

Wynne Godley's monetary circuit or why did I get along with Wynne

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A Brief intense relationship (2000-2010)

- One book, *Monetary Economics* (2007)
- 4 journal articles
- 1 book chapter
- A few working papers (Levy Economics Institute)

Common views

- Pricing procedures
- Open-economy macroeconomics
- Banks and endogenous money
- The monetary circuit (Graziani)

Pricing

- Wynne and normal-cost pricing (P.W.S. Andrews)
- Coutts, Godley and Nordhaus 1978 book
- Prices (of reproducible goods) are cost-determined and do not respond to demand
- Adjustments to changes in demand are done through quantities, i.e., the rate of capacity utilization and **inventories**
- Cf. Shiozawa et al. (2019) *Foundations of evolutionary economics* where, in a multi-sectoral model, adjustments to demand changes can be entirely done without price changes, with enough excess capacity, inventories and partial inventory adjustment

Open-economy macroeconomics

- Godley (1999) 'Open economy macroeconomics using models of closed systems'
- Model 1 shows that a balance-of-payment surplus, in a fixed-exchange rate regime will not lead to an increase in the supply of money (a rejection of the Mundell-Fleming model)
- The increase in foreign reserves is compensated by a fall in the stock of domestic bills held by the central bank.
- This is nothing else than the compensation thesis of Le Bourva (1962), Berger (1972), the Banque de France view (compensation in the advances made to banks)
- Compensation thesis presented in Lavoie (1992 book; 2001 chapter)
- Compensation thesis in chapter 6 of G&L (2007)
- Outgrowth the endogenous money view

Endogenous money supply and reversed causality

- Compensation thesis tied to endogenous money supply
- Godley (and Cripps 1983) views influenced by Kaldor?
- Cambridge: Kaldor (1970, 1982), Kaldor and Trevithick (1981), Cramp (1962, 1971), Robinson (1970), Kahn (1972)
- Lavoie (1982, 1984, 1985): Le Bourva (1959, 1962), French circuitistes, circulation approach, Kaldor (1970, 1982), Robinson (1952, 1956, 1970), Moore (1979, 1983), Torto and Lombra (1973)

Credit money, Godley and Cripps 1983

- ‘Once a system of inter-bank credits is in existence, there is no logical or institutional constraint on the extent to which the whole banking system can supply additional loans, thereby simultaneously expanding the stock of money held by the public by an amount exactly equal to the increase in loans. Changes in the stock of loans and money will be governed solely by demand of loans and the credit-worthiness of would-be-borrowers’
- ‘There is a “central bank” which stands ready to lend or to borrow without limit on the inter-bank market at a fixed “base” rate, and that all other rates bear relativities to the base rate determined by the competition between commercial banks’.

The theory of the monetary circuit (theory of monetary production)

- (i) there is hierarchy between three large sectors: banks, firms and households
- (ii) the monetary circuit starts with the creation of money so as to allow payments tied to production
- (iii) production requires initial finance, which must be distinguished from final finance
- (iv) the supply of money and high-powered money is endogenous
- (v) production takes time
- (vi) there exist crucial macroeconomic identities

- Parguez (1980), Graziani (1984, **1989**, 2003)
- Lavoie (**1987**, 1990, 1992)

The first link Graziani-Godley...

- Zezza, a student of Graziani, goes to the DAE at the University of Cambridge in 1986. Zezza becomes Godley's research assistant.
- Godley gets invited by Graziani to Naples, to give a series of three lectures in Naples, in April 1988, on 'Time, credit money and the neoclassical synthesis'.
- Godley (2004) was present at the conference organized in 2003 by Neri Salvadori, to celebrate Graziani's 70th birthday.
- Reciprocal cites:
 - Graziani (1989-1990; 2003) cites Godley and Cripps (1983);
Graziani (2003) cites Godley (1993 Sylos Labini);
 - Godley (1999 CJE; 1993) cites Graziani (1989-1990)

The main theoretical similarity

- Godley and Graziani had found that they held very similar views about how money entered the economy, mainly through the credit granted to firms that needed to pay for their labour costs and intermediary goods. For production to occur, entrepreneurs need to borrow, and in the simplest models, outstanding loans will be equal to the value of inventories, which themselves will be equal to the money balances that households decide to hold.
- Both Graziani and Godley very firmly believed that money was endogenous at a time when this hypothesis was not fashionable at all.
- Both Graziani and Godley rejected the IS/LM model
- I had very briefly mentioned the link between the monetary theory of Godley and Cripps (1983) and the work of monetary circuitistes in my survey of monetary circuit theory (Lavoie 1987).

An unpublished 2001 short note by Godley

- The sequence in monetary circuit theory is sometimes likened to that of some agricultural economy.
- *“There comes about an institutional need for finance. The intuition is quite clear. A farmer who markets his produce once a year, at harvest time, cannot generate wages to pay hired hands, nor an income for himself until the sale actually takes place. Do they starve until harvest time? So in order to pay wages and realise profits firms have to borrow”.* (Godley 2001)
- As a stunned reader, I marked this as ‘this is the monetary circuit story!’

The 2001 note ...

- *‘Surely the primary act is best thought of as a decision to produce something. The build up of initial inventories when production starts up is the result of such a production decision, made with the agreement of a bank. It is this act which brings a bank loan into existence and simultaneously brings a bank balance (that of the newly employed labour force) of equal size into existence.... If the HH [Household] sector now buys something from the P [Production] sector, this will (ceteris paribus) destroy money and loans by an exactly equal amount’.*
(Godley 2001: 5)

Godley (2004) on Graziani

- In his contribution to the Graziani festschrift, Godley (2004) presents a small (25 equations) model with real and nominal variables that presents his essential ideas about about macroeconomics in a world with (only) households, firms and banks.
- Chapter 9 of G&L (2007) is a variant of this model.
- ‘In what follows there is not a breath of criticism of the Graziani construct, which is at once simple, elegant and fruitful. What I propose to do here is adapt the model so that the main insights (as I understand them) are carried across into a world where aggregate production is a continuous set of overlapping individual processes and in which the production period can vary.... All of Graziani’s insights are retained’ (pp. 125-6).

So what are these insights?

- ‘In order to finance production, the entrepreneur must obtain the funds necessary to pay his workforce in advance of sales taking place. Starting from scratch, he must borrow from banks, at the beginning of each production cycle, the sum which is needed in order to pay wages, creating a debt for the entrepreneur and, thereby, an equivalent amount of credit money, which sits initially in the hands of the labour force. Production now takes place and the produced good is sold....When the debt is repaid, the money originally created is extinguished. An entire monetary circuit is now complete.’ (Godley 2004).

The beginning of the monetary circuit, ch. 2 of G&L (2007)

Table 2.8B The second step of the monetary circuit with private money

	Households	Production firms		Banks	Σ
		Current	Capital	Capital	
Consumption					
Investment		$+I$	$-I$		0
Wages	$+WB$	$-WB$			0
Δ loans			$+\Delta L_f$	$-\Delta L$	0
Δ deposits	$-\Delta M_h$			$+\Delta M$	0
Σ	0	0	0	0	0

Graziani 2003 on Godley ... initial vs final finance

- *‘To some extent the two definitions are equivalent. If we refer to the bank debt of the firm in a single instant of time, it is correct to set it equal to the money value of the commodities produced and not yet sold, namely semi-finished products plus inventories. If we refer to the initial credit requirement of firms, and therefore to their demand for bank credit, it seems more correct to make credit requirements equal to the wage-bill corresponding to the planned level of production’.*

Common features

- *‘There is a gap in (historical) time between production and sales which generates a systemic need for finance;...*
- *Bank money is endogenously determined by the flow of credit;...*
- *Total real income must be considered to be divided into three parts – that received by entrepreneurs, that received by labour and that received by banks’. (Godley 2004)*

- Godley says that they both reject neoclassical instantaneous production, exogenous money, and marginal productivity theory.
- The main difference is that: ‘while Godley focuses on the end-of-period stock of loans outstanding, the TMC [theory of monetary production] focuses on the beginning-of-period initial finance, but the two approaches are entirely compatible’. (Zezza 2012).

Slight differences

- The main difference is that: *'While Godley focuses on the end-of-period stock of loans outstanding, the TMC [theory of monetary production] focuses on the beginning-of-period initial finance, but the two approaches are entirely compatible'*. (Zezza 2012).
- In the monetary circuit, the production period and the accounting period are identical. In SFC models, the accounting period is longer than the production period: firms progressively produce their goods and services, while households spend the revenues that they receive in a continuous way, so that firms make profits on the items sold, thus allowing them to gradually distribute dividends to households, which are also spent within the accounting period.

Conclusion

- Godley's views are perfectly compatible with Graziani's theory of monetary production
 - The proof of the pudding is in the numerous younger scholars, associated with Graziani's theory of monetary production, who have adopted the stock-flow consistent approach: Botta, Caverzasi, Tori, Veronese Passarella, Jo Michell
- I felt I learned as much economics during my 6-year stint writing the book with Wynne then I did in the prior 25 years