Steven Horwitz, (2000) *Microfoundations and Macroeconomics: An Austrian Perspective*. London: Routledge, pp. xii, 276.

Austrians stand in a difficult relationship to mainstream economics. Their consistently critical, not to say adversarial, stance towards it has created a degree of self-referential isolation that should probably be credited with preserving and developing a set of important ideas that might otherwise hardly have survived. But it has left the problem of how Austrians are to interact with the rest of the profession so that these ideas will gain the wider influence that they deserve and so that they will not run out of worthwhile things to say and do and thus condemn themselves to reciting a catechism.

Steven Horwitz's new book is also caught in this dilemma. Horwitz sets out to show that "there is an Austrian macroeconomics that is alive and well." He identifies three Austrian contributions to macroeconomics over the last twenty or thirty years. One consists of the extensions to the Mises-Hayek theory of the business cycle, the second is the White-Selgin free banking theory, and the third the revival of pre-Keynesian monetary disequilibrium theory. But, clearly, these three themes will not suffice to make a self-contained macroeconomics! They could stand as worthwhile contributions to macroeconomics but then the questions becomes what broader body of theory are they to fit into and how is that to be accomplished? Horwitz is willing to reach outside the Austrian circle and discusses at some length the relationships between Austrian ideas and the works of W.H. Hutt, Leland Yeager and myself. Needless to say, this does not reach out far enough to make contact with the current mainstream.

While three Austrian themes won't cover the field, they harbor both unresolved conceptual problems and unexploited theoretical opportunities that deserve further exploration. Horwitz's book should be a stimulus to such exploration. Some directions that may be taken will be suggested below.

Capital and Interest

The Böhm-Bawerkian capital-theoretic component of the Mises-Hayek business cycle theory offers one opportunity that has not been exploited. Böhm-Bawerk's roundabout production may be seen as Adam Smith's division of labor put in a temporally sequential context. The technological productivity of roundaboutness restates the increasing returns property of Smithian production theory—the key to the Wealth of Nations. If "the Division of Labor depends on the Extent of the Market", so does the roundaboutness of production. By exploiting the Smithian proposition, one might perhaps provide a more convincing case than the Hayekian story for why overinvestment processes cannot be sustained. They push the temporal division of labor beyond what the extent of markets will allow.

General competitive analysis has shunned Smith's production theory. That the same increasing returns property is present in Böhm-Bawerk may explain why his once dominant capital theory has also faded from view in the context of theoretical structures that do not easily accommodate non-convexities. Perhaps modern Austrians will also be reluctant to accept the suggestion made here, since re-asserting Böhm-Bawerk's "third ground" on this basis makes a pure time-preference theory of interest (Fetter 1977) and a purely subjective theory of capital (Garrison 1990) more difficult to uphold.

Money and Inflation

On the subject of inflation, the new Austrian literature suffers both from a neglect of empirical work and from unresolved conceptual issues. Austrians need face up to the facts that most inflations have not been associated with overinvestment and that not all overinvestment episodes have been associated with inflation. Actually, finding cases that clearly fit the Austrian theory is not easy. The reason is that outside money inflations cause disintermediation and tend to kill the markets that finance long-term investments while inside money (credit) bubbles may, as in the case of Japan in the 1980's, produce asset-price inflation and over(mal)investment without necessarily causing CPI inflation. But the Austrian literature often neglects the outside-inside distinction and so does Horwitz in this book.

For the most part, Horwitz's chapter on inflation simply reiterates the familiar Austrian story of overinvestment and forced saving caused by too low a rate of interest. Elsewhere, he argues that inflation is a far more important problem than deflation in the modern world because of the "near-universal phenomenon of government control over the production of money" and tendency to maximize seigniorage revenue. But the inflations in which the inflation-tax is used to cover a government deficit are precisely those that do not give rise to overinvestment financed by forced saving. Overinvestment is bank-financed in the Austrian model, but the inflation-tax reduces the real volume of funds intermediated by the banks. Horwich actually cites (p. 123) Kevin Dowd on "...inflation's tendency to reduce the quantity of investment and the size of the capital stock," without noting the inconsistency of this observation with the Austrian model.

Horwich resurrects Mises' argument about the importance of money and money market prices for economic calculation. This, I am convinced, is an important theme and it is certainly one totally neglected in mainstream economics. But repeating it in a prioristic terms adds little to our understanding of the role of money in the market economy. Why not bring Austrian analysis to bear on some empirical phenomena that seem anomalous from the standpoint of mainstream theory? Examples might be the spread of barter in Russia in the mid-nineties (Woodruff 1999, Seabright 2000) or the virtual breakdown of many principal-agent relationships when high inflation destroys the unit of account function of money (Heymann and Leijonhufvud 1995). The Russian case demonstrates, I believe, that in the absence of money, arbitrage will be insufficient to create a coherent system of market prices out of the welter of half-isolated barter transactions.

Banks and Intermediation

A related problem, namely lack of clarity on the role of intermediation, goes back all the way to Wicksell whose definition of the natural rate as the rate of interest that would prevail if capital was lent *in natura* left a pall of obscurity over the intermediary function of banks. In a non-monetary economy, as Horwitz also insists, there would be no financial markets. Investment would have to be equity financed. The prospective income from future output could not be offered in exchange for the resources needed today to realize that future output. (A Keynesian would recognize this as an "effective demand failure.") Since particular investment opportunities are perceived only by particular individual entrepreneurs, such an economy will grow at best very slowly. Actual monetary economies come to approximate these conditions under conditions of high inflation or in the aftermath of financial crashes.

> The point about this is that intermediaries enlarge the production possibilities that a society is able to exploit at any one time. Banks make possible the realization of investment opportunities *now* that would otherwise have to be postponed or perhaps never be realized. But if that is so, Wicksell's mode of thinking about the natural rate is surely unsatisfactory and should be abandoned. Moreover, the Austrian 'neutrality' criterion for monetary policy needs rethinking (as from a somewhat different standpoint, Myrdal argued already in the Hayek-edited *Beiträge zur Geldtheorie* almost 70 years ago). Consider, the Mises-Rothbard argument that fiduciary money issue should be prohibited. In Rothbard's case, this astounding argument for government interference with what is surely an 'organic' institutional development is based on the notion that fractional reserve banking is inherently fraudulent. (Why more 'fraudulent' than other transactions in which lenders willingly accept a credit risk is unclear.) More relevant to the present issue is the Mises-Rothbard contention that issue of fiduciary media always involves "created, and not transferred credit, and thus forced savings" (Horwitz:79).

Horwich puts considerable emphasis on this distinction, drawn from Selgin's work, betwen "created" and "transferred" bank credit (pp. 74–79). If I understand it correctly, the idea is that overinvestment could be avoided if banks would limit their lending to what has already been voluntarily saved by households. Why saving decisions ought necessarily to precede investment decisions is unclear, however. If bank creation of credit can enlarge the production possibilities realized, the resulting higher real income may produce the "unforced" saving subsequently. More to the point, it is difficult to see how an operational neutrality criterion for bank credit can come out of this analysis. Certainly, the individual bank that experiences positive clearings and is thus able to make additional loans will have no idea whether the reserves gained are due to increased saving somewhere in the system. Nor will it have an incentive to ask the question.

Horwich argues the desirability of a "monetary equilibrium" such that MV is maintained constant. In an economy growing because of increasing productivity, this would entail obeying the criterion for "neutral money" revived by Selgin, namely, money prices falling at the rate of productivity growth with money wages constant. This neutrality criterion is important, Horwich argues, because (p. 127) "we have to rely on the banking system to produce rates of interest that track the natural rate because we have no direct way of accessing the natural rate." He intimates (p. 152) that a banking system that "respond[s] appropriately" in recession would offer lower interest rates to "balking borrowers" so as to "buy off their pessimism." But an environment of falling rates will surely induce banks to improve their own liquidity positions, particularly so if the lower rates are not believed to be permanent. Even if that were not so, and the banks for some reason were to keep M constant, one cannot expect them to counteract an increase in money demand that reduces the V of that constant M. This is a point that Horwich himself also makes (pp. 186–187). I did not come away from this book with a clear idea of what kind of banking system Horwich thinks would produce the kind of monetary neutrality that he espouses.

Keynes and the Austrians

Ludwig Lachmann and G. L. S. Shackle both had a lively interest and appreciation of Keynes, particularly of his thought on probability, uncertainty and long-term expectations. The younger Austrians, in contrast, remain askance, seldom fail to recall the controversy between Hayek and Keynes (and Sraffa) of 70 years ago, and juxtapose Keynes' "labor-based" to their own "capital-based" macroeconomics. I think this is a mistake.

There is no denying that Keynes was cavalier about the time-structure of productive capital in his attitude to Hayek's *Prices and Production.* Indeed, one has the impression that he thought of capital as a malleable aggregate in a manner that Joan Robinson and Richard Kahn would not have condoned in the Cambridge capital controversy 30 years later. But Horwitz overstates the case when he charges Keynes with a lack of attention to intertemporal coordination (e.g. p. 88).

Keynes' saving-investment problem *is* an intertemporal coordination problem (and one that unfettered markets will not always get right). In his *Treatise on Money*, Keynes also used the Wicksellian natural/market rate terminology familiar to all Austrians. But the natural rate is uniquely defined only as long as one maintains the twin assumptions that (i) the labor market will clear, and (ii) that entrepreneurial expectations are roughly right. In the depression context, these assumptions were not sensible and, in dropping them, Keynes also relinquished the natural rate concept.

On the production side, Keynes only distinguished fixed and liquid (or working) capital. By the standards of Austrian capital theory, this is a crude and primitive time-structure at best. But he gave much thought to the duration structure of the economy's capital stock as it relates to wealth-holders' preferences between short and long income streams. Keynesian liquidity preference in this context is a problem neglected in Austrian theory but one that ought to be systematically integrated in it. As far as I know, we do not have an Austrian theory of the term structure of interest on a par with that of the *Treatise on Money*. In particular, one would wish for more Austrian attention to the cyclical behavior of the term structure. Despite Keynes's neglect of the production side of the intertemporal coordination problem, his theory stays much closer to Austrian concerns than do those monetarist or monetary equilibrium theories that pay no attention at all to the saving-investment nexus.

It is true enough, of course, that saving-investment coordination disappeared entirely from later Keynesian economics and thus was never an issue, for example, in the Monetarist controversy where instead wage-rigidity became, somehow, the signal characteristic of "Keynesianism." This was an economics quite alien to Austrianism. Horwich's book starts with two very lucid chapters laying out the fundamentals of Austrian market process analysis. Here the reader learns that prices are "*inherently* less than perfectly flexible" and that making a norm of the notion of perfect flexibility leads to "serious errors in theory and policy" (pp. 12–13). Furthermore, prices will not perform their "communicative function" properly "if *they are overly flexible*" (p. 27). This is an insight the significance of which is seldom recognized. (For a context in which it turns out to be important, cf., Leijonhufvud 1997). But it is then puzzling, at least to this reader, to note the affinity that Horwich subsequently shows for W. H. Hutt in the chapter devoted to his ideas. To Hutt, unemployment is *prima facie* evidence that wages are too high and "should" come down; moreover, if they do not come down, it appears, the government "ought to" make them do so. The positive theory underlying Hutt's normative propositions seems shaky indeed. If the market rate were to be above natural rate, or entrepreneurial expectations were to be unduly pessimistic, so that the economy were experiencing "underinvestment", Hutt would ask for wage concessions sufficient to offset the effects of these intertemporal errors on employment in the present. Hutt is apparently convinced that if only labor behaved in this way—or were made to behave in this way—the system would rapidly grope its way to the near neighborhood of equilibrium. But for this he can have no warrant.

In this book, Steven Horwitz attempts to engage the profession in a discussion of the ideas that Austrian economists have contributed to macroeconomics. It is a worthwhile enterprise which I hope others, Austrians and non-Austrians, will join. I have tried to respond to his work by indicating a number of issues where further work and debate seems to be needed in order for the Austrian contributions to be absorbed by a larger audience.

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Axel Leijonhufvud