

trating and analysing more clearly sequence and policies of the most urgent national reform ventures and their integration with supranational efforts.

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Nell, Edward J. (1998). *The General Theory of Transformational Growth. Keynes after Sraffa*. Cambridge/New York/Melbourne: Cambridge University Press. 784 pp. £ 90.00. ISBN 0-521-59006-X.

Edward Nell is one of these rare scholars whose work is difficult to label, because it is inspired by several economic traditions. The book, as the title mentions, shows that economic systems do not function as they used to, one or several centuries ago, and that economic theories must reflect this fact. In addition, as the subtitle indicates, Nell offers a synthesis of the classical and the Keynesian approaches that take into account these transformations. Nell has already written or edited 11 books, but this is no doubt his *magnum opus*, and as he says in the acknowledgements, it is intended to supersede all his previous efforts.

This huge book can also be seen as an attempt to link together the various topics that the author tackled in the course of his career, some of which had been left aside for a long while, starting with his 1967 *Journal of Political Economy* article on the circulation of money. Chapters are devoted to the methodology of economics, the monetary and the financial systems, the wage-profit trade-off, firm pricing decisions, and prices within an input-output framework. Macroeconomic issues linked to effective demand, investment, employment and output, and business cycles are also in the forefront of the analysis. All this is intertwined with an impressive assessment of the past history of capitalist economies.

Nell's major thesis is that economies have gone through several stages in history. In its dichotomic form, the theory of transformational growth says that craft economies, which were resource-constrained and based on small units or family businesses, are characteristic of the past; whereas modern industrial economies, which are essentially demand-constrained, are based on mass production, knowledge, and large corporations. Nell's main point is that neoclassical economics (even New Keynesian economics) mostly applies to craft economies, whereas post-Keynesian economics is relevant to mass production economies. Craft economies and mass production economies are based on different sets of stylized facts, and they will run through different sets of business cycles. In the old cycle, prices and wages would be flexible, reductions in investment expenditures would be compensated by increases in consumption expenditures, productivity would fall with output, and there would be little variation in output and employment. In the modern business cycle, most indicators move in a pro-cyclical fashion:

consumption diminishes when investment falters; real wages, interest rates and productivity increase with employment and output; and while prices and wages never drop, there are wide swings in output and employment. The book underlines these stylized facts and explains why business cycles operate the way they do now in mass production economies, compared to how they ran at the time of the craft economies.

Another theme that runs through the book is the importance of the golden rule. For Nell, the key to balanced growth is that the interest rate be equal to the rate of profit, and that both be equal to the growth rate of the economy. One implication, among others, is that the amount of wages distributed in the investment sector is then equal to the value of investment goods purchased by the firms operating in the consumption sector, an hypothesis made by Marx in particular. While this makes neater the analytics of a two-sector economy that takes into account effective demand, it is never clear why this condition should hold. Nell claims that as long as it does, 'money in circulation will expand at a rate just sufficient to continue to circulate the growing output at a constant level' (p. 151). This may be so, but I just could not see why. Various developments are designed to show that the golden rule makes sense, but some results, that overturn previous ones, such as Richard Kahn's 1972 valuation formula, appear dubious. However, while Nell claims that the equality between the rate of interest and the rate of growth will bring balanced growth, he shows in other chapters that the dynamics of a monetary economy are such that, in general, discrepancies between the two rates will be sustained.

Another feature of the book is that, while Nell uses the Sraffian pricing equations, modifying them to reflect the various episodes of industrialization, he is quite critical of the neo-Ricardian approach. Nell argues, correctly it seems, that the gravitation processes described by most Sraffians, as well as the long-period method which most of them propose, both apply to craft economies and not to mass production economies. In most gravitation models, investment decisions are assumed to be taken on the basis of changes in market prices, an assumption which Nell rejects, arguing that investment decisions, which are long-run irreversible decisions, cannot be taken on the basis of flimsy short-run changes, but rather on projected long-term demand.

Nell's book is an attempt to provide a synthesis of what effective demand economics should look like when combined to an appropriately-modified Sraffian pricing approach, while showing under which circumstances the standard neoclassical model could be useful. The book is a remarkable synthesis of various currents of thought in economics, and shows once again that Nell is a highly original thinker. My only complaint, as already mentioned, is about the space and importance devoted to the golden rule. This allows Nell to establish connections between fields that are usually studied independently of each other – the circulation of money, effective demand, price theory – but this grand synthesis is achieved at a cost, that of being required to offer justifications for a rule which is not an obvious stylized fact.

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