Growth theory without the steady state -- Beyond the Steady State ... Dore, Mohammed Science & Society; Spring 1995; 59, 1; ProQuest pg. 87

United States to live in the newly independent African state of Ghana. He died there two years later. Clearly, the events of Du Bois' life after 1919 pose challenges to his biographers as great as those presented by his first half century. This Pulitzer prize-winning first volume sets a very high standard for the second half of David Levering Lewis' account of this remarkable life.

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Science & Society, Vol. 59, No. 1, Spring 1995, 87–94

GROWTH THEORY WITHOUT THE STEADY STATE*

Beyond the Steady State, edited by Joseph Halevi, David Laibman and Edward J. Nell, appeared in 1992, just after 12 years of ultra-conservative Reagan-Bush rule. The 1980–1992 period is perhaps the longest in post-war U. S. history during which real wages and real incomes of working people did not rise at all, and while there was weak growth of real GDP over the period, this growth was captured as higher income by the top five per cent of wealthy individuals (see Peterson, 1993). It was also a period during which the worst recession (1981–82) since the great depression occurred; it was a period during which the United States moved from being the world's greatest creditor nation to become the world's largest debtor nation. But during the same 12-year period, both Japan and China experienced continued growth of real income per capita.

The book is a collection of essays by economists who are critical of orthodox neoclassical economics as well as the right-wing economic policies of Ronald Reagan and George Bush, policies that were responsible for a 12-year period of income stagnation. While the essays in the book are strictly theoretical, there is much in the book that is directly relevant in understanding the real world consequences of the Reagan-Bush poli-

* The author would like to thank anonymous referees for comments on earlier versions of this paper. However, the author alone is responsible for any remaining errors or deficiencies.

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cies. In this review article I hope to make the most important results of the book (as I see them) accessible to a more general readership and show how the book can also be read as a critique of the Reagan-Bush era.

Section 1 presents the intellectual context in which the book appears. This context is important in order to appreciate what the book seeks to do. Section 2 begins with a summary of the contents of the book and then selects parts of the book that are most useful in interpreting the consequences of conservative economic policies.

1. *Context: Orthodox and Heterodox Growth Theory*

Conservatives have always championed the cause of "free markets." Opponents of the free market argue that systems of markets do not *remain* "free"; that power relationships soon distort markets, and that an imperfectly functioning system of markets sometimes fails to "coordinate" itself, resulting in periodic slumps.

The free-market school has a particular *vision* of the market: it sees all transactions as if they occur in one giant auction of goods *already there*. Once the goods are there, the resulting prices at the auction are merely a function of "supply and demand." This school also applies the same idea to the labor "market." Thus all incomes are subject to the "free" forces of "supply and demand," as all trade in these markets, including that involving labor, is treated as voluntary.

Opponents of this (neoclassical) approach make a tiny modification in the vision of the market — which radically alters the picture. If most goods are not already there, but are *produced* using means of production and labor, then there is an integrated process of production and sale that must be looked at as a whole. This circular production and reproduction of commodities (C) was first articulated by Marx, who argued that the circular process was not $C - M - C$ (where M is money) but $M - C - M'$. Marx's dynamic analysis of production was a significant contribution to political economy, and grounds his further argument that the conflict between forces and relations of production would result in periodic crises.

Under commodity capitalism, crises manifest themselves as realization crises: when firms cannot sell goods, they must often shed labor or even go out of business. In this integrated process of production *and* sale of goods, all prices, wages and profits must be determined *simultaneously*. In this circular process, the exchange of goods cannot be arbitrarily separated from the production process. This was indeed the way classical economists, including Marx, viewed the matter.

This classical view was nearly forgotten by neoclassical commodity fetishism, until the classical view was revived. As a thumbnail sketch of the

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divergence of views between the classical and neoclassical perception of production and the necessity of taking *circular* production into account, the first chapter in the book, by Vivian Walsh, is an excellent guide.

It turned out, as argued by Walsh, that in this debate the question of how the fruits of production are distributed between labor and capital became crucial; classical political economy identified the conflict over the distribution of income as a central characteristic of modern capitalism. Indeed the conflict manifests itself through periodic bouts of inflation, which are followed by the Central Bank restricting credit and thereby curtailing new investment. The fall of investment reduces the bargaining power of workers; when wage growth slows down or is curtailed, inflation comes down too. Once inflation is down the Central Bank eases credit which then revives investment. The phenomenon just described is the *business cycle*, a phenomenon that is subject to investigation in Part V of *Beyond the Steady State*.

In stark contrast, the neoclassical school sees no conflict over income distribution. Instead, it presents capitalism as a harmonious regime without conflict, in which the distribution of income is also subject to the "laws" of supply and demand.

Now the "nature and causes of the wealth of nations" was the central concern of classical political economy, and Harrod returned to this question in the 1930s and 1940s; these efforts became known as "growth theory." In the neoclassical version of growth theory, the steady state appears as a constant proportional growth rate of consumption per capita sustainable by a given technology. The steady state of per capita consumption remained both a desired and a reachable path; an "optimally" growing free market economy would be *on* the steady state, or close to it. However, in the modern revival of classical political economy, the steady state is in no sense a desired path any more than it is an actual path; it is a benchmark device. As actual growth rates fluctuate, and with growth of knowledge and technological progress, one benchmark steady-state path soon yields to another. The important issue is the *transition* from one benchmark path to another; it is this transition between steady states which is called the *traverse*. (In ordinary language, "traverse" is of course a verb; here, the technical meaning of the "traverse" as a noun is to identify the possibility of a path of an economy to run *between* steady-state paths, or a transition.)

Of course, the intelligent layperson, who casually observes reality, is aware that capitalism does not evolve on a smooth path with continuous and steady growth; there are cycles, crises, and structural changes along the way. But these realities are ignored in much of growth theory. It is the *theorization* of these non-steady state phenomena that is the objective of this book; theory must reproduce these observed facts.

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No doubt in the early history of growth theory, the steady state was a conceptually useful if artificial construct. It served as an initial reference path for purposes of theory construction. In the Introduction to the book, the Editors draw a useful distinction between "ontological" and "methodological" steady states, that is between the steady state as an actual equilibrium outcome versus one used as a benchmark device from which to examine deviations, such as booms and slumps in the actual economy. Just how this theoretical construction is to be carried out is discussed below.

In analyzing transitions, one is going *beyond* the steady state(s), and hence the title of the book in question. A large and important part of *Beyond the Steady State* is concerned with deepening our understanding of the traverse. It is something which is now *completely* neglected by the neoclassical school. The book's contributions to the analysis of the traverse are examined in the next section.

To summarize so far, the nature and causes of the wealth of nations is the subject of growth theory. *Beyond the Steady State* is devoted to both reviving this interest in growth theory and deepening its analysis; it does this by going beyond the concept of the steady state which was only a conceptual construct in any case. Absorbing the lessons of these new contributions to growth theory will enable us to understand the stagnation of the growth of income in the United States in the 1980–92 period.

2. *Varieties of Post–Steady-State Theory*

Beyond the Steady State is written by specialists for a specialist, academic audience. Nevertheless, its main results can be made accessible to a wider readership.

The book's main objective is to understand the growth *process*, something that neoclassical growth theory failed to do. In this task, the book attempts to build on the foundations laid by Smith, Ricardo, Marx, Schumpeter, Keynes, Kalecki, Joan Robinson, Harrod, and of course, Adolph Lowe, to whom the book is dedicated. The book is organized in five parts, of which the first is an overview. Part two concerns the main determinants of accumulation and effective demand; the third examines the role of technological change. Part four is a detailed analysis of the traverse. The final part covers some aspects of the integration of both growth and cycles, *i.e.*, cyclical growth. The rest of this article is a selective appraisal of some of the main ideas of the book.

An economy does not simply *grow* exponentially; as it grows it undergoes *structural* changes. For example, in the 19th century, agriculture declined in importance compared to manufacturing, until only about five percent of the U. S. population is now engaged in agriculture. Similarly,

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employment in the manufacturing sector has declined over the last 30 years, whereas employment in the service sector has grown. In addition, the nature and division of labor among industries has also changed over the last half century. These are all examples of structural and dynamic changes; no economy or even an industry expands along a constant expansion path, or along a *steady-state* path. The central issue is to "study (growth) and accumulation of capital without the trivializing straightjacket" (Walsh, 37) of steady-state growth paths.

Thus the objective of theory in going beyond the steady state is to show structural transformations and cycles that arise endogenously in the theory itself. Both Edward J. Nell (Chapter 5) and David Laibman (Chapter 6) attempt to do this.

What governs accumulation (occurring through investment in increased productive capacity)? Is it the volume of a community's savings? Or, as Keynes argued, is it the autonomous volume of investment in the long run that determines productive capacity? What is the effect of not utilizing fully any existing productive capacity? Pierangelo Garegnani (Chapter 2) attempts a careful analysis of these questions. Simplifying his answers somewhat, it turns out that the volume of savings is not a constraint on growth. Rather, failure to utilize existing capacity fully implies smaller investment and therefore a lower than potential output, which in turn means lower than *potential output capacity*. Thus underutilization of plant and equipment *lowers* accumulation which implies a lower than possible income; the accumulation foregone is a missed opportunity that reverberates forever – *i.e.*, output is permanently lower than it need have been. It follows that every contraction imposed through a credit crunch by the U. S. Federal Reserve has a long-lasting effect (Heinz Kurz, Chapter 3). As stated above, the main objective of a contraction is to reduce the bargaining power of labor (ostensibly to bring down the rate of inflation); hence the contraction has the effect of altering the distribution of income between classes. The credit crunch and inflation cycle therefore reflect the underlying class conflict inherent in the capitalist economy.

Every credit crunch lowers effective demand. Indeed, "the existence of excess capacity as a long run characteristic of capitalism . . . is to be explained essentially in terms of fluctuations in aggregate demand" (79). Excess capacity is indicative of the elasticity of the modern industrial system. This elasticity, as noted by Marx, is the direct consequence of the variability of the rate of utilization of fixed capital.

In Chapter 3, Kurz further deepens our understanding of this variability not only by including the *time-specificity* of input prices but also by pointing to a lack of an *ex ante* coordination of investment, which of course alters capacity. This lack of coordination leads to the inherent in-

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stability of capitalism, a subject that had much occupied both Keynes and Harrod.

As stated in section 1, conflict over income distribution is central to capitalist production, and credit crunches break the bargaining power of labor at the peaks of business cycle expansions. In this struggle over income distribution, firms do not rely only on the efficacy of credit crunches. Indeed the most important long-term method of raising profits by lowering the wage share is through technological innovation. What kind of innovation would best achieve this? This is the subject of Laibman's contribution (Chapter 6), which shows that one kind of technological innovation, namely *labor saving* innovation, will be most likely to result from the competitive process. Indeed over the last 200 years the dominant form of innovation has been labor-saving and labor-displacing. Thus, Laibman's theoretical analysis agrees with observed reality.

At the outset it was stated that *Beyond the Steady State* seeks to analyze the phenomenon of growth without the assumption of the steady state. Three chapters of Part IV concentrate on this problem. Without the steady state, an economy is always on the traverse. Harald Hagemann (Chapter 9) shows that a traverse will involve periods of unemployment and underutilized capacity, largely because market signals are not adequate to deal with the coordination problem referred to earlier, a problem we turn to next.

Joseph Halevi (Chapter 10) presents a fine Marxian analysis that integrates the analysis of Marx, Harrod, Keynes, Hicks and Lowe. He argues that structural disequilibrium may be inherent in the way production is organized in a modern economy. His model contains a capital goods sector and a consumption goods sector, with accumulation in the latter depending on the capacity of the former. Halevi's argument is that if reinvestment is persistently above the growth rate of labor productivity and of population, then this will inevitably lead to excess capacity which must in turn lead to a collapse in investment demand. This will be the case even if prices for goods are set to clear the goods market. Full employment, then, can only be achieved "by a permanent program of public investment" (271). This is because now the coordination problem is not one of *market* coordination, but of fundamental disproportionalities in the warranted sectoral expansion rates. Thus the ensuing crisis, as argued earlier by both Harrod and by Paul Sweezy, is very different from a typical cyclical downturn; a chronic depression due to the very nature of production becomes inevitable. The analysis of the traverse thus leads to a built-in instability that gets worse as capital accumulation grows and outstrips the growth of labor. If, in addition, we add labor-saving technical progress, there could be a complete mismatch between the needs of industry for labor and the size and capabilities of the labor force.

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An important policy lesson from Halevi's chapter is that simple aggregate demand management policies, advocated by Keynesians, will fail; what will be necessary is sectoral planning and monitoring of major investments.

The final part of the book deals with growth cycles, in an attempt to weave together the various strands developed in the first four parts. Richard Goodwin presents a new version of his seminal growth cycle model, except that the cyclical relationship is now between the wage bill and the employment ratio. Marc Jarsulic presents a classical cycle model in which cycles are bounded, whereas Laibman's model results in explosive cycles. The latter suggests that potentially explosive cycles are institutionally contained, and that transformational growth is a real alternative to ontological steady states: it is time to abandon the notion that economies converge to any particular steady state. Rather economies are always on some transition between benchmark steady states (traverses). The book seeks a traverse that arises endogenously from the theory itself.

Thus the U. S. economy (like all other economies) was on some traverse over the 1980–1992 period. It is now time to pose an important question: was the stagnation of income in 1980–1992 due to a lack of effective aggregate demand and credit crunches, or was it due to structural imbalances inherent in free enterprise economies? A full answer is outside the scope of this short paper, but we may consider a counterfactual. The Japanese economy also faced the same kind of structural imbalances; why, then, was Japan able to show a higher rate of growth of per capita income over the 1980s than the United States?

Prima facie the conservative economic policies of Reagan and Bush have a lot to answer for. Years of excess capacity and lack of effective aggregate demand led to a lower path of growth, lower accumulation and a lower growth of real incomes. This interpretation is consistent with the theoretical propositions of *Beyond the Steady State.*

To sum up. The book under review contains a number of essays on non-equilibrium and non–steady-state growth theory. A central aspect of this theory is the characterization of growth and fluctuations in growth along the traverse. It attempts to integrate cyclical growth and structural change by building on classical political economy extended earlier by Harrod, Keynes, Lowe and Goodwin in the 20th century. The essays are technical in nature; however, the message they carry in interpreting actual growth experiences of developed capitalist economies is accessible to a wider audience. The book also demonstrates that while neoclassical growth theory does not integrate growth, cycles and structural change, contemporary classical political economy (which is not entirely Marxian) makes that essential attempt. However, in its headlong search for theorization,

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the relationship of theory to empirical reality is left entirely implicit. That link could and should have been made in the book. But to be fair, not everything can be done in one short book. Nevertheless, for those familiar with the data on the dismal performance of the U. S. economy over the Reagan and Bush years (see Peterson, 1993), this collection of essays offers significant food for thought.

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