From Macroeconomics to Monetary Economics: Some persistent themes in the theory work of Wynne Godley

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Outline: from *Macroeconomics* (1983) to *Monetary Economics* (2007)

- Common themes to the two works
  - The big picture: Integrating real and monetary
  - Money and banking
  - Pricing, profits and inventories
- Omitted themes
  - The New Cambridge hypothesis (Shaikh, Mata, Maloney)
  - The fundamental identity – the three balances (Wray)
  - Forecast of unsustainable processes
  - The dominance of fiscal policy (Sawyer)
  - Open-economy macroeconomics (Mazier, Kinsella)

Preliminaries

- First meeting: December 1999
- Last meeting: May 2005
- First missed meeting: October 1985
- Second missed meeting: May 2010

- First citation: in a 1987 survey of the monetary circuit
- Two references in my 1992 book
- But omitted from 1991 survey of Cambridge views on money,presented at the 1987 Levy conference!

- Converse: in CJE 1999 and 1998 working paper version
- Litterary executor

The monograph: Several co-authors

- « A substantial monograph in the course of preparation with Ken Coutts » (1993, p. 79).
- A research programme, undertaken in collaboration with George McCarthy… « the paper owes a special debt to Ken Coutts and Anwar Shaikh » (1996, p.1).
- He owes « a special debt to George McCarthy », « through a long treck » (1997 and 1999)
- The Draft treatise/textbook (February 2000): thanks to McCarthy « for extensive help with making these models at an early stage »
- 2001: I join in: Looks of puzzlement and friendly sarcasm!
- *Monetary Economics* (2007), most of it written between 2001 and 2003.
- Help from Alex Izurieta

The big picture

- Macroeconomists ought to exploit the fact that « every money flow comes from somewhere and goes somewhere » (1983, p. 44)
- « A simulation model in which banks' operations are fully articulated with income, expenditure and transfer flows together with asset demand functions » (1993, p. 79)
- «to show how the whole system fits together and cast banks in a realistic role », a macroeconomic model based on comprehensive accounting and without black holes (1996, p. 14)
- 1985: a stock matrix
- 1996: a transactions matrix
- 1997: both matrices
- 1999: CJE paper (vs 1996, 1997)

Wynne's theoretical objective

- Find the Holy Grail of Keynesianism
  - The integration of the real and the monetary sides of economics
  - The integration of stocks and flows
- The goal is already in Godley and Cripps (1983).
- "Our present synthesis may be broadly characterized by saying that we make a 'monetarist' financial system (based on the behaviour of stocks of money, financial assets and debts) drive a 'Keynesian' flow system based on the response of expenditure to income" (1983, p. 17)
- "to have provided a framework for an orderly analysis of whole economic systems evolving through time" (1983, p. 305)

A response to Monetarism

- Keynesian orthodoxy of the time was said to be “incomplete and inadequate” because “it did not properly incorporate money and other financial variables” (1983).
- Godley “found quite early on that there was indeed something deficient in most macroeconomic models of the time”, including their own, “in that they tended to ignore constraints which adjustments of money and other financial assets impose on the economic system as a whole” (Godley and Cripps 1983, p. 16).
- Godley was aware of the work being carried out at about the same time by Tobin and his Yale colleagues, as well as that of others such as Buiter, Turnovsky, and Blinder and Solow.
- “Money stocks and flows must satisfy accounting identities in individual budgets and in an economy as a whole”.

Flow-of-funds and heterodox views

- Godley and Cripps (1983, p. 15) were annoyed by several of the behavioural hypotheses found in the work of the more orthodox Keynesians, as they "could only give vague and complicated answers to simple questions like how money is created and what functions it fulfils".
- The Cambridge authors thus wanted to start from scratch, with their own way of integrating the real and the financial sides, thus avoiding these "tormented replies".
- "If only the Keynesian model had started off life with the national income flow identity embedded in a system of balance sheets recording stocks of assets and liabilities at the beginning and end of each accounting period!" (Godley, 1984, p. 78) – a sentence I had underlined in 1985 but to little effect on my own research.

Isn't everyone stock-flow coherent?

- The Godley approach got called the stock-flow coherent or stock-flow consistent (SFC) approach by Claudio Dos Santos (2002).
- Stock-flow consistency was not just limited to the link between real investment and tangible capital.
- Other names to highlight this: the *real stock flow monetary model* (Godley 1993, p. 63), or names that we juggled with, such as the *financial stock-flow coherent* approach or the *sectoral stock-flow coherent* approach.

Money and banking

- The big difference in the theoretical work on money conducted by Wynne Godley in the early 1980s and the mid 1990s is the explicit introduction of asset choices in his later work. In the Godley and Cripps (1983) book, portfolio choice is discussed, but it is not modelled.
- What struck me most when I first read his 1996 paper was that Godley was putting together a monetary flow analysis, linking monetary income and expenditure with a flow demand for credit, and a portfolio analysis, that explained the various demand functions for financial assets, including the demand for a stock of money.

The monetary circuit

- Tight links between French and Italian monetary circuit theory, as described earlier by Parguez (1980) and Graziani (1990) and the Godley and Cripps (1983) book.
- In circuit theory, the production process starts with banks granting advances to production firms to pay for wages and intermediary products. This is initial finance. Firms are then able to pay back this initial finance as long as households don't accumulate new money balances in banks.
- Godley and Cripps (1983) have a similar view. For them, production takes time, and firms must borrow from banks to finance their new production and their inventories.

Going beyond the monetary circuit

- Three innovations:
- First, Godley and Cripps show that the outstanding debt of firms will be equal to the end-period inventories valued at cost.
- Second , Godley and Cripps have an explanation of the size of the money balances. They were some stable proportion of disposable income.
- Third, in Godley's 1990s work, the proportion of money balances as a share of financial wealth is given an additional Tobinesque explanation (portfolio analysis).

Endogenous money

- Godley was always puzzled by the standard neoclassical assumption, found in both the IS/LM model and among monetarists, of an exogenous or fixed stock of money.
- Godley (1997, p. 4) says, “governments can no more control stocks of either bank money or cash than a gardener can control the direction of a hosepipe by grabbing at the water jet”.
- Godley shows clearly that loans make deposits, but he also shows that changes in the desire to hold deposits have a feedback effect on outstanding loans.
- Thus, in a simple world, there can be no discrepancy between the stock of money and outstanding credit, just as there can be no discrepancy between saving and investment in the national accounts.

Going beyond Tobin I

- Godley was most particularly influenced and stimulated by his reading of the paper by Backus et al. (1980).
- But in Tobin, the focus is on one-period models, or on the adjustments from the initial portfolio towards the desired portfolio composition, for a given income level.
- As Randall Wray (1992, p. 86) points out, in Tobin's approach "flow variables are exogenous, so that the model focus is solely on portfolio decisions".
- By contrast, in Godley and Cripps and in further works, Godley is preoccupied in describing a fully explicit traverse that has all the main stock and flow variables as endogenous variables.
- This is not done, even by Tobin and Golub (1998).

Going beyond Tobin II

- Banks in most of Tobin's writings are veils that provide households with a greater variety of asset choices.
- "The raison d'être of Tobin's banks, so far as I can see, is to enlarge the asset choice of households and facilitate the agility with which it can be made" (Godley 1997, p. 49).
- By contrast, in Godley's view, banks play a distinct and essential role, since "bank loans are required to enable industry to function at all" (ibid, p. 49).
- Godley's banks are Kaldorian, responding to the financial needs of their credit-worthy clients.
- Bank loans act as a necessary buffer for the fluctuations in inventories.

Profits, cash flows, inventories

- Wynne lived in a period of high inflation (1960s and 1970s, especially in the UK). As a result he was very much interested in inflation-corrected measures.
- Also Wynne was a student of P.S.W. Andrews at Oxford, and he was a junior colleague of Robert Hall (Hall and Hitch, 1939).
- He wrote an important book on pricing (with Coutts and Nordhaus, 1978).
- Pricing in Godley is not linked to scarcity: it is a tool of income distribution, because the role of prices is not to clear markets.
- He put forth the « normal-cost pricing » hypothesis, which is a variant of cost-plus pricing, based on the normal historic unit cost, which depends on the target inventories to sales ratio.

Two obscuring features

- There was a lack of clarity when discussing pricing in Godley and Cripps (1983): dealing with ex post identities or with behavioural relationships?
- Also, Godley, being used to work with statistical data provided by real statistical agencies, made use of indices such as base-period market prices or base-period costs. The use of these indices, and the additional variables that they require, makes even harder the comprehension of ideas which are relatively difficult by themselves.
- It is only soon after we met that it dawned on Wynne that since we were building theoretical models, without tackling actual statistical data, we could assume that we knew volume measures, that is, we knew how many widgets were being produced!

Pricing

- Inventories must be valued at their cost for SFC consistency.
- Godley's original proposition is that firms set prices on the basis of historic unit costs, that is on unit costs that take into account the fact that part of the sold goods this period will have been produced at some unit cost in the current period while the rest will have been produced in the previous period at some other unit cost, plus (unitary) interest payments arising from the cost of financing the holdings of these inventories for the period.
- Assuming that the inventories to sales ratio is smaller than unity, this means that the proportion of goods sold but produced in the previous period is equal to the inventories to sales ratio.
- The percentage of a cost increase that will be passed on in the next period thus depends on this inventories to sales ratio. Thus the lag between costs and prices should not be estimated econometrically.

A contentious issue: the definition of profits

- At least four definitions are possible:
  - Net business profits: sales less actual historic costs
  - Gross business profits:net business profits less interest payments
  - NIPA profits: gross business profits less IVA (stock appreciation)
  - Cash flow: net business profits less the change in the value of inventories (due to increase in unit costs (stock appreciation) and due to increase in volume of inventories).
- Wynne Godley expressed great reluctance in accepting the definition of NIPA profits, although he was fully aware that national accountants needed such a definition to equate the value of production to factor incomes. He grudgingly accepted to include the NIPA definition only when I showed him that the NIPA profits to sales ratio was *completely* invariant to fluctuations in inventories and their costs (G&L, p. 278).

Conclusion: the targeted audience of *Monetary Economics*

- The SFC framework is certainly useful to all schools of thought in economics
- Nevertheless, after some hesitation, it was decided that the targeted audience of our book, would be post-Keynesian economists, who needed the discipline of the SFC framework.
- It also made sense because the main behavioural equations are Keynesian, so it was more realistic to presume that mostly fellow post-Keynesians were likely to read the book.
- For a while, Wynne was considered by some, mistakenly so, to be in support of monetarism. This is ironic since I think it is fair to say that Wynne is now considered as one of the most important and original (post-)Keynesian authors.