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Understanding financial crisis through accounting models

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Abstract

This paper presents evidence that accounting (or flow-of-funds) macroeconomic models helped anticipate the credit crisis and economic recession. Equilibrium models ubiquitous in mainstream policy and research did not. This study traces the intellectual pedigrees of the accounting approach as an alternative to neo-classical economics, and the post-war rise and decline of flow-of-funds models in policy use. It includes contemporary case studies of both types of models, and considers why the accounting approach has remained outside mainstream economics. It provides constructive recommendations on revising methods of financial stability assessment and advocates an 'accounting of economics'.

Introduction

On 9 December 2008 Glenn Stevens, Governor of the Reserve Bank of Australia commented on the "international financial turmoil through which we have lived over the past almost year and a half, and the intensity of the events since mid September this year". He went on to assert: "I do not know anyone who predicted this course of events. This should give us cause to reflect on how hard a job it is to make genuinely useful forecasts. What we have seen is truly a 'tail' outcome – the kind of outcome that the routine forecasting process never predicts. But it has occurred, it has implications, and so we must reflect on it" (RBA, 2008). This idea that 'no one saw this coming' has been a common view from the very beginning of the credit crisis. And yet it would be premature to ask "Why did nobody notice?", as Queen Elizabeth II did in November 2008 (Pierce, 2008). It is not difficult to find predictions of a credit crisis and recession in the years leading up to it – not only by pundits, but by serious analysts from the world of academia, policy institutes, think tanks and finance. The point of this paper is that there is something to be learned from this observation: "we must reflect on it" in the words of Governor Stevens. The credit crisis and ensuing recession may be viewed as a 'natural experiment' in the validity of economic models.

Those models that failed to foresee something this momentous may need changing in one way or another. And the change is likely to come from those models (if they exist) which did lead their users to anticipate instability.

There is an immediate link between accounting and the ability of some economists to predict the crisis. Previewing the results, 'accounting' (or flow-of-funds) models of the economy turn out to be the shared mindset of a large subset of those analysts who worried about a credit-cum-debt crisis followed by recession, before the policy and academic establishment did. They are 'accounting' models in the sense that they represent households', firms' and governments' balance sheets and their interrelations, and that accounting identities play a major role in the model structure and outcomes. If society's wealth and debt levels reflected in balance sheets are among the determinants of its financial stability and of the sustainability of its growth, then such models are likely to timely signal threats of instability. This does not imply that balance sheet data are more accurate or objective than other data, or that accounting professionals are inherently superior in analytical skills or work ethic than macroeconomic model builders. But it does mean that models that exclude balance sheets – such as the general equilibrium models widely used in academic and Central Bank analyses – are prone to 'Type II errors' of false negatives, rejecting the possibility of crisis when in reality it is just months ahead.

With a few exceptions, this point seems to have been overlooked to date. When Krugman (2009) prominently asked 'How did economists get it so wrong'? he gave a number of reasons, but did not discuss – other than in a passing mention – those economists who did *not* get it wrong (Galbraith, 2009). In the accountants and auditors community, the dominant response in the wake of the credit crisis has been to re-examine accounting regulations such as 'fair-value' accounting (Boyer, 2007, Laux and Leuz, in press), mark-to-market accounting, lax auditing practices, and the like; or to ask how accounting models can reflect what has happened (Roberts and Jones, in press). It is important to stress from the outset that the present paper aims to make an entirely different point. It is a response to the call by Arnold (2009) in this Journal to examine "our failure to understand … the macroeconomic and political environment in which accounting operates" (also, Hopwood 2009). One key to understanding policy makers' environment is the neglect of balance sheet effects in policy advice. This paper therefore draws attention to the 'accounting approach' within economic analysis underpinning flow-of-funds models, where balance sheets effects are central. It also attempts to explain the neglect of the 'accounting approach' by policy makers.

Section snippets

'No one saw this coming'

The trigger to the credit crisis turned out to be the US real estate market and its derivative products, but the broader trend leading up to it was financial globalization, and the speculation and opacity that this allowed which, in turn, was possible largely due to financial deregulation. Indeed, as Reinhart and Rogoff (2009) show in a survey of financial crises in 66 countries over eight centuries, deregulation is among the best predictors of financial crisis. But with a few exceptions,…

The accounting approach in economics: theoretical pedigree

In this “Section” trace the historical pedigree of the contemporary accounting approach. Analysts located within this strand may be found throughout the history of economic thought both in Britain, on the Continent and (later) in the US. For one example, Skaggs (2003: p. 377) discusses the Scottish economist Henry Dunning Macleod (1821–1902) as a representative, within the British tradition, of the accounting approach. Skaggs identified as critical elements linking these analysts their…

The Post-Keynesian accounting approach and mainstream economics

Kalecki, Minsky and Tobin were major inspirers of the accounting approach today, since the 1970s principally associated with ‘Post-Keynesian’ economics. This strand of economics aims to build on the foundation Keynes and his Cambridge collaborators laid, distinguishing itself from ‘New-Keynesian’ mainstream macroeconomics, which is ‘Keynesian’ only in that it allows for temporary disequilibrium caused by ‘sticky’ wages. Post-Keynesians see this simplification as a subversion of Keynes’…

Accounting models

This section and the next discuss which elements of flow-of-funds models are central in understanding the determinants of an economy’s growth and its likelihood of entering into a debt-driven recession. The contemporary accounting approach is described in Godley and Lavoie (2007b), a macroeconomics textbook along Post-Keynesian lines. Godley introduces what he describes as an ‘accounting framework’ (p. 18) to macroeconomics by writing that the aspiration is to “describe the evolution of the…

Debt crisis anticipations by accounting model users

Friedman (2009) notes that “what is sorely missing in the discussion is attention to what function the financial system is supposed to perform in the economy and how well it has been doing it”. Using an accounting framework helps to redress this omission. Keen (2010) demonstrated in detail how a flow-of-funds model based on Minsky, 1978, Minsky, 1980 theory leads to this and other assessments. Godley and others could project that because of the debt growing in parallel with tradable…

Equilibrium models

The alternative to the accounting models just reviewed will be referred to as ‘equilibrium’ models, after their most important trait. Wealth, debt, and the flow-of-funds are absent from these models. These are ‘mainstream‘ models in the sense that they rest on neo-classical theory and that all official macroeconomic forecasts, policy analyses and scenario building are based on equilibrium models (or on rules of thumb…

Summary, reflections and conclusions

This paper made the point that an ‘accounting approach’ to understanding the macro economy is fruitful. The argument was developed with reference to the discrepancy between official assessments and reality before and during the 2007–2008 credit crisis and ensuing recession. This study documented the sense of surprise at the credit crisis among academics and policymakers, giving rise to the view that ‘no one saw this coming’. It also reports analyses by some of those professional and academic…

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References (73)

P.J. Arnold
Global financial crisis: The challenge to accounting research
Accounting, Organizations and Society (2009)

G. Akerlof *et al.*
Animal spirits
(2009)

D. Baker
The run-up in home prices: Is it real or is it another bubble?
(2002)

D. Baker *et al.*
Asset returns and economic growth
Brookings Papers on Economic Activity (2005)

W. Baumol
Say's (at least) eight laws, or what say and James Mill may really have meant
Economica (1977)

BIS
BIS 74th annual report
(2004)

A. Blinder *et al.*
Money, credit constraints, and economic activity
American Economic Review (1983)

Borio, C. (2004). Market distress and vanishing liquidity: Anatomy and policy options. Bank for International...

Borio, C., & Lowe, P. (2004). Securing sustainable price stability: Should credit come back from the wilderness? BIS...

R. Boyer
Assessing the impact of fair value upon financial crisis
Socio-Economic Review (2007)

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