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## The Globalization of the Technical Civilization

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A Review Article

Of: **Robert J. Barro**, (1997).

Determinants of Economic Growth: A Cross-Country Empirical Study  
(Cambridge, Massachusetts: The MIT Press)

And : **William Greider**, (1997).

One World Ready or Not: The Manic Logic of Global Capitalism  
(New York: A Touchstone Book/Simon and Schuster)

More than a generation ago, Jacques Ellul, the French sociologist-philosopher, formulated a comprehensive and incisive social philosophy of the then emerging global civilization. **The Technological Society (Ellul 1964)** is a remarkable book. It examines in depth and details the consequences of having a society pervaded by technicians - it is wider in scope, and of course more current than Thorstein Veblen's *The Engineers and the Price System*. Our world, according to Ellul is a progressively technical civilization. It is controlled by the rule of technique; a process that is ever expanding, irreversible, and extending to all domains of life. In his foreword to Ellul's book, Robert Merton (1964; vi-vii) summarized the process as follows:

[The technical civilization is one that is] committed to the quest for continually improved means to carelessly examined ends. Indeed, technique transforms ends into means. What was once prized in its own right now becomes worthwhile only if it helps achieve something else - technique turns means into ends .. The vital influence of technique is of course most evident in the economy .. The intellectual discipline of economics itself becomes technicized. Technical economic analysis is

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substituted for the older political economy included in which was a major concern with the moral structure of economic activity .. Politics in turn becomes an arena for contention among rival techniques ... To the technicians, the nation is nothing more than another sphere in which to apply the instruments he has developed [He] judges states in terms of their capacity to utilize techniques effectively, not in terms of their relative justice. [Purposes] drop out of sight and efficiency becomes the central concern.

Ellul's analysis, although not intended as a sociological apocalypse has been prophetic. The world has been moving in the direction he foresaw, and probably beyond his imagination at the time. At the present time, for example, 'economic growth' has been substituted for 'development' as the main economic policy concern, since the former is more quantifiable and thus could be better expressed with the precision required by technicians. This was not the case even in the recent past. There has been a strong debate about the socio-environmental cost and even the feasibility of continuous economic growth, for example as illustrated by the proceedings of a Symposium on the subject held 25-years ago (Weintraub, Schwartz and Aronsmn 1973). In that Symposium, Solow, a strong proponent of economic growth and a leader in modeling it, made a distinction between the possibility and the desirability of continuous economic growth. He saw economic growth not as an end, but as a *means* to improve national and global 'welfare' within and across generations. The issue was considered vital and challenging - none claimed having all the answers. Solow (1973: 43) best illustrates the modesty of scientific knowledge at the time:

I think that those who opposed continued growth should in honesty face up to the implications of their position for distributional equity and the prospects of the world's poor. I think that those who favor continued growth on the grounds that only thus can we achieve some real equality ought to be serious about that.

The world changed dramatically since then, The institutions of socialist economies collapsed. A new global era evolved that is being unified by the emerging technique of information technology, instantaneous and border-less mobility of finance capital, and the associated system of international power structure and regulatory agencies. These changes in the global environment have been in line with Ellul's predictions. But they should not reduce the concern with the fundamental socioeconomic and environmental issues, associated with the present course of global economic growth. If anything, they should make them more current.

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The two books under review examine, in combination, the determinants and consequences of economic growth in the present global environment. They differ sharply in perspective and methodology. **Robert Barro**, using a sample of countries relies on formal economic modeling and econometric analysis. His work exemplifies the elegance and abstraction of modern neoclassical economic analysis. **William Greider** on the other hand provides a detailed descriptive analysis of the capitalistic processes in various industries and countries, offering a rich mix of penetrating observation and interpretation of 'Global Capitalism'.

**Determinants of Economic Growth (120 pages + notes, references and index)** is based on Barro's Lionel Robbins Memorial Lectures, delivered at the London School of Economics in February 1996. The book although small in size covers a wide terrain. It contains three essays. The first is a survey of the research on the determinants of long-term growth. The second investigates the relation between growth and democracy. The third examines the connection between inflation and growth. The analysis is based on estimation of panels of cross-country data.

Recent theoretical developments on long-term economic growth are discussed briefly but with authority in the first section. Starting with the neoclassical model developed in the 1950s and 1960s by Solow, Swan, and Koopmans among others, Barro emphasizes its convergence property. Convergence implies that the lower the starting level of real per capita gross domestic product (GDP), the higher is the predicted growth rate - less developed countries have a good chance to catch-up. The catching-up process occurs mainly through technology transfer. However, convergence is conditional on the presence of the determinants of long-term economic growth, the latter of which Barro labels as steady-state level of per capita output. In the neoclassical tradition, these determinants include an array of private and public choice variables that depend on preferences and costs. On the private level, these variables include saving rates, labor supply, and fertility rates. On the public choice level, they include public spending, tax rates, market distortions, maintenance of the rule of law and property rights, and the degree of political freedom. In essence, the process of growth is highly endogenous.

The findings from the sample of roughly hundred countries since 1965 indicate that the main factors conducive to growth are years of schooling, life expectancy, low fertility low government welfare

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expenditures, the rule of law, and favorable terms of trade. For some countries, e.g., the tigers of East Asia, high growth is determined by high educational attainment, strong rule of law, low public spending, low fertility, high investment, and low inflation. For others, e.g., the Philippines, India, and Sri Lanka relatively high growth is related more to the convergence phenomenon: their levels of per capita GDP are a fraction of that of S. Korea.

Democracy plays an important role in Barro's analysis. Using an index of political rights, Barro finds that the overall relation between growth and democracy is far from simple. It appears to be nonlinear: more democracy raises growth when political freedoms are weak and depresses growth when a moderate amount of freedom is already established. Barro's interpretation reveals his elevation of growth over other societal values:

In places that have already achieved a moderate amount of democracy, a further increase in political rights impairs growth and investment because the dominant effects comes from the intensified concern with income redistribution (Barro: 59).

Indeed, intra-country distributional issues are conspicuously absent in Barro's analysis. This is partly because of inadequate data, but partly because Solow's dictum cited above: Barro is not so serious about them! Similarly absent is a discussion of the effects of international finance and of the emerging global environment. There is strong evidence that globalization reduces the internal sovereignty of the state, and accordingly democracy. The process is exogenous, however (Sirageldin 1998).

Furthermore, the predictive power of the model seems to fail the test of anticipating present developments. None of the determinants responsible for the spectacular success of the countries of South-East Asia as specified in Barro theoretical and empirical analysis have changed during the severe economic crises that these countries are now experiencing and that are likely to set back their economies for more than a decade. Evidently, Barro's model, with its over emphasis on 'internal' choice factors could not explain what determines economic growth in the new global environment. Barro may argue, with some justification that his interest is in long-term growth and the present crisis is a short-term event. The countries of Southeast Asia will in time bounce back into their long-term high growth path. One may even argue further with Barro that a greater temporary decline in GDP is desirable in the context of the

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model - it will generate a faster conversion - never mind the interim loss in welfare! But such arguments are beside the heart of the question: What factors determine system shocks? In the absence of such knowledge no conclusion about the path of future growth can be drawn with confidence. There is a need for in-depth understanding of how the global economy works - a better understanding of the 'logic of global capitalism' and especially the socioeconomic and political implications of its relentless pursuit of efficiency through global finance.

**One World, Ready or Not: The manic Logic of Global Capitalism (473 pages + Notes, Acknowledgement and Index)** by William Greider provides some clues to the missing elements in Barro's analysis. One World, Ready or Not is a massive work. It includes four parts and nineteen chapters. The first part examines the process of globalization. The second goes into details, some brutal, of how local labor markets are being linked into a unified global labor market. The third examines the triumph of finance capital over entrepreneurs and governments. The final section raises the sociopolitical questions. The main thesis of Greider is that the present global system produces harm to the majority of people, leads to extreme concentration of wealth and power, produces Ellul's technical civilization at its worst, and exhibits no tendency towards equilibrium.

Reading Greider, one could have predicted as he did that the political system in Indonesia that guaranteed maximum returns to international finance capital with subsistent wages and no labor rights cannot be sustained for long regardless of the booming economic activities of the time. The threat of finance capital mobility reduces the power of labor to bargain not only in the emerging economies but also in the advanced ones. The threat of finance flight seems to create strange alliances. China, the last citadel of socialism invites capitalistic finance to 'exploit' its own labor - so Greider argues. The process is so erratic, speculative, and unpredictable that orderly development is rather the exception.

The book is not an easy read. Although well documented and informative, it is repetitive and often lost in details. But the patient reader will gain valuable insight into the inner workings of the global system. Greider is not optimistic about the future of global capitalism. The main danger he foresees is over supply relative to demand. By its very nature of efficiency gained at the expense of labor income worldwide, effective demand is reduced relative to supply. The capitalist strategy is to seek

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more efficiency through cheaper labor. But the process cannot continue endlessly. Another danger is political. The reduction of the real income of workers in the advanced economies as a result of capital flight generates a struggle. the nature of that struggle is not evident but its consequences could be devastating. A third concern of Greider's is environmental. The process of global labor arbitrage if eventually leads to the spread of the same pattern of consumption as found in Western societies could have serious environmental consequences. The process is inescapable Greider claims.

Greider's description of the global capitalistic system and his insights about its consequences are worth careful considerations and should be helpful for cautioning against simple conclusions derived from abstract economic modeling and analysis. As to the policy recommendations presented by Greider, they require careful assessment and will not be discussed in the present review. *One World Ready or Not* is a must reading for economists and policy makers. Although for economists it might be a tough medicine to swallow especially if they focus on methods and techniques rather than being informed about changes in the institutional framework of global capitalism. For example, in a review of Greider's book, Paul Krugman (1997) seems to focus more on Greider's methodology rather than on the book's contribution to the institutions description of the present capitalistic system. Krugman argues that the present technological transformation is not the first and will not be the last. New technology implies system adjustment with growth and decline among sectors and skills. This has been the case we agree and the case of the American Agricultural transformation is a good illustration of these dynamics. The American agricultural transformation took place over a span of more than 50 years, starting early this century. With the area of land under cultivation almost invariant, the agriculture labor force declined from over 10 million to 1.2 million with labor productivity and agriculture output increasing many folds. The story of adjustments in the labor force, and in the structure of industry, and the extensive Public support for agriculture during the agricultural transformation is well known and requires no elaboration. On the other hand, Greider is saying that the pace of the present transformations is much faster, less predictable, and more global. The emerging institutions dealing with the socioeconomic consequences of the present technological transformation have not been adequately tested. It is questionable that socioeconomic outcomes are invariant to significant changes in national and international regulatory institutions.

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