Theme 7 – The Implications of the Global Economy

Presentation: Uneconomic Growth: Conflicting Paradigms

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Uneconomic growth in theory

Growth in Gross National Product is so favoured by economists that they call it 'economic' growth, thus ruling out by terminological baptism the very possibility of 'uneconomic' growth in GNP. There is, however, no a priori reason why at the margin the environmental and social costs of growth in GNP could not be greater than the production benefits. In fact, economic theory would lead us to expect that at some point. The law of diminishing marginal utility of income tells us that we satisfy our most pressing wants first, and that each additional unit of income (production) is dedicated to the satisfaction of a less pressing want. So the marginal benefit of growth declines.
Similarly, the law of increasing marginal costs tells us that we first make use of the most productive and accessible factors of production - the most fertile land, the most concentrated and available mineral deposits, the best workers - and only use the less productive factors as growth makes it necessary. Consequently, marginal costs of growth increase. When rising marginal costs equal falling marginal benefits then we are at the optimal level of GNP, and further growth would be uneconomic. It would increase costs more than it increased benefits. Why is this simple application of the basic logic of microeconomics treated as inconceivable in the domain of macroeconomics?

Uneconomic growth in fact

One might accept the theoretical possibility of uneconomic growth, but argue that it is irrelevant for practical purposes since, it could be alleged, we are nowhere near the optimal scale. The benefits of growth might still be enormous and the costs still trivial at the margin. Economists all agree that GNP was not designed to be a measure of welfare, but only of activity. Nevertheless they assume that welfare is positively correlated with activity so that increasing GNP will increase welfare, even if not on a one-for-one basis. This is equivalent to believing that the marginal benefit of GNP growth is greater than the marginal cost.

Uneconomic growth in two paradigms

Within the standard neoclassical paradigm uneconomic growth is an anomalous category. You will not find it mentioned in any macroeconomics textbook. But within the paradigm of ecological economics it is an obvious possibility. Let us consider why in each case.
The preanalytic vision of standard neoclassical economics is that the economy is the total system, and that nature, to the extent that it is considered at all, is a sector of the economy, for example, the extractive sector (mines, wells, forests, fisheries, agriculture). Nature is not seen, in the vision of ecological economics, as an envelope containing, provisioning, and sustaining the entire economy, but as one sector of the economy similar to other sectors. If the products or services of the extractive sector should become scarce, it is presumed the economy will 'grow around' that particular scarcity by substituting the products of other sectors. If the substitution is difficult, new technologies will be invented to make it easy.
In this view, the unimportance of nature finds empirical support in the declining share of the extractive sector in total GNP. Beyond the initial provision of indestructible building blocks, nature is simply not important to the economy in the view of neoclassical economics. Ecological economics considers the percentage of GNP represented by resources to be a misleading indication of their importance. One might as well claim that a building's foundation is unimportant because it represents only five percent of the height of the skyscraper erected above it. GNP is the sum of value added. Resources are that to which value is added - the foundation or base upon which the skyscraper of value added is resting. A foundation's importance does not diminish with the growth of the structure that it supports! If GNP growth resulted only from increments in value added to a non-growing resource throughput, then it would remain economic growth. That is not what happens.
What happens, according to ecological economics, is that the economy grows mainly by transforming its environment (natural capital) into itself (man-made capital). This process of transformation takes place within a total environment that is finite, non-growing, and materially closed. A throughput of solar energy powers biogeochemical cycles, but that energy throughput is also finite and non-growing. As the economic subsystem grows it becomes larger relative to the total system, and therefore must conform itself more to the limits of the total system - finitude, non-growth, and entropy. Subsystem growth is ultimately limited by the size of the total system, even under neoclassical assumptions of easy substitution of man-made for natural capital. But if man-made and natural capital are complements rather than substitutes, as ecological economics claims, then expansion of the economic subsystem would be much more

stringently limited by that complementarity. There would be no point in transforming natural capital into man-made capital beyond the capacity of remaining natural capital to complement and sustain it. What good are more fishing boats when the fish population has disappeared? The fish catch used to be limited by the number of fishing boats (man-made capital) but is now limited by the remaining populations of fish in the sea (natural capital) .
When factors are complements, the one in short supply is limiting. If factors are substitutes then there cannot be a limiting factor. Economic logic says that we should economise on and invest in the limiting factor. Economic logic stays the same, but as we have moved from an 'empty' world to a 'full' world, the role of limiting factor has gradually shifted from man-made to natural capital, from fishing boats to remaining fish in the sea; from sawmills to remaining forests; from irrigation systems to aquifers or rivers; from oil well drilling rigs to pools of petroleum in the ground; from engines that burn fossil fuel to the atmosphere's capacity to absorb CO2.
The smaller the optimal scale of the economy, the greater is: (a) the degree of complementarity between natural and man-made capital; (b) our desire for direct experience of nature; (c) our estimate of both the intrinsic and instrumental value of other species. The smaller the optimal scale of the economy, the sooner its physical growth becomes uneconomic.

From permitting growth, to mandating growth, to limiting growth

The neoclassical paradigm permits growth forever, but does not mandate it. Historically the growth mandate came from the answer given to the problems raised by Malthus, Marx and Keynes. Overpopulation, unjust distribution, and involuntary unemployment would all be solved by growth. Overpopulation would be cured by the demographic transition initiated by growth. Unjust distribution of wealth between classes would be rendered tolerable by growth, the rising tide that lifts all boats. Unemployment would yield to increasing aggregate demand which merely required that investment be stimulated, which of course implies growth.
Continuing this time-honoured tradition the World Bank's 1992 World Development Report argued that more growth was also the solution to the environmental problem. The assumption in all cases was that growth was economic, that it was making us richer rather than poorer. Now growth is becoming uneconomic. Uneconomic growth will not sustain the demographic transition and cure overpopulation. Neither will it help redress unjust distribution, or cure unemployment. Nor will it provide extra wealth to be devoted to environmental repair and clean-up.
We now need more radical and direct solutions to the problems of Malthus, Marx and Keynes: population control to deal with overpopulation; redistribution to deal with excessive inequality; and ecological tax reform to raise resource productivity and employment. These must be national policies. It is utopian (or dystopian) to think of them being carried out by a world authority. Many nations have made progress in controlling their population growth, in limiting domestic income inequality, in reducing unemployment. They have also improved resource productivity by internalising environmental and social costs into prices. These significant national gains are now being undercut by the ideology of globalisation. Global economic integration by free trade and free capital mobility effectively erases the policy significance of national boundaries, turning the federated community of nations into a cosmopolitan noncommunity of globalised individuals. Some of these 'individuals' are giant transnational corporations, treated as individuals by legal fiction.
Under globalisation, each country seeks to expand beyond the limits of its own ecosystem and market by growing into the ecological and economic space of all other countries, as well as into the remaining global commons. Globalisation operates by standards-lowering competition to bid down wages, to externalise environmental costs, and reduce social overhead expenses for public goods. It is far worse than an unrealistic global dream - it actively undercuts the ability of nations to continue dealing with their own problems of unjust distribution, unemployment, external costs, and overpopulation. It is hard to imagine any country continuing to limit its birth rate or internalise its environmental and social costs when the results of overpopulation and cost externalisation in other countries freely spill over into it.
Globalisation is the latest elixir concocted by the growth-forever alchemists. Export-led growth is the new philosopher's stone; it turns lead into gold by the alchemy of free trade. With the revival of alchemy comes a return to the logic of mercantilism: wealth is gold, and the way for countries without mines to get gold is to export more goods than they import and receive payment for the difference in gold. The way to export more than you import is to reduce wages. The way to keep wages low is to have an oversupply of labour, attained by easy immigration or high birth rates among the working class. Globalisation requires, therefore, that for a nation to be rich, the majority of its citizens must be poor, increase in number, and live in a deteriorating environment.
Truly, John Ruskin foresaw the era of uneconomic growth, a time when: 'That which seems to be wealth may in verity be only the gilded index of far-reaching ruin' (Unto this Last, 1862).