrimental effects of specializing exclusively in diminishing-return activities, such as Mongolia was forced into, are well documented in economic theory and economic history, and are taught even at the elementary level of economics in all Western universities.
2. A condition, 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 those enjoyed and practiced by all US states, cities and municipalities, and is consequently discriminatory.
3. 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 problem, 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, such as the Mongolian Development Research Center, indicates a complete lack of interest in the productive side of the economy as long as short-term financial goals are met. The incentive structure in the Washington institutions, which judge economic success exclusively on financial issues, has led to the collapse of all increasing-return activities and to a real interest rate of 35 per cent in Mongolia. This incentive structure is applied contrary to economic theory and to all traditions of macroeconomic management in the developed world.
  4. Fundamentally this is also an issue of the 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, p. 2). In view of the accumulated experience of mankind, Mongolia is the victim of an 'experiment against reality'. As the late Archbishop Helder Camara of Brazil said, these people have been made poor in the name of economics (quoted in Reinert 1980). Arbitrary abstract principles of standard economics are, in practice, given precedence over human welfare.
  5. The textbook solution to assist Mongolia's failing industry, to help it become more competitive on the world market and to cure the permanent balance of payment deficit, would be to devalue 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 its productive capacity, but no free market when the forces of the market would help it regain competitiveness. In a way that Thorstein Veblen would have recognized, we observe 'financial capitalism' destroying 'industrial capitalism', a development that in the long term will prove destructive to the financial side of the economy as well.

Reparations to the Mongolian people could focus on the huge share of GDP which has permanently disappeared, on the permanent loss of 50 per cent of the Mongolian people's purchasing power, on the permanent loss

of manufacturing capacity and the permanent trade deficit amounting now to 50 per cent of the value of exports (that is on the simultaneous breakdown of the country's capacity to import and its ability to produce manufactured goods itself), and on the permanent damage to the environment through increased desertification in the fragile Mongolian ecosystem.

## 8. TOWARDS THE GLOBAL VERSION OF 1848 AND A POSSIBLE WAY OUT

Nineteenth-century industrialization brought with it huge social ills. Books and articles addressing the 'social question' abounded in all languages well into the twentieth 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 opposite poles in the econo-political discussions, but very different forces cured the social ills. Both in the United States and in Germany dedicated politicians and economists consciously constructed institutions to create welfare states. The German Verein für Sozialpolitik created the operative institutions of the welfare state which were later copied throughout Europe (Verein für Sozialpolitik 1872–1932). The theoretical foundations for the economic theory undergirding the welfare state can also be found in the first 100 years of Schmollers Jahrbuch (1871–1972) and in the writings of the pre-war US institutional school of economics. On the political side, Otto von 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 managed to resolve most of Europe's social ills.

More than half of the world's nations were poorer in the late 1990s than in 1990. A new technological wave is creating the 'social question' all over again. This time, however, the social question is not within each industrialized state; it is between industrialized states and the poor nations 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 my firm conviction that only theories and attitudes similar to those 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 nineteenth-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 world's poverty are nil.

What can bring the world out of this deadlock? Economists like those who formed the Verein für Sozialpolitik in 1872 – people who disliked

communism 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 save thousands of lives and prevented much human suffering (Baade 1955). I 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 (1882) *An Enemy of the People*. 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 1990s than in 1990 attracts as little press coverage as the German concentration camps did in the 1930s. Yet there are people who know. The report *Transition 1999* (United Nations Development Programme 1999) asserts that the transition to capitalism has 'literally been lethal for a great many people'. Compared to population projections based on demographic profiles and life expectancy recorded before 1990, 9.7 million men today are 'missing' in the transition economies. The 'transition' of Eastern Europe – in most cases from inefficient production of increasing-return products to diminishing-return economies – has been accompanied by great loss of life. As in the 1930s, those who want to know, know, but the matter is not publicly discussed.

The statistical records of the 1990s show beyond any doubt that the market fundamentalism – the quasi-religious thesis that preaches that markets are harmony-making machines – has caused great damage. A reaction is slowly mounting. Joseph Stiglitz's whistle-blowing 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 establishment of ATTAC (the Association for the Taxation of Financial Transactions for the Aid of Citizens). These events, however, tend to be protests which do not lead to a better understanding of the problems at hand. In my opinion a large obstacle to better understanding of practical policy solutions is that the alterative and factually based economic theory – the Other Canon theory that built the United States – has virtually disap-

peared. A better policy can only be produced if we have a theory of what causes development to be so uneven.

Because the economics profession today fails to distinguish categories of economic activities, it fails to understand that whereas 'openness' of an economy is a necessary and indispensable policy ingredient for a nation with a strong presence of increasing-return activities, 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.

In 1867 the US economist Henry Carey pointed out that Ricardian economics, from which today's standard economic theory descends, has a lot in common with medical quackery: quacks live in a world without categories of diseases and remedies, and they therefore have only one medicine which they claim will cure all illnesses (Carey 1869). It was standard in the nineteenth century in Canada and the United States to argue that backward nations needed a different economic policy from that of advanced nations.

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 countries in the Organization for Economic Cooperation and Development (OECD) towards the rest of the world during the 1990s bears strong similarities to the Ricardian euphoria that built across Europe from the 1820s, peaking in 1846. The backlash of 1848 followed in the form of widespread revolutions. Just as in the 1840s, today's problems in economic theory originate with the abstract system of David Ricardo. In the year 1900, looking back at the human suffering caused the last time the Ricardian system had been allowed to overrule common sense, the eminent Cambridge economics professor H.S. Foxwell wrote:

Ricardo, and still more those who popularised him, may stand as an example at all times 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 reasoning became positively mischievous and misleading when it was unhesitatingly applied to determine grave practical issues without the smallest sense of the thoroughly abstract and unreal character of the assumptions on which it was founded. (Foxwell 1899, p. xli)

This same criticism could be levelled at neoclassical economics for its devastating effects on welfare in the Second and Third Worlds. It is this kind of theoretical 'mischief' that has caused the loss of welfare in so many countries in the 1990s. The industrialized world has, for the last 50 years, attempted to cure the symptoms rather than the causes of underdevelopment in the Third

World. The Third World was 'put on the dole', like the unemployed of the European welfare states.

As it is now, non-governmental organizations move into newly impoverished countries such as Mongolia, attempting to ease economic pain. Also the World Bank tries to alleviate the symptoms of poverty rather than to spur 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. Thus many parts of the Third World are slowly turning into gigantic hospices where the Florence Nightingales of the first world – both on the spot and through donations – do an admirable job of alleviating the pain of those dying prematurely. Our alternative is to develop the economic latecomers in the twenty-first century using the same methods as were used with the countries lagging behind England in the nineteenth century: letting the economic periphery become core by spreading increasing-return activities to them. This, however, requires understanding and distinguishing between the true causes and the mere symptoms of the phenomenon we call economic development.

The Washington conditionalities effectively make it impossible for any underdeveloped nation today to take 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 without exception. The Washington institutions fail 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 cultivating '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 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 eco-



nomics profession chose to work with Léon Walras's version of equilibrium theory, the theory of split-second equilibrium. The adoption of this thesis caused the economics profession to lose three important dimensions: time, space and the unevenness of economic growth.

Research in the 1990s showed that the world is converging into two groups of nations: a clustering of extremely wealthy nations and a cluster of increasing size in which the majority of nations are getting poorer. Standard economics is utterly helpless to explain this phenomenon. The Other Canon approach suggests that the forces creating the increasing gulf between the two groups of countries are two economic vortices. Nations specialized 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, nations specialized in Malthusian goods are – as in the Mongolian case – through the natural forces of the market driven into a downward spiral of increasing poverty and increasing environmental degradation. In this setting, Malthus was right: the natural wage level will be at the brink of starvation.

From the mid-eighteenth-century writings of economists such as James Steuart (1767), the rulers of Europe – the 'enlightened despots' in Wilhelm Roscher's term – understood the fundamental symbiosis between manufacturing and agriculture, between increasing-return activities and diminishing-return activities. This created the understanding that a nation with even an inefficient and undeveloped manufacturing sector would be much better off than a nation without any manufacturing sector at all. Targeting and cultivating incipient manufacturing allowed the creation of 'middle-income' countries. The sudden dismantling of any targeting and cultivating of increasing-return activities in Second and Third World countries through the shock therapy of the 1980s and 1990s in many cases effectively made their position as middle-income nations 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 1990s 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 'corruption' in the eyes of the West.

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 my view, have to be 'get the economic activities right'. In today's divided world we face two possible strategic options: we can either globalize the labour market and let the poor come to where the economic activities are that are able to create prosperity, or alternatively we can follow the nineteenth-century path and spread increasing-return activities that have a potential for technological change to the countries where the poor live. In my view these are the only two real options. The third option, instant globalization 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 replaced with the principles of the Other Canon. A succinct recommendation of Other Canon economic policy can be found in Marshall's *Principles of Economics* (Marshall 1890, p. 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. I suggest that this 'New Deal' in development ought to be financed by extending normal US 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 in the 1980s and 1990s.

## 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 make some nations rich and some poor – was the Neapolitan Antonio Serra, in 1613. Serra's work was republished in 1803, and the year before that a volume of eulogies was published in his honour (Salfi 1802).

Serra wrote 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, p. 21). In his book, Serra explains how the poverty of Naples and the wealth of Venice origi-

nated in the fact that the economic activities in which the two states specialized behaved according to different laws: as Venice specialized in manufacturing, its unit costs fell, 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 its competitors. As Naples specialized 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 in the late 1400s. They were expressed in the sixteenth- and seventeenth-century theories of 'good' and 'bad' trade (see King 1721, Pfeiffer 1764–78, 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 nineteenth-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 to all nations economic activities which obeyed the laws of increasing returns. Friedrich List and Wilhelm Roscher – the economists 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 nineteenth-century Europe, the 'social question'. There is a massive amount of literature on this economic theory (for example 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 twentieth century was a Dark Age. In economic policy Serra's principle of distributing and rebuilding increasing-return activities was a core principle behind the Economic Recovery Program (Marshall Plan), but in economic theory this insight was lost. Just as Fordist mass production started to dominate the industrialized world – where Serra's principle of increasing returns could be observed on a scale never before seen or imagined – the dichotomy of increasing versus diminishing returns was lost in economic theory. Because the concept of 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 produce opposite results (wealth and poverty, respectively) was thrown out of economic theory (see Reinert 1980, 1996a, 1998 for more detailed discussions). This opened the way for the belief that

globalization would produce ‘factor-price equalization’, that all nations would be equally wealthy under a regime of global free trade. In fact, according to late twentieth-century theory, the poor would benefit the most, since they lagged the most behind. In this chapter, using Mongolia as an example I have attempted to describe why the opposite results were produced as the few increasing-return activities in Mongolia were closed down by sudden world competition.

With the coming of ‘new trade theory’ in the early 1980s (Krugman 1980), increasing returns was again put on the map. Frank Graham’s 1923 article (see Appendix 3) was the basis for this revival, but although Graham, a president of the American Economic Association, showed – as Serra did – that increasing and diminishing returns would produce opposite effects, by the 1980s 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 resurrecting only half of the practice and theory that had dominated economic policy in Europe for centuries and in the United States since 1820, understanding of the mechanisms that create poverty on the one hand and wealth on the other were lost. The half of the theory that was forgotten was the half concerning the mechanisms that keep poor nations poor, and neo-classical 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 globalized economy produces the opposite effects of what standard economic theory predicts. Instead of a convergence of world income (towards factor price equalization), 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 have increased sharply in sub-Saharan Africa. Most of the former communist nations are considerably poorer than they were under the inefficient centrally planned economy. I argue that a key factor in this economic deterioration in the majority of the world’s nations is the failure by the Washington institutions to recognize what most nineteenth-century economists believed: a nation with even 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-return activities to all European nations starting in the sixteenth 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 chapter has been to use the precipitous economic decline of the Republic of Mongolia during the 1990s 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 globalization 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 Worlds can only reinforce the present division of the world into two convergence groups steadily moving apart in wealth and income.

Twentieth-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 in which all inputs are alike throughout the process will never produce anything but an equality of outcome. During the first half of the twentieth century the common sense of the past prevailed over this model in practical policy. During the second half, mainstream economics had generally lost both the 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 the policy making of the industrialized North, through the Washington institutions the South was fed an unprecedented diet of neoclassical economics in its pure form, unmitigated by the common sense of the past. The simplifying assumptions of standard economics ostensibly are there to clarify the conclusion. The Mongolian case shows that the assumption that all economic activities are qualitatively alike as carriers of economic development is wrong and 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 nineteenth 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, p. 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 Serra,<sup>3</sup> 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. (Schumpeter 1954, p. 195, emphasis added)

## APPENDIX 2: STATISTICS FOR MONGOLIA, 1989–98

*Table 6.2 Output of selected industrial commodities, 1989–98*

	1989	1990	1995	1996	1997	1998
Sawn wood (thousand metres)	553.1	509.0	61.2	70.2	36.5	35.5
Leather jackets (thousands of pieces)	212.8	264.5	18.9	6.5	1.0	0.6
Skin coats (thousands of pieces)	180.2	138.1	16.8	14.9	2.6	0.5
Canned meat (tons)	1682.3	1108.5	431.7	339.2	650.8	322.0
Salt (tons)	4818.8	3811.9	497.3	429.3	240.4	201.6
Publications (millions of pages)	376.6	312.8	50.9	36.5	38.7	79.1
Porcelain (thousands of pieces)	3747.3	3138.3	688.5	150.6	49.3	24.2
Carpet (thousand m <sup>2</sup> )	2128.1	1971.2	595.7	667.0	643.6	587.7
Felt boots (thousands of pairs)	592.3	588.5	79.0	57.6	48.0	47.9
Suits (thousands of pairs)	182.6	201.8	1.2	1.0	1.2	1.6
Sheepskin (thousand m <sup>2</sup> )	1151.1	1510.5	193.5	22.4	5.2	–
Leather boots (thousands of pairs)	4140.0	4222.5	245.5	86.6	41.7	33.1

*Source:* National Statistical Office of Mongolia (1999).

Table 6.3 Index of industrial production (1989 = 100)

Year	1989	1990	1995	1996	1997	1998
Electricity (million KWh)	100	94	73	73	75	75
Thermo-energy (thousand Gk)	100	107	100	94	95	96
Coal (thousand tons)	100	89	61	64	61	63
Fluorspar (thousand tons)	100	79	91	98	98	106
Copper concentrate	100	101	98	100	101	102
Molybdenum concentrates (thousand tons)	100	125	116	139	126	126
Bricks (million pieces)	100	88	12	15	9	10
Cement (thousand tons)	100	86	21	21	22	21
Lime (thousand tons)	100	108	54	57	60	58
Steel and concrete blocks (thousand m <sup>3</sup> )	100	101	8	10	8	7
Matches (million boxes)	100	76	58	36	6	3
Mineral cotton (thousand m <sup>3</sup> )	100	90	13	11	8	6
Khurmen block (thousands of pieces)	100	111	<1	<1	4	14
Spun thread (tons)	100	77	12	6	5	2
Combed down (tons)	100	96	168	207	173	201
Camel wool blankets (thousand metres)	100	100	21	34	26	24
Scoured wool (thousand m <sup>2</sup> )	100	96	12	8	8	5
Carpets (thousand m <sup>2</sup> )	100	93	28	31	30	28
Knitted goods (thousands of pieces)	100	103	13	7	8	9
Felt (thousand m <sup>2</sup> )	100	115	12	15	12	16
Felt boots (thousands of pairs)	100	99	13	10	8	8
Wool cloth (thousand running metres)	100	56	4	2	<1	<1
Overcoats (thousands of pieces)	100	121	<1	<1	2	<1
Suits (thousands of pieces)	100	111	<1	<1	<1	<1
Hides, large (thousand tons)	100	100	0	10	-	-
Sheepskin (thousand m <sup>2</sup> )	100	131	17	2	<1	-
Chevreau (thousand m <sup>2</sup> )	100	101	9	7	1	-

Table 6.3 (continued)

Year	1989	1990	1995	1996	1997	1998
Leather boots (thousands of pairs)	100	102	6	2	1	-
Leather coats (thousands of pieces)	100	86	31	11	<1	<1
Leather jackets (thousands of pieces)	100	124	9	3	<1	<1
Skin coats (thousands of pieces)	100	77	9	8	1	<1
Meat and meat products (thousand tons)	100	94	18	14	12	11
Canned meat (tons)	100	66	26	20	39	19
Sausages (tons)	100	95	11	12	14	11
Spirits (thousand litres)	100	101	62	60	78	82
Alcohol (thousand litres)	100	131	75	73	90	102
Flour (thousand tons)	100	95	80	46	32	33
Small intestine (thousand rolls)	100	97	10	6	5	14
Salt mining (tons)	100	51	6	6	11	<1
Salt (tons)	100	79	10	9	5	4
Bakery goods (thousand tons)	100	95	55	45	29	29
Confectioneries (thousand tons)	100	91	24	25	27	23
Milk, dairy products (million litres)	100	96	3	3	3	4
Mixed fodder (thousand tons)	100	56	22	9	7	7
Washing soap (thousand tons)	100	79	9	9	9	6
Toilet soap (thousand tons)	100	100	30	30	10	0
Publications (million signatures)	100	83	14	10	10	21
Porcelain (thousands of pieces)	100	84	18	4	1	<1
Installed metal constructions (thousand m <sup>3</sup> )	100	101	8	10	8	7
Doors and windows (thousand m <sup>2</sup> )	100	95	2	<1	<1	<1
Railway sleepers (thousand m <sup>3</sup> )	100	67	47	43	47	47
Sawn wood (thousand m <sup>3</sup> )	100	92	11	13	7	6
Ceramic tiles (thousand m <sup>3</sup> )	100	78	11	6	-	-

Source: Calculated from National Statistical Office of Mongolia (1999).



Table 6.4 *Index of industrial production, new products (1995 = 100)*

	1995	1996	1997	1998
Candles (thousands of pieces)	100	5	<1	7
Steel (thousand tons)	100	123	146	104
Metal foundries (thousand tons)	100	52	86	102
Injection syringes (million pieces)	100	214	306	151
Injection needles (thousands of pieces)	100	79	–	105

Source: Calculated from National Statistical Office of Mongolia (1999).

Table 6.5 *Index of total harvest (1985 = 100)*

	1985	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total crop	100	81	67	56	54	37	29	25	27	21
Wheat	100	87	78	66	65	47	37	31	34	28
Potatoes	100	116	86	69	53	48	46	41	48	58
Vegetables	100	100	56	39	54	54	66	56	83	110
Fodder	100	88	35	23	19	5	3	3	2	2

Source: Batkhisig (2000), p. 46.

Table 6.6 *Index of agricultural yields (1989 = 100)*

	1989	1990	1995	1996	1997	1998
Cereals, total	100	88	58	53	61	50
Wheat	100	86	57	51	58	49
Barley	100	93	71	70	67	50
Oats	100	101	6	10	5	25
Potatoes	100	87	68	54	66	65
Fodder crops	100	111	43	49	56	29

Source: Calculated from National Statistical Office of Mongolia (1999).

*Table 6.7 Index of number of livestock (1989 = 100)*

	Total	Camels	Horses	Cattle	Sheep	Goats
1989	100	100	100	100	100	100
1990	105	96	103	106	106	103
1991	103	85	103	105	103	106
1992	104	74	100	105	103	113
1993	102	66	100	101	97	123
1994	109	66	110	117	97	146
1995	116	66	120	123	96	172
1996	119	64	126	129	95	184
1997	127	64	132	134	99	207
1998	133	64	139	138	103	223

*Source:* Calculated from Batkhishig (2000), p. 45.

*Table 6.8 Number of herdsmen and herdsmen's households*

	Herdsmen	Index	Households	Index
1989	135 420	100	68 963	100
1990	147 508	109	74 710	108
1995	390 539	288	169 308	245
1996	395 355	292	170 084	247
1997	410 078	303	183 636	266
1998	414 433	306	187 147	271

*Source:* Calculated from National Statistical Office of Mongolia (1999).

### 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*

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

World production: 1600 wheat + 1400 watches. In wheat equivalents: 3200

Country A's income in wheat equivalents: 1714 wheat

Country B's income in wheat equivalents: 1486 wheat

Price: 4 wheat = 3.5 watches

*Stage 2: World income and its distribution after each country specializes according to its comparative advantage*

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

World production with trade: 1500 wheat + 1550 watches. In wheat equivalents: 3271

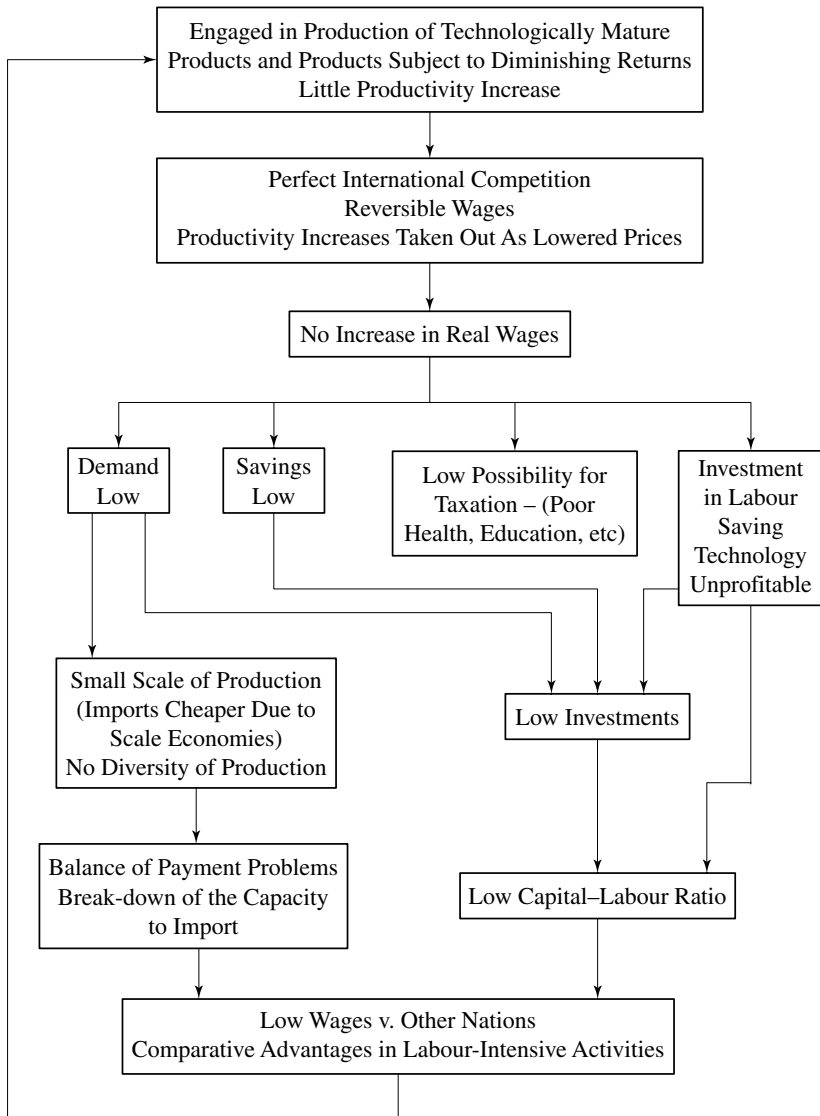
Country A's income in wheat equivalents: 1993 wheat

Country B's income in wheat equivalents: 1278 wheat

### APPENDIX 4: THE MONGOLIAN VICIOUS CIRCLES CONDENSED

1991: Free trade shock and collapse of COMECON trading area > fall in exports leads to galloping deindustrialization and loss of most activities subject to increasing returns (manufacturing) > lower demand and lower tax receipts lead to massive loss of other urban jobs, in both the services and the 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

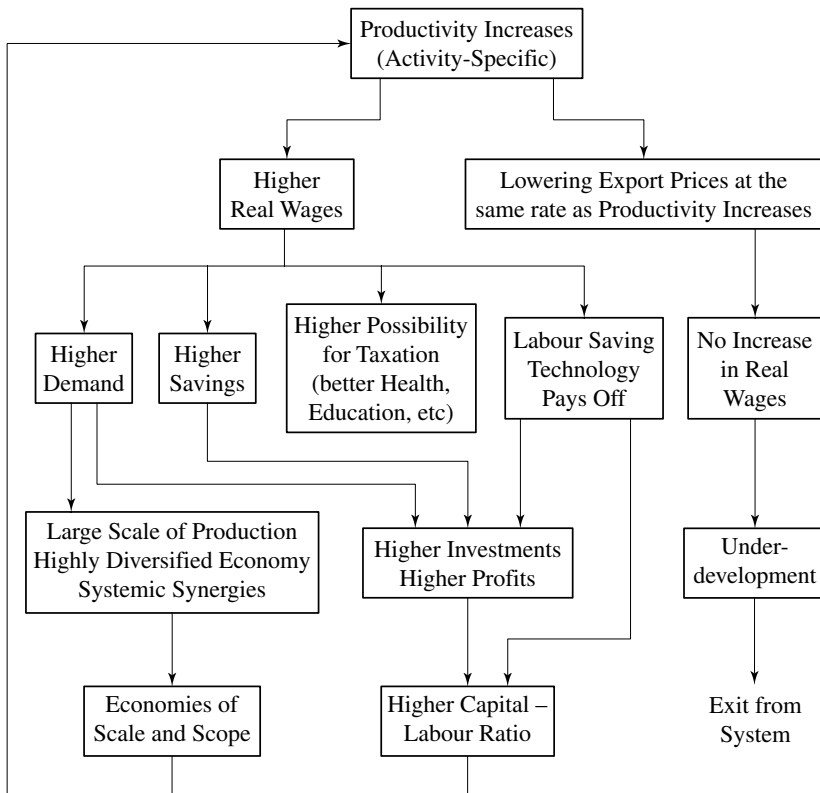
manufactured goods, increasing the crisis > return to the pastoral economy in the countryside > fast growth in diminishing-return activities, 8 million pasturing animals added by urban unemployed attempting to earn a new living > fragile ecosystem cannot support the increase in livestock (more than 2 million animals, roughly the increase in number of animals over the previous two years, starve to death during the winter of 1999–2000) > environmental degradation, perhaps permanent desertification > exports collapse even further (exports down by 56 per cent in current dollars since 1989) > breakdown of the capacity to import (trade deficit in 1998 equal to 49 per cent of exports) > terms of trade deteriorate as exports are now raw materials > very limited foreign exchange available to agricultural sector for industrial inputs such as fertilizer > institutional collapse in agricultural sector (animal vaccines programmes, agricultural extension) > complete collapse in agricultural productivity due to lack of fertilizers and the institutional collapse (yield per acre of important fodder crops down by 71 per cent since 1989; the least affected crop is potatoes with ‘only’ a 35 per cent drop in productivity; all other crops decline by at least 50 per cent) > fears of inflation and of bank failures cause IMF to keep both interest rates (real interest rate is 35 per cent) and currency exchange rate high, blocking the natural mechanisms which should have made Mongolian labour and products cheap on the world market, thus blocking the market mechanisms which would have given Mongolia a chance to become more competitive in world markets. There appears to be no factor in sight to invert these causal mechanisms. See Figures 6.1 and 6.2.



Note: It is futile to attack the system at any one point (for example 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.

Source: Reinert (1980), p. 41.

Figure 6.1 The vicious circle of Morgenthau Plans



*Note:* In a closed system, with constant employment rate, the only way GNP per capita can grow is through the 'virtuous circle'. However, the system can be cut-off at any one point, for example if higher demand goes to foreign goods alone, the circle will break.

*Source:* Reinert (1980), p. 39.

*Figure 6.2 The virtuous systemic effects of a Marshall Plan*

## NOTES

1. The author gratefully recognizes the partial financing of this project from the Royal Norwegian Ministry of Foreign Affairs. The opinions expressed in this essay are, however, his own, and do not necessarily reflect the views of the Ministry.
2. 1998 figures are from National Statistical Office of Mongolia 1999, unless otherwise noted.
3. Serra 1613, part 1, chapter 3: 'nell'artefici vi può essere moltiplicazione . . . e con minor proporzione di spesa.' (In manufacturing industry, output may be increased at less than a proportional increase in expense.)

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