Some Swedish Stepping Stones to Modern Macroeconomics

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INTRODUCTION

The processes studied in economics, however, are generally MACROECONOMIC in character...

(Lindahl (1935, p. 52))

I would be very willing to replace the terms MICRO and MACRO with aesthetically more pleasing words but cannot, unfortunately accept Ohlin's suggestions to replace them with PARTIAL and TOTAL, since these have a totally different meaning.

(Lindahl (1941, p. 243))

It is fitting, in a paper that aims to explore "Some Swedish Stepping Stones to Modern Macroeconomics," to begin with granting Lindahl his due: it is not to Klein nor to Morgenstern that we owe the earliest use of the word "Macroeconomics" to describe what had been Monetary Economics and Public Finance on the one hand and Capital and Trade theory on the other, with Business Cycle Theory as the cementing force. It may not be an exaggeration to say that, especially in view of recent contributions by New Classical and so-called New Liberal economists and their efforts to reintegrate Public Finance as part of standard macroeconomics, Lindahl was the father of this exciting but perennially controversial field, although Wicksell had paved the way at an earlier stage. With the possible exception of modern growth theory stemming from Harrod, Domar and von Newmann with roots in the "magnificent" dynamics of the classical economists, Lindahlian Macroeconomics is what is today called "Open Economy Macroeconomics."

To make the aim of this paper reasonably meaningful, I begin with my understanding of the scope and nature of "Modern Macroeconomics." In the subsequent sections some, hopefully successful, claims will be made to establish the "Swedish stepping stones" towards what has become "Modern Macroeconomics." Some concluding remarks on the virtue of reflecting upon the works of past masters, especially relating to their puzzles in the face of similar problems, leads to speculative comments on the thorny problem of methodology. It will, of course, be clear to anyone even remotely familiar with Swedish economics that much has been left out. A tradition going back to Christian and coming down through Davidson, Wicksell, Heckscher and Cassel towards Lindahl, Myrdal, Ohlin and their younger colleagues and followers cannot conceivably be summarized in a few pages.

"MODERN MACROECONOMICS"

... the attractive Anglo-Saxon kind of unnecessary originality, which has its roots in certain systematic gaps in the knowledge of the German language on the part of the majority of English economists. (Myrdal (1939, pp. 8–9))

There is surely nothing controversial in claiming that the dominant paradigm, to further misuse a much maligned term in Macroeconomics, is that which is circumscribed by the tools,

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techniques, concepts and framework of New Classical Macroeconomics (or Lucasian Macroeconomics). Against the backdrop of the following three assumptions (Futossi-Velupillai, 1987):
(a) Rational Expectations,  
(b) Equilibrium Values (i.e., Auction Market Clearing), and  
(c) Imperfect Information,  
a series of models have been developed by the Lucasians to focus attention on the following Macroeconomic issues:
(i) The Lucas-Rapping Supply Function  
(ii) Neutrality Propositions  
(iii) Policy Ineffectiveness Propositions  
(iv) So-called “dynamic inconsistencies”  
(v) Credibility in Policy Models  
(vi) (Equilibrium) Business Cycle Theories  
(vii) Public Finance aspects, and  
(viii) Methodology in Econometrics and Economic Theory.

This is, of course, not an exhaustive list even of New Classical Macroeconomics, (NCM) let alone macroeconomics in general. Other important issues, only partly developed within the framework of NCM, but squarely within any definition of macroeconomics, are, for example:

(ix) Monetary Regimes (Axel Leijonhufvud 1983).  
=x) Theories of Growth, Capital and Distribution (Margin 1983)  
(x) Political, Ethical and Behavioral foundations for Macroeconomics—as an alternative to so-called micro- or utilitarian foundations. Even this expanded list is, surely, not exhaustive but that is in the nature of a subject constantly evolving beyond one controversial frontier to another.

A few words of clarification may not be out of place at this point. Items (iii), (iv), and (v) are a development and an outgrowth based on Lucas powerful and sustained criticism of the “mechanical” nature of the framework under which the formal “Theory of Economic Policy” was discussed. Logically, item (ix) belongs to the subset spanned by (iii), (iv), and (v). The last item is a shorthand for the powerful group of theories on the borderline of Politics, Economics, Ethics and Psychology that has increasingly become important in the development of new macroeconomics going beyond “Rational Macroeconomics.” The leading theories, alternative paradigms, controversial challenges in this development have originated in the works of Arrow, Buchanan, Sen, Simon and Vee Wright.

Even with all this excitement in macroeconomics—some call it “disarray,” which seems a misnomer: who wants a settled and uncontroversial subject!—it seems fair to single out “Theories of the Business Cycle” as THE most active area of research in Modern Macroeconomics. Indeed a strong case can be made for a claim that the other ten issues have become part of macroeconomics precisely within Theories of the Business Cycle.

Mathematical Business Cycle Theory, at least since Frisch, has blossomed beyond all expectations can, in turn, be subdivided as follows:
(1) NEW-Classical Equilibrium Theories  
(2) NEO-Classical Equilibrium Theories  
(3) NEO-Classical Disequilibrium Theories  
(4) Post-Keynesian Disequilibrium Theories  
(5) Monetarist Theories of the Business Cycle  
(6) Long-Wave Theories  
(7) Political Business Cycle Theories.

The most recent off-shoot of item (1) and the currently most “fashionable” one, is the approach, within an Overlapping Generations model (OLG-models), of Real Business Cycle. Item (4) which refers to the “modern classics” spans the works of Frisch, Kaleck, Tinbergen, Kaldor, Hicks and Goodwin (Velupillai, 1987, b).

I have omitted “Development Economics” except insofar as it is a part of “Theories of Growth and Allocation.” This is an important qualification in view of Myrdal’s outstanding work in development economics using, as a building-block, “cumulative causation,” an idea going back to Wickel’s famous “cumulative process” in prices generated by the discrepancy between a money rate of interest and a “natural” rate of profit.

The main theme of this paper is the claim that “Swedish economics,” from Davidson, Wickel and Cauel through Lindahl and Myrdal to Lundberg, Svennilson, Hammerskjöld, Johnson and, finally, Bent Hansen, provided almost all “the stepping stones” towards the macroeconomics I have called “modern.” It is not unintentional that Ohlin has been omitted from this list. That justification cannot be substantiated in a purely positive discussion.

“THE SWEDISH STEPPING STONES”

Public Finance, National Income Accounting, Capital and Distribution Theories are the “uncontroversial” stepping stones. Public Finance, as Sargent and Wallace (1981), Lucas (1981 a, b), etc., have, in recent years, forcefully reminded us, is Accounting Theory par excellence. The moral underpinnings of the accounting discipline was the central theme emphasized by the Swedes. David Davidson, the first "Modern" Swedish economic theorist, produced a booklet on the problem of taxation norms (Davidson 1899) as one of his earliest works.

Wickel followed with his justly famous Finanz theoretische Untersuchungen and then Lindahl's outstanding doctoral dissertation on Justice in taxation: "Die Gerechtigkeit Der Besteuerung" (Lindahl 1919). From Public Finance to National Accounts there was an inevitable line for the fundamental question of Justice in taxation. The explicit political link was of course the contention that the structure of taxes reflect the balance of political forces. The importance of the political element in the financing of public expenditure was theoretically formulated in the Wickel-Lindahl approach to Public Finance; practically reflected in the early coordination of monetary, fiscal and agricultural policy based on the political coalition between the Social Democratic party and the (then) Farmer's party (cf., Wiggins, 1938; The Agricultural Policy); and, finally, empirically analyzed, at least in one aspect, in the pioneering studies by Herbert Twesting (1937) and Johan Akerman (1946) of the Political Economy of Business Cycles.

For these pioneers the calculation of national income accounts was, on the one hand, for taxation with social and distributional aims; on the other hand it was, of course, for the debits side of state expenditure. From the former point of view it is, thus, not surprising that Wickel's followers, Lindahl and Myrdal in particular, were preoccupied with the problems of norms for price stabilization. This, in turn, implied a detailed study of the theoretical underpinnings and
The empirical nature of wage and price indices. The final stage, before the ultimate thrust into Macroeconomic Theory and Stabilization Policy, was reached with a clear scheme of National Accounting, Monetary Disequilibria and Social Justice. This scheme was, in effect, a corollary of the accounts for the state budget, balance of trade and the balance of international payments—for it was never forgotten that Sweden was a "small open economy."

Many of these "stepping stones" are part of the folklore of Modern Macroeconomics—events at the elementary and introductory level of enlightened textbooks from Mises to Keynes and Hicks, and Rawls. These "Swedish stepping stones" have been used to reach impressive theories and illuminating insights in the fields of Public Finance, Taxation, Political Economy, Welfare Economics and the Theory of Justice. The not unrelated development of "functional finance," as its early proponent Abba Lerner (1948) dubbed it, from Domar's classic in 1944 to Sargent and Wallace in 1981 completely bypassed Eric Lindahl's independent and more comprehensive analysis of almost identical issues (cf., Lindahl, 1944, 1944).

The twin horns of Capital and Distribution theories, in their exotic and colorful controversies between Austrians, Marxists, Neoclassicals, Frank Knight and Joan Robinson, have had the shadow of Wickelr trailing them for almost one hundred years. It is a literature rich in documentation in which interest has been reawakened at least three times since the turn of the century; Wickelr's contribution was appraised, approved and acknowledged each time. Bohm-Bawerk vs. all corners at the turn of the century; Frank Knight vs. the Austrians in the 1930s; the Cambridge controversies of the 1960s.

The unheralded precursors are, at least, three: Gustav Alenius, Erik Lindahl and Alf Johannsen. The inclusion of Gustav Alenius in this list, in spite of Wickelr's famous two-page review article of the first volume of his dissertation with a hansom cab endorsement, must be explained (Wickelr, 1934 p. 273). Wickelr's review related only to the first and static part of Alenius's thesis. The second volume of the thesis dealt with dynamic problems for fixed-capital systems. In this compressed and complex dynamic part Alenius discussed, in terms of copious numerical and special examples, the problems of the truncation of production flows, and the traverse and went on to suggest the now-famous Braha von Neumann device of treating fixed capital as joint products. Wickelr was, of course, aware of the theoretical implications of the truncation of production flows in the point input-output output Austrian model, (Veipupilli, 1987a).

On the other hand, theories of functional income distribution, or "Alternative Theories of Distribution" as Kaldor's (1955) seminal contribution suggested, have totally neglected the "Swedish stepping stones." That Wickelr was not a neo-classical predecessor is undoubted and well documented (Veipupilli, 1973). However, that Erik Lindahl and Alf Johannsen were precursors of the Kaldor-Pawinielli theory is less well known, (Chiodi-Velupilli, 1983)—but Alf Johannsen has been relegated to the dusty heaps of acknowledged precursors (cf., Johannsen, 1934, esp. Ch. V, h)). Johannsen, unfortunately, did not have the Wickelr that Gustav Alenius had to set his (Johannsen's) casuistic analysis in its formal space.

The uncontroaversial "Swedish stepping stones" (see items (vi), (iv) and (i) in the list of Macroeconomic Issues listed in 2. Almost all of the remaining issues in their modern connotations, have been formulated within the framework of models incorporating intelligent expectations formation by (economic) agents. (Olson, 1985)).

Lucas's "Equilibrium Model of the Business Cycle" (Lucas, 1982) proceeds along the above Lindahl-type updating of expectations in equilibrium process (Veipupilli, 1985). This is only one example of the ubiquitous presence of expectations in Lindahl-type macroeconomic analysis.

Business-cycle analysis, as from Wickelr-Lundberg (Metzler) framework, by Lindahl (1930, 1935, 1939), and Alf Johannsen (op. cit.), was essentially Equilibrium Business Cycles
with "rational" expectations in the dynamic sense indicated above in the two extensive quotes. Alf Johansson was meticulous in his discussion of the assumption of equilibrium in the dynamics of business cycles. Dismissing Hayek's program for research in the theory of business cycles, quoted approvingly by Lucas (1982, p. 215) or, at least an equivalent version of it (Johansson, op. cit., p. 114), Johansson asks (p. 117, fn. 1): "How a depression ... can be characterized as an equilibrium situation," and goes on to suggest the ingenious and quite modern (at least from the point of view of Dynamical Systems theory) idea of:

Equilibrium in the initial situation serving the formal purpose of making possible the definition of subsequent situations. (Johansson, op. cit., p. 117, fn. 7)

In other words, a dynamical system with "meaningful" initial conditions, which is an eminently acceptable definition. No fuss about the incompatibility between Equilibrium and Fluctuations— and even cold three and a half decades later by Johan Åkerman in his memorable "Avkeds

förändring" (Johan Åkerman (1961)) by appealing to Niche Bob's "Complementarity Principle": use equilibrium analysis to study "structure" ("Position") and determine "initial conditions": use "Dynamical analysis" for studying the problem of business cycles.

It is in this context that one must view so-called period dynamics, business cycles, budgetary reform, monetary policy and fiscal policy—not simply as exotic excursions into terminological calisthenics (Ex-Ante vs. Ex-Post, Continuous Time vs. Discrete Time, Short-run vs. Long-Run, Temporary Equilibrium vs. Long-Run Equilibrium, etc.—those familiar and maligned concepts, almost all of them introduced in the very first pages of Ohlin's celebrated paper of 1937). The fundamental fact that budgetary reform, the move away from the principles of "sound finance" which required balanced budgets in every period, was predicated on a model of the business cycle seems never to have been recognized. Again, it was Lindahl in his influential review of Myrdal (1954)—itself a precursor of sorts to Bent Hansen's final synthesis of "The Economic Theory of Fiscal Policy" almost a quarter of a century later— who brought together the different strands represented in Hammarskjöld (1933), Johansson (op. cit.), and Lundberg (1937). The reasoning was ingenious and simple. The pro-cyclical nature of the budget surplus in a business cycle model—the cycle itself caused mainly by the rigidities in the monetary system and other nonlinearities—can and must be used to smooth fluctuations by resorting to a balanced budget over a period. The surplus of the government account in the upturn to be used for appropriation decisions with disbursements at a later, cyclically determined, phase of the development of the national economy.

Anyone familiar with the 50-year history of Mathematical Business Cycle theory from Frisch to Lucas and beyond will recognize the remarkable modernity of such an argument. The ingredients are:

(i) National Income Accounting with an explicit role for the government budget and government spending.
(ii) Interaction of the real and monetary sectors with nonlinearities induced from the side of the monetary system as a whole.
(iii) The old Wicksellian assumption of "ax institutional setting where monetary policy pegs the rate of interest and money supply adjusts to demand for money" (Hansen, 1981, p. 267)—inside a "corridor," outside of which the rigidities of the monetary system begin to operate and such an adjustment is reversed: i.e., demand is forced to adjust to supply constraints.

(iv) In such a setting as (i)—(iii) the introduction of Frisch-Kalaić type distinction between investment decisions and final deliveries with the length of the lag between the two not only determined by technical conditions but also subject to policy (accelerated depreciation, investment funds, etc.). It is easy to construct a simple model to encompass some aspects of this ingenious scheme which is most elegantly summarized in Lindahl (1935). A formalization could also make it clear that it was an eclectic combination of "period analysis" and "continuous dynamics" that was envisaged by Lindahl and his younger colleagues. It is, roughly speaking, the fix-price dynamics of a period (the short-run) and the global dynamics of a continuously developing nonlinear macroeconomy.

Taken in conjunction with Johansson's definition of "equilibrium" and Lindahl's review of Myrdal's proposals to the Unemployment Commission it is easy to "rationally reconstruct" the path, via Bent Hansen's (1981) "quasi-equilibrium" to the disequilibrium dynamic models based on Leijonhufvud (1965) and culminating in Benassy's recent (1984) "Non-Walrasian Model of the Business Cycle." It is only necessary to generalize Benassy's model to include the government budget constraint and then we are in vintage Lindahl territory. However, the resulting framework would not necessarily result in a business cycle model—indeed Lindahl's purpose was to go from a model of the national economy with the government budget constraint to a business cycle model and thence to a policy model where fluctuations, although not disequilibrium dynamics, in the sense of periodic adverse cycles in unemployment would be eliminated. This, I surmise, is the path back to Wicksell's speculations about the possibility of multiple equilibria in vol. 1 of his Lectures.

There is, finally, the case of the "rocking-horse" and the story from Wicksell's review of Karl Petander (Wicksell, 1918) via J. Åkerman's dissertation (Åkerman, 1927) and, first, Frisch's review (1931) and then the celebrated article in the Kausalteoriericht (right up to Lucas and Sargent on "After Keynesian Macroeconomics" (Lucas and Sargent, 1979). From the point of view of methodology, especially in view of the most recent offshoot of NCM in the OLG guise, this particular "Swedish stepping stone" to distinguish "propagation" from "impulse" has been a source of fertile developments in Mathematical Business Cycle Theory.

We come now to the question of neutrality, natural rates, policy ineffectiveness, dynamic inconsistencies, credibility and reputation in policy models and the monetary regime-stable money nexus. The modern revival of neutrality propositions, at least in Anglo-Saxon literature, goes back to the celebrated Sraffa-Hayek debate of the early 1930s. It is, of course, well known that the setting for that colorful debate was Wicksell's "Interest and Prices" (Wicksell, 1936). That it took a different direction after Patinkin does not change the essential fact that Wickellian themes retain their importance. The neutrality debate, now in a "natural rate" setting is, in fact, even more "Wickellian" than it was in the esoteric debate between Sraffa and Hayek. That this claim is easy to substantiate can be seen by the more recent "Swedish stepping stones" stemming from a series of seminal essays by Axel Leijonhufvud commencing with "The Wicksell Connection" (Leijonhufvud, 1961, ch. 7). From "neutralität" to a "natural rate" setting to the effectiveness of monetary policy, the norms and constitutional constraints of monetary regimes, the search for "stable money", credibility and reputation (a policy models and consistent policy in a dynamic setting is only a short and inevitable step. That is the direction taken by Leijonhufvud in his most recent work; and that was the path taken by Wickell's followers: Lindahl, Myrdal and Svensson, in a slightly different set of monographs. Lindahl was most consistent in developing this line, combining the three great Wickellian
CONCLUDING NOTES

"Even Ohlin is now trying to learn monetary theory..." (Letter from Lindahl to Lundberg, 13th March 1932)

...I am sure that the only way to prevent the most horrible mess in the English journals is that you should intercede.

(1) by writing something directly in reply to Keynes and Ohlin.

(2) by accelerating the appearance of your book. May I entreat you most strongly to do both of these things?" (Letter from Hicks to Lindahl, 4th June 1937)

A half century of macroeconomic development, debate and controversy seems to have shifted the focus of interest on topics determined by the successes and failures of so-called Keynesian economics. In spite of Ohlin's cautious footnote accompanying the second part of his influential essay and with the possible exception of Public Finance and Capital Theory, "Swedish stepping stones" have been viewed from the point of view of possible "prefigurations of the General Theory." Hammarskjöld, for example, bitterly protested to Lindahl about Ohlin's attempt and claim to be able to summarize and represent the Swedish discussion of Monetary Theory and policy (Hammarskjöld, 1932). In a majestic and characteristic reply Lindahl was to
These are METHODOLOGICAL conclusions and the Swedes, particularly Lindahl and Myrdal, were fond of reflecting on what they had been doing. Methodological conclusions have a way of demanding an underlying METHOD and it has, in the past 50 years, often been claimed that theirs was a dynamic method. However, as Hicks perceptively noted: "The method would not have been devised because there was a methodology in pigeon-holes for it; it was devised because there was a need for it. The particular place where the seed was sown was in monetary economics. (Hicks, 1985, p. 62)"

And monetary economics, in turn, was conceived, as we have tried to indicate in describing the "Swedish stepping stones," to be implied by the interaction between Public Finance, Taxation and Capital Theory. The accounting conventions necessary to coherently consider these interactions led them to be pioneers in Social Accounting Theory. The book-keeping that an accounting theory requires, is, naturally, over some period of time and the sequence of such periods cannot be considered without imposing accounting discipline. Thus it is that "economic dynamics is an accounting theory." (Hicks, 1956, pp. 51 and 61). Lindahl...is [a] father of Social Accounting Theory." (Hicks, 1977, p. 143).

FOOTNOTES

1. My translation from the original English.

2. For a Scandinavian author a closed economy is always "abstract" and "realism" requires considering an open economy. (Hansen, 1981, p. 260).

3. Greger Myrdal's doctoral dissertation... still remains untranslated, and probably still would have a good deal to say to us... Inger Svellnäs's 'Ekonomisk Planning' (of which I one would greatly value a translation) has not been followed up. (Hart, 1951, p. 9 and p. VIII).

4. Expectational dynamics in a business cycle context had always been the framework for Lindahl, especially in the discussion of policy regimes. Indeed it was in such a context that Lindahl introduced one half of the many splendid twin of his Ante vs. Ex Post (not Myrdal or Ohlin as is normally assumed).

5. "The Swedish books contain only a scanty analysis of interest theory, as I do not know to what extent the SEC/HD of this section is accepted by my Stockholm colleagues." (Ohlin, 1937, p. 221, fn. 2) How and why would Ohlin expect to get away with such a statement about "Swedish books" on "interest theory" after "Naturalism and Imitation" had stimulated Davidovics, Cassel, Lindahl and Myrdal to a series of classic works on interest theory? Indeed what about Cassel's "The Nature and Necessity of Interest"?

6. The full passage from Lindahl's letter to Hammarskjöld is as follows:

"And a passage revealing the end of his vision has also been noted: "Some of his ideas are not yet fully understood by his contemporaries. There are, indeed, certain aspects of his economic thought which are now begining to be appreciated by later generations."

REFERENCES


Gunnar Myrdal (1898–1987): A Memorial Tribute

Nicholas W. Balabanis*

Gunnar Myrdal, co-winner of the 1974 Nobel Prize in Economic Science, passed away in May of 1987. The Prize was given for his pioneering work in the theory of money and economic fluctuations and for the penetrating analysis of the interdependence of economic, social and institutional phenomena. Also, for the majority of contemporary academic economists in America and Western Europe, Gunnar Myrdal is thought of as not only an economist, but a sociologist. How, many asked in 1974, could a sociologist win the Nobel Prize in Economic Science? Last there are any among us who still ask that question today, it is relevant to recapitulate the basis for his place in the history of our discipline.

THE MAN AND HIS CAREER

Gunnar Myrdal was born in 1898 in the village of Sollvarbo, in the central Swedish province of Dalarna. Even today this province reflects old Sweden in miniature: farms, woods and lakes still predominate. In summer Swedes still flock there to savor the pleasure of small-scale village life as it has been lived in Dalarna for centuries. The rural folk remain foot-soldiers of their land whose history knew little of either nobility or serfdom.

Myrdal’s father, Carl Adolf Peterson (1876-1934) was himself the owner of a landed estate, a successful, self-made man of conservative political leanings. His child was christened Karl Gunnar. The childhood memoirs of Gunnar’s son, Jan Myrdal, recall how Karl Gunnar Peterson became Gunnar Myrdal. After graduation from the gymnasia, as a student of jurisprudence, he called himself Gunnar Myrdal. Eventually, the latter h also disappeared from the last name and the young student became Gunnar Myrdal. At the University of Stockholm, he studied with Knut Wicksell, David Davidson, Eli F. Heckscher and Gustav Cassel. He was a brash young man and Gustav Cassel once warned him by saying: “Gunnar you should be more respectful to your elders, because it is we who will determine your promotion.” “Yes,” young Myrdal replied, “but it is we who will write your obituary.” Nevertheless, he and Cassel became very close and he eventually succeeded to the latter’s chair in political economy at Stockholm University. When Cassel died in 1945, Myrdal wrote his obituary which was eventually translated in 1963, into English. In 1924, Gunnar married Alva Reimer, who became a leading feminist as well as a diplomat and cabinet member and, in 1982, winner of the Nobel Peace Prize. The Myrdals had three children: Jan, an essayist and political scientist, Sissela Ahn, an authority on ethics and the wife of Derek C. Bok, president of Harvard University, and Kai Folster, a sociologist, who resides in Gothenburg, West Germany. Jan, their oldest son, caused Gunnar much grief by publishing childhood memories of his parents that portrayed them as popularity seekers, opportunists, and bleeding hearts. Jan Myrdal did not attend either of their funerals. But whatever Jan Myrdal wrote about his parents, Gunnar and Alva got along splendidly and were a happy couple indeed.

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