NOTES AND COMMENTARY

Growth and Development: Critique of a Credo

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Since the early postwar decades conventional wisdom has declared that growth is, and should be, the number-one goal of economic policy. *The Growth Report*,* a product of 18 blue-ribbon contributors from 16 countries, under the leadership of economics Nobelists Michael Spence and Robert Solow and World Bank vice president Danny Leipziger, reaffirms and celebrates this goal. The World Bank, which among others financed the study, will be very glad to hear that. The other patrons (Australian Agency for International Development, Dutch Ministry of Foreign Affairs, Swedish International Development Cooperation Agency, UK Department for International Development, and the Hewlett Foundation) may also be pleased with the return on their investment. One is not told how much the Report cost them, but they have the satisfaction of knowing that in addition to bureaucratic English the report will be published in Arabic, Chinese, French, Japanese, Portuguese, and Spanish. And it is all available on the Internet. The Commission means to talk to everyone. That such a top-down paean to growth should be thought worth so much renewed effort by the global champions of the credo may be evidence that among common folk faith in growth is waning.

To point the way to a revival of the overarching goal of global growth, the Commission reviews the experience and policies of the 13 countries that have, since 1950, grown at an average annual rate of 7 percent or more for 25 years or longer. These countries are: Botswana, Brazil, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Malta, Oman, Singapore, Taiwan, and Thailand. This review is certainly a useful and interesting task to undertake. The Report contains some important factual material, especially in Part 4 on new global trends, and is a bit more tolerant of government than most other

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Washington Consensus documents. It is worth reading. The policy conclusions the Commission draws from this interesting exercise are, however, mostly unconvincing—except for the obvious ones like good governance and macroeconomic stability.

If "sustained growth" means that the global economy is to grow at 7 percent for 25 years (duplicating the experience of the 13 star performers), that means the economy will increase by a factor of 5.4. At the end of 25 years will that be enough, or might we need a 25-year encore? We are not told, but inasmuch as the concept of "enough" is absent from the analysis, one expects a series of encores. A "mere" quintupling of the scale of the economic subsystem relative to the scale of the non-growing and containing ecosystem should by itself trigger a few questions. Are remaining environmental sources and sinks sufficient to regenerate the resources and absorb the wastes of the larger metabolic flow (resource throughput) necessary to sustain the quintupled global economy? Did perhaps the rapidly growing 13 states use more than their share of the world's remaining sources and sinks, including the most accessible ones, effectively precluding the generalized repetition of their accomplishment? Indeed, even at the present scale, what makes this blue ribbon Commission believe that the extra ecological and social costs of growth are not already larger than the extra production benefits?

More on that later, but for now, to be fair, I should note that in discussing trade (p. 94) the Report does mention what it calls "the adding-up problem," a reference to the fallacy of composition (assuming that what is possible for a part must also be possible for the whole). But recognizing the existence of a fallacy in one context does not absolve one from the sin of having just committed it in another. "These cases demonstrate that fast, sustained growth is possible—after all, 13 economies have achieved it" (p. 19). The past growth of the 13 stars has never been in doubt. What is doubtful is that such future growth is a feasible goal for the world as a whole, notwithstanding that the Report clearly concludes that it is.

The same recognize-but-don't-deal-with-it mode is applied to the question: "Do these rising prices mark the beginning of a period in which natural resources, broadly defined, impose new limits on global growth? It is possible" (p. 98). This is an admission to be celebrated. But just what does the Commission mean by limits on growth? Read further: "Growth, both globally and in developing countries, may be somewhat slower than the pace set in the recent past. But it is not possible to know in advance how tight the new limits might be" (ibid.). It seems that, for members of the Commission, resource limits to growth means growing only at around 5 percent instead of their norm of 7 percent. They go on to point out that "knowledge and ingenuity, not oil or minerals, account for much of the value that has been added to the global economy in recent years.... If this pattern holds in the future, the amount of natural resources required to produce a dollar of GDP will continue to decline" (ibid.).

It is true that for some countries resource content per dollar of GDP has declined, but also true, yet unremarked, that aggregate resource throughput has continued to grow. Of course oil and minerals do not add value to anything. They are natural resources, "that to which value is added"—added by labor and capital, which embody knowledge and ingenuity. It is impossible to have "value added" without something to add it to, namely resources (low-entropy matter/energy) (Georgescu-Roegen 1971). So downplaying oil and minerals relative to knowledge and ingenuity (or vice versa) is nonsensical.[1] Maybe the resource content per dollar of GDP will continue to fall, but not if the extra GDP, touted as the cure for poverty, actually consists of the material-intensive necessities that poor people require (food, clothing, shelter—as opposed to information services). Theoretically in the limit perhaps a dollar of value added to GDP can become "angelized," inhering in only a few molecules of resources. But then it will be of no use—except to angels and growth economists—certainly not to poor people who need food on the plate more than recipes on the Internet.

Another problem recognized but not dealt with appears on page 7, where the Commission advocates constraining distributive inequality at the lower and upper ends of the income distribution. This is an excellent idea, and I would think it merits more than the kiss-and-run treatment it received. To initiate a concrete discussion, how about simply limiting the range of inequality by a minimum and a maximum income? We could start out with a wide range, say a factor of 100, and then on the basis of experience narrow it. Nobody believes that CEOs need to earn 500 times base-level wages. Another promising beginning immediately aborted is the recognition on page 41 that knowledge is a non-rival good, a strong reason for sharing it freely. But there is no discussion of barriers to sharing, such as patent monopolies and intellectual property rights, or of alternative means of financing knowledge production. If the Commission thinks that knowledge and ingenuity are more important than oil and minerals, then should it not at least consider how knowledge is produced and shared?

For a Report that claims that growth is the *sine qua non* of most good things, one would expect some careful analysis of the concept and measurement of growth. Is growth a temporary process necessary to arrive at some desired, sufficient state, which thereafter is maintained, like the stationary state of J. S. Mill? Or is it the process of growth itself that is permanently desirable and presumably limitless? This question gets no consideration at all. The assumption seems to be growth forever. Since the Report's subtitle refers to both "growth" and "development," one would expect some useful distinction, such as ecological economists have introduced, namely that growth is quantitative physical increase while development is qualitative improvement. One could then define "sustainable development" as development without growth beyond biophysical carrying capacity. In other words, sustainable development is qualitative improvement in design, technology, efficiency,

ordering of priorities, and the like without quantitative increase in the entropic throughput from environmental sources to sinks. The Report, however, follows its north star of GDP and lumps these different processes together. Growth is not called "sustainable" (thankfully), but even more incongruously is referred to as "sustained," meaning that for 13 countries in the past it once lasted for 25 years, and therefore might do so for the whole world for the next 25 years, the Commission hopes.[2] But very likely it will not.

Exactly what is it that is growing, and how is growth measured? GDP is what grows, but instead of explaining the measure and differentiating its components, the Commission simply praises it: "Gross domestic product (GDP) is a familiar but remarkable statistic. It is an astonishing feat of statistical compression, reducing the restless endeavor and bewildering variety of a national economy into a single number, which can increase over time…. A growing GDP is evidence of a society getting its collective act together" (p. 17).

Well, it may also be evidence of a society depleting its life-sustaining natural capital and counting it as current income, of asymmetric entries that count defensive expenditure on anti-bads (e.g., pollution clean up) but fail to enter negatively the bads (pollution) that made the anti-bads necessary, or of shifting household production into the monetary economy because both spouses are now breadwinners (also add a further GDP increase from the extra salary). Also, since GDP counts gross rather than net investment, it increases with the depreciation and replacement of existing manmade capital. Correcting for these accounting anomalies can sometimes reduce countries in the 7 percent growth club to membership in the 0 percent growth club. The issue of distributive inequality also escapes the statistic, although it is given some independent recognition by the Commission.

GDP is equal to per capita GDP times population. Which of these two factors is more responsible for growth in total GDP seems quite important. Should "getting our act together" mean more people at the same per capita income, or greater per capita income for the same number of people? What little attention the Report gives to demography is not from a policy perspective, except for migration, which is advocated as a means to balance out national age structures, but with no counting of costs to either sending or receiving countries.

One would never guess from reading this Report that other scholars, including economists, have developed alternative indexes bearing on human well-being to GDP. For example, the Index of Sustainable Economic Welfare (Daly and Cobb 1994: 443–507), the Genuine Progress Indicator (Redefining Progress 1995), the Ecological Footprint (Rees and Wackernagel 1994), the Human Development Index (UNDP 1990), and the Happy Planet Index (New Economics Foundation 2006) all yield insights obscured by GDP. Also ignored are more standard national accounting improvements such as Roefie Hueting's Sustainable National Income for the Netherlands (Hueting

and de Boer 2001),[3] and even the World Bank's (2000: chap. 16) "green accounting" and "genuine investment" flirtations with reality, as well as former World Bank economist Salah El Serafy's (1989) more orthodox method for calculating the division of nonrenewable resource rents into an income and a capital consumption component (see also El Serafy 1991). The first two of these indexes, ISEW and GPI, show a positive correlation with GDP up to the early 1980s, followed by a continued rise in GDP but a leveling off and slight decline in the ISEW and GPI. This is consistent with the thesis that GDP growth has, for some high-consumption countries, become *uneconomic growth* that at the margin increases costs by more than it increases benefits. The authors of *The Growth Report* appeal to all sorts of unspecified technical progress in support of growth, but evidently believe that technical progress in national accounting was exhausted 50 years ago. Perhaps so, but they owe it to the reader not to simply ignore work by others that leads to a contrary conclusion. Try refuting it instead!

Policies that the Commission advocates to promote growth are, first and foremost, to integrate the nation into the global economy via export-led growth, free trade, and free capital mobility. Then come macroeconomic stability, high savings and investment, market orientation, and good governance. I will assume that these are indeed the policies most responsible for growth. But like all policies, they have some disadvantages as well as advantages. Disadvantages are obliquely considered in Part 4, not as negative consequences of recommended policies that might on balance still be good policies, but rather as "new global trends" that are happening independently of these policies. One of the new trends, for example, is a backlash against globalization, in both rich and poor countries. The idea that such a backlash might be a legitimate reaction by people hurt by elitist policies of global integration, deregulated international commerce, off-shoring of jobs, illegal immigration, and other factors never occurs to the Commission. It is just a "new trend" that might irrationally slow globalization and growth in the future.

Another "new trend" is global warming. I would have thought that global warming is in large part a consequence of the rapid growth that the Commission wants to see continued forever. At least it should count global warming as a massive negative "side effect" of its desired fivefold expansion of the global economy in the next 25 years, rather than as a "new trend" of uncertain origin.

Yet another new trend is the falling relative price of manufactured goods and rising relative price of resources and commodities (energy, food). Is this not an expected consequence of growth policies emphasizing industrial production, thereby simultaneously increasing the supply of industrial goods and the demand for their raw material inputs? Crediting one's pet policies only with their favorable consequences, while relegating unfavorable consequences to a mystery box labeled "new global trends" seems somewhat less than honest.

The heavy advocacy of globalization is expressed on page 21: "Sustained growth….became feasible only because the world economy became more open and more tightly integrated." The openness the Commission refers to is that of national economies; the integrated world economy is obviously a closed economy, since Earth does not trade with other planets. It is the many national economies that became more open and integrated—by free trade, free capital mobility, and increasingly free migration—into a single global economy. This integrated global economy is closed, and it has no government to regulate economic activity for the common good. It is the space into which transnational corporations move to escape regulation by national governments.

Internationalism is based on the federated framework of the Bretton Woods accord. In it, separate national economies trade and cooperate with each other to further the interests of their national communities, including dealing with irreducibly global problems. The IMF-WB-WTO have subverted their Bretton Woods charter in the interests of *globalism*, the fuzzy mirage of a single unified global economy. Interdependence has been replaced by integration—"a world with no boundaries," in the sentimental lyrics of popular songs, replaces real historical institutions of community and policy at the national and local levels. If this is what the Commission advocates, then it no longer makes sense for it to appeal to good governance or to laud the exaggerated virtues of open economies. Globalism will replace internationalism. That is a very big deal (Daly 1999). The Commission offers not a clue as to what that will mean, but it is eager for globalism as long as GDP grows.

The Report frequently points out how much nicer it is to be rich than poor. I certainly agree. But then the Commission wants us to conclude that "therefore" more growth must be good because that is what makes us richer. No. Growth in net wealth makes us richer, but GDP does not measure net wealth—even the units are different. Growth in GDP will make us better off and ultimately richer only if at the current margin it increases beneficial activities more than costly activities. GDP does not even distinguish costs and benefits. It conflates them as "activity." The Commission simply assumes that GDP correlates positively with net benefits from net wealth when this is the very issue in dispute (Dasgupta 2001). The highly relevant work by economists and psychologists on "self-evaluated happiness" and its lack of correlation with GDP beyond a certain threshold casts doubt on the reasonableness, nay sanity, of GDP growth as the world's number-one policy goal (Easterlin 1995). That work, too, is ignored.

With so much academic prestige and business and government experience represented on the Commission, one has the right to expect a more serious product. The Commission is most definitely elite. Its work benefits from that fact; it also suffers from it. It benefits substantively from the undoubted competence of its members, and it benefits politically because people

are reluctant to criticize the work of a legitimately elite Commission. But it suffers intellectually from that very failure to counter anticipated criticism, enhanced by the excessive confidence that members of an elite committee often have that someone else on the committee surely has vetted what they themselves might regard as doubtful. The fallacy of composition may apply to committees—the clear thinking of which a single mind is capable may not be possible for an aggregate of many minds. Furthermore, since Commission members are too important to spend their time drafting and editing the report, that task is often given to less elite assistants, amply supplied by generous patrons. Of course I do not know whether any of this really happened. I mention it because there were times in reading the Report when I was reminded of similar experiences that I have had on less elite committees. But even viewing the Report as a World Bank apologia and reaffirmation of the Global Growth Credo, designed to encourage doubting communicants, one doubts that their doubts will be much assuaged by it.

Notes

1 As geologist Earl Cook (1982: 194) wrote: "without the enormous amount of work done by nature in concentrating flows of energy and stocks of resources, human ingenuity would be onanistic. What does it matter that human ingenuity may be limitless, when matter and energy are governed by other rules than is information?" Similarly, what does it matter to the growth of a population of organisms that its genotype contains whole libraries of information, if the environment lacks the food necessary to convert genotype into phenotype?

2 The abstract noun "sustainability," the adjective "sustainable," and the past participle "sustained" are all less informative than the transitive verb form "to sustain," which grammatically requires us to name both a subject and an object. It is good to be ever mindful that what is being sustained is the physical wealth of the economy (including the population), and what is doing the sustaining is the finite, non-growing biosphere.

3 For a pioneering general critique of GNP accounting, see Hueting (1980).

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