Seven unsustainable processes, again?

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Outline

• “Mainstream” interpretation of the crisis
• Our interpretation: financial fragility
• Financial balances and sustainable growth
• The role of income distribution
• Policies and strategies for growth
The “New consensus”

As noted by Blanchard in 2008, (mainstream) macroeconomics had achieved a “consensus” on which model to use to study the economy, and project its growth path.

The consensus was based on assuming

1. rational behavior of forward-looking individuals;
2. the idea that markets are not perfect, and therefore prices adjust slowly, and
3. that if monetary policy followed a simple (Taylor) rule to determine interest rates, the economy would grow following potential output.
The “New Consensus”

Price stickiness in a new classical model

\[ x_t = E_t x_{t+1} - \sigma (i_t - E_t \pi_{t+1} - r^*_t) \]

\[ \pi_t = \beta E_t \pi_{t+1} + \kappa x_t \]

\[ i_t = i^*_t + \gamma \pi (\pi_t - \pi^*) + \gamma_x (x_t - x^*) \]

\( x \) : output gap
\( \pi \) : inflation
\( i \) : nominal interest rate

*From Tamborini et al. (2009)*
The crisis according to the “New consensus”

A crisis can occur, in this framework, either because of an unexpected shock (usually modelled as a supply-side or technology shock), or because of policy failure (i.e. failure to adopt the Taylor rule). Accordingly, mainstream interpretation of the recession focused

1. on the fact that the recession was triggered by an extraordinary shock
2. on policy failures (“there is clearly evidence that there were monetary excesses during the period leading up to the housing boom.”, Taylor, 2009, p.3)
3. failure of the theoretical and empirical models to capture recent evolution of financial markets (Trento, 2009)
What to do, according to the “New consensus”

• Regulate financial markets
• Provide liquidity to financial markets
• (possibly) change the governance of financial institutions
• (possibly) sustain aggregate demand temporarily through government intervention
A model which helped us predict the crisis

The model in use at the Levy Economics Institute, developed by Godley et al., is grounded in a different approach, and it has had a good performance in helping us predict the crisis.

The approach we adopt is known as “Stock-flow consistent” and “Post-Keynesian”, and is grounded in the ideas of Keynes, Tobin, Godley and, more recently, Lavoie.
Seven unsustainable processes (1999)

Godley (1999) pointed to seven unsustainable processes which could harm U.S. growth prospects. In our view, a longer, deeper crisis was averted in 2001, without addressing the underlying growth problems, so that the next (current!) crisis was more severe. It follows that if the remaining imbalances are not addressed by appropriate policy measures, resuming growth under the same demand patterns will imply further instability.

In our view, therefore, the current crisis is not due to financial markets or monetary policy – which have indeed acted as a powerful multiplier – but can and should be tracked down to real markets.
No one saw this coming?

Some critics may argue against a prediction which started in 1999, on the ground of the “stopped clock syndrome”.

Bezemer (forthcoming) “No One Saw This Coming” reviews the relevant literature and finds that only 12 economists (and their teams) anticipated the recession

“...in an extensive search of the relevant literature...Only analysts were included who provide some account on how they arrived at their conclusions. Second, the analysts included went beyond predicting a real estate crisis, also making the link to real-sector recessionary implications, including an analytical account of those links. Third, the actual prediction must have been made by the analyst and available in the public domain, rather than being asserted by others. Finally, the prediction had to have some timing attached to it.”

The 12 economists are Dean Baker; Wynne Godley; Fred Harrison; Michael Hudson; Eric Janszen; Stephen Keen; J.B. Madsen & J.K. Sorensen; Kurt Richebacher; Nouriel Roubini; Peter Schiff; Robert Shiller.
Relevance of flow of funds

“Surveying these assessments and forecasts, there appears to be a set of interrelated elements central and common to the contrarians’ thinking. This comprises a concern with financial assets as distinct from real-sector assets, with the credit flows that finance both forms of wealth, with the debt growth accompanying growth in financial wealth, and with the accounting relation between the financial and real economy” (Bezemer, p.9)
Seven unsustainable processes, plus one…

1. the fall in private saving into ever deeper negative territory;
2. the rise in the flow of net lending to the private sector;
3. the rise in the growth rate of the real money stock;
4. the rise in asset prices at a rate that far exceeds the growth of profits (or of GDP);
5. [the rise in the budget surplus;]
6. the rise in the current account deficit;
7. the increase in the United States’ net foreign indebtedness relative to GDP.

(Godley 1999:2)

8. the shift in the distribution of income (Zezza, 2007; 2008)
SFC models, or “accounting models”

Five of the processes above are related to the analysis of financial balances, which gives clues to where the economy is going in the medium term.

From national accounting it is easy to show that financial balances are linked through the identity between **saving and investment**, or

\[(Sh - Ir) + (P - Ik - In) = GD + BP\]

Where \(Sh\) = household saving; \(Ir\) = residential investment; \(P\) = undistributed profits; \(Ik\) = non-residential investment; \(In\) = change in inventories; \(GD\) = government deficit; \(BP\) = balance of payments on current account
#1. The fall in private sector saving

![Diagram of private sector saving and investment from 1960 to 2010. The black line represents saving, and the red line represents net investment. The source is NIPA, FoF.](#)
#2. The rise in lending

Private sector: Borrowing and Debt

% of GDP

Source: Federal Reserve, B.E.A.
More detail: the personal sector

Personal saving, borrowing, investment and debt

% of Personal disposable income

- Saving rate
- Residential investment
- Net change in mortgages
- Debt outstanding

Source: NIPA, FoF
#6&7. External imbalance

U.S. net foreign assets and external balance

- Net foreign assets at historical cost (rhs)
- Net foreign assets at market value
- U.S. dollar nominal exchange rate index (rhs)

 [% of GDP]

Years: 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 00, 02, 04, 06, 08

Gennaro Zezza – Minsky Summer Conference, Levy Economics Institute, 27/6/2010 - 16/28
#3. Monetary policy

Real growth in M1 & M2, real interest rate

Source: BEA, Federal Reserve

Gennaro Zezza – Minsky Summer Conference, Levy Economics Institute, 27/6/2010 - 17/28
Some commentators put the blame on monetary policy for keeping interest rates too low, and therefore allowing an ever increasing level of debt.

In our view, low interest rates helped deferred the crisis. As interest rates went down and debt went up, household debt burden stayed roughly constant relative to income. As interest rates started to rise again for fear of inflation, the debt burden increased and this gave a timing for bursting the bubble in the real estate market.

However, as we have shown, the underlying process of rising debt/income ratios started much earlier.
#4. The asset price bubbles

![Graph showing the difference between growth in asset prices and growth in GDP](image)

- S&P 500 index - l.h.s.
- Price of housing - r.h.s.
Our interpretation of the crisis

For the U.S., it became clear, in the second half of the 1990s, that the private sector had started to reduce systematically its NAFA, getting into debt. The “new economy” period could then be interpreted as debt-fuelled growth, as suggested in Godley (1999), implying an ever-growing current account deficit (for stable fiscal policy).

The current financial crisis could have started in 2001, with the burst of the stock market bubble. However, the drop in private sector borrowing, and the consequent recession, was countered by an expansionary fiscal policy which filled the gap in aggregate demand, but kept household debt (and foreign debt) growing. At the time Godley started to insist on the need to take policy actions to counter the foreign imbalance.
Why “excessive” consumption?

The change in NAFA, or excessive consumption, remains to be explained. In a theoretical SFC model (Zezza, 2007) we have shown that, in a post-Keynesian framework with two household groups with different propensity to save, and proper modeling of the housing market and financial markets – in the face of a changing distribution of income – a drop in NAFA can only be explained if relative consumption matters.

This “keep up with the Joneses” approach has gained more ground (Stiglitz, 2008; Cynamon-Fazzari, 2008; Barba – Pivetti, 2008)

The role of the distribution of income on aggregate demand was also noted by Galbraith, Krugman, Skidelsky among others.
#8. Distribution of income

Income limits for each fifth and top 5% of households

Source: census.gov
Effects of changes to income distribution

An increase in the share of income and wealth going to the richest quintile should imply an increase in the propensity to save. Unless the lower quintiles try to keep up. It has been suggested that – on the face of stagnant real wages – keeping up has implied (or required) an increased female participation to the labor force first, an increase in working time next, and finally an increase in borrowing.
Where we are now…

Real disposable income and wages

annual percent growth rate

Source: B.E.A.
Where we may be going

U.S. Main Sector Balances and Unemployment

- Government deficit - rhs
- Private S. Investment - Saving - rhs
- Unemployment rate - lhs
Where we may be going

Private sector debt

% of GDP


Households Non financial business
Price indexes for equities and commodities
1995m1=100

- S&P 500 index - lhs
- IMF non-oil commodity price index - rhs
Prospects

• Recent figures for employment show that unemployment is stable, with employment rising mainly in the public sector
• The U.S. dollar is following financial markets, rather than trade balance, and growth in China and India has little impact on U.S. exports.
• Domestic investment does not appear to be increasing, yet
• With stable real wages, households will be reluctant to resume borrowing at the pace they did before the crisis.
• Therefore no components of aggregate demand – other than government expenditure – seem to be recovering
Conclusions and policies

• Sustainable growth will return when domestic investment is restored

• In addition, a shift in the functional (and personal) distribution of income will be needed to guarantee that household real disposable income grows in line with domestic output

• Meanwhile, persistent government deficits are required to fill the gap in aggregate demand.
Conclusions and policies

• As long as aggregate demand is sustained through fiscal policy, there will be an impact on external balances

• In the U.S., oil is now very relevant for the external balance, so that policies aimed at oil substitutions should be effective both for growth and for reducing the external deficit

• For Europe, export-led growth strategies will generate or increase imbalances

• Early attempts to move government deficits within the Maastricht criteria will make the recession deeper, and longer