Contrasts of NC and PK Macrodynamics, pp. 22 ff.

BL Walrasian analysis envisioned an economy that already is functioning in perfect competition and perfect equilibrium. On the ground floor he has the consumers determining the prices and quantities of what they would purchase. On the second floor sellers of consumer goods come to terms about the prices they would pay for the quantities of services workers would supply. On the third floor capitalists purchase capital goods in view of the perpetual net revenue such goods generate. On the fourth floor there are added the circulating capital, the inventories of producers' and consumers' goods that have to exist in a functioning economy.

The results would be complicated incalculably if there was an attempt to give an account of the genesis of an economy, either from its rudest beginnings, or from the beginning of some new development in commerce or in commer ce-and-industry. Such a development is envisioned by PK analysis, i. e., a growth over time but in an uneven manner because we learn about all the eventualities that may occur by suffering the consequences of failing to anticipate them.

J Cornwall Hence, NC macrodynamics

1st asks whether there is any situation or model in which all economic variables (output, capital stock, labor, investment) can grow at the same constant rate and whether there is any tendency for these same variables to resume this constant rate of growth should the economy be displaced from its warranted and natural growth path

2nd factors determining long-term growth rates are all on the supply side; they are the factors underlying the rate of growth of the labor force and the rate of technological change. Explanations of the determinants of these rates of growth are rare.

3rd demand plays a passive role. If the economy is capable of steady stable growth, the rate of growth of demand will adjust to the supply factors. Aggregate demand is always just right; all units of every factor are assumed to be fully employed. The price mechanism works so efficiently that whenever there might be any tendency for any units of captial or labor to be unemployed, relative factor prices adjust, inducing a return to full employment.

so there is no need for concern with problems of inadequate demand, the business cycle, unemployment.

J Cornwall

Contrasts of NC and PK macrodynamics

4th Full employment output (aggregate supply) can be analyzed in terms of a simple production function[cf. HEA 1026-53] that relates total output to the inputs of capital and labor. It is a function that assumes constant returns to scale, i. e., if all inputs are increased by a certain perentage, the total output will increase proportionately.

5th Whatever fixed proportion of income recipients choose to save, that proportion will determine the share of aggregate output that is invested. Moreover, whatever is the share of aggregate output, the long-run growth of the economy will not be affected. A higher rate of investment may lead to more capital-intensive modes of production or even a deviation from the warranted and natural rates of growth, but not a change in those rates.

6th By assuming that consumer tastes and production technologies remain more or less unchanged, NC theory holds the institutional framework constant, and thereby reduces the economic (not the mathematical) complexity of the analysis. This procedure is introduced in two ways. If one views the economy from a total or overall perspective, both the aggregate production and the aggregate savings functions are posited as being fixed. If the economy is disaggregated into sectors, the growth process is treated as one in which all sectors of the economy grow at the same rate, together producing a total output whose composition never changes. This unchanged composition of output depends on an unchanged collection of technologies or production functions.

7th Perfect competition prevails in all markets and all persons have perfect knowledge of past, present, and future events. Real wages are equalized across jobs and rates of return on capital are e qualized across firms.

8th Since innovations, i. e., the introduction of new technologies or new goods, are excluded from consideration, since the portion of output saved and invested is determined by income recipients, and since perfect/ competition prevails, the only role for business men is to coordinate production, e. g., substituting capital for labor when the relative price of capital falls, and vice versa.

24f The PK alternative is concerned with more concrete questions: why does one economy grow more rapidly than another; why growth accelerates in some periods and not in others; what the likely patterns of capitalist development are; and why unemployment is more of a problem in one country or period than another.

25 The PK view of macrodynamics sees a capitalist economy as one growing over time but in an uneven manner. .. why do these growth rates differ between countries or at different periods of time within a country. .. why is a capitalist economy characterized by short-run cyclical fluctuations in output and employment, with investment playing such a key role in generating these cycles. The first question has given rise to PK long-period analysis; the second, to PK short-period analysis.

Because short-run fluctuations are not ruled out [by NC], PK macrodynamics is able to highlight the view that

26 a capitalist system is usually in some kind of disequilibrium. It is then but a short step to PK macrodynamics. What is the mechanism in capitalist economies that works to limit these short-run fluctuations so that unemployment rarely reaches double-digit figures? Any number of empirical considerations suggest that it is not the price mechanism alone that produces this result. And the collapse of the nineteen-thirties suggests that there is no automatic self-correcting mechanism that can always be counted on.

In an effort [to explain why growth rates differ and cyclical fluctuations occur] PK macrodynamics has been forced to discard most of NC assumptions... In so doing, PK has been able to view the process of growth as one of "qualitative change", whereby the composition of output and the methods of producing that output are constantly shifting. Thus, in the course of real-life processes of growth, demand shifts to new goods as consumer tastes change, inducing a shift in the distribution of resources and the development of new technol-

27 ogies //27// to produce the goods now in greater demand. By highlighting such qualitative change, PK seeks to infuse its analysis with a sense of history.

Besides the introduction of new technologies, PK highlights the variability of technology. It allows and even emphasizes variable returns to scale: if a firm or the economy increases its use of both capital and labor by 10%, its output may increase by more than, less than, or exactly by 10%. Again, the kinds of technologies and the degrees of mechanization can and usually will vary across and within sectors. A common feature of even the most capitalist economies is the coexistence of highly mechanized firms employing the latest technologies alongside technologically backward, inefficient firms, not only in the same sector of the economy (eg manufacturing), but even in the same industry. .. profit rates (and wage rates) vary quite widely across sectors in real economies.

[For NC] an increase in the share of output devoted to investment cannot permanently increase the rate at which the economy grows. PK theory in contrast emphasizes that new technologies can seldom be introduced without large doses of investment. Since the process of growth is
28 viewed as one of rising per capita income, with the composition of final demand changing as consumers move up through the hierarchy of goods defined by the relative income elasticities of demand for different items, it follows that the new technologies required by the changing composition of final demand must necessarily be embodied in the new capital goods being purchased. Other things being equal, the bigger the share of output devoted to investment, the more rapidly will this growth period unfold.

.. the changing composition of demand and continuous introduction of new technologies -- largely through investment -- will tend to proceed at an uneven pace... .. the unbalanced nature of the growth process.. will inevitably lead to fluctuations in the level of investment and in the rate of expansion. These cyclical movements are what the PK short-period analysis is intended to explain.

Where do the savings to finance large investment outlays come from? In PK economics there is no presumption that these savings are limited to the proportion of income that capitalists and heads of households choose not to spend on current consumption -- certainly not in the case of the business investment which is the key to rapid growth. (Increasing profit margins, alternative to change in relative factor prices; emphasized by PK because in real world the former adjustment plays by far the more important role. p 29)
29 PK macrodynamics incorporates both the institutional framework of an advanced economy and the manner in which this framework changes over time into the explanation of growth and cyclical processes.

Policy implications

30 NC growth analysis lends itself very poorly to policy prescriptions. Since it does not deal with the business cycle or allow for unemployment...

31 PK skeptical about current policies: gov't officials in capitalist countries are, for the most part, pursuing restrictive monetary and fiscal policies, often along with "temporary" wage and price controls. The result is that they find themselves doubly cursed with high rates of unemployment and low rates of capacity utilization.

The PK view tends to be that these policies are counterproductive in the long run. By substantially reducing growth and creating higher rates of unemployment, the current anti-inflationary policies are seen by most PKers as creating additional sources of economic, social, and political conflict. These will eventually be reflected in intensified but unrealizable claims on available output, and these will, in turn, be reflected in a continued cost-push inflationary spiral.

32 Work by alfred Eichner and others has indicated that growth requires relatively flexible or unregulated prices in so far as goods and services are concerned.... When firms need to increase investment outlays and lack the internal funds to do so, they tend to raise prices in order to assure the necessary financing. Flexible product prices allow this important allocative mechanism to work in the interests of economic growth.

What must be controlled are wages.. and the part of profits that are not retained by corporations for financing investment. This requires taxing dividends and corporate salaries at a rate that keeps the growth of these forms of income in line with the growth of wage income.