

Book Review

Macroeconomics and Financial Crises: Bound Together by Information Dynamics.

By G.B. Gorton and G.L. Ordoñez

Princeton University Press, 2023.

The leading argument throughout *Macroeconomics and Financial Crises* by Gorton and Ordoñez (2023) is the fact that financial crises are an endogenous and inherent feature of the economy. Since, according to the authors, mathematical models do not yet live up to this claim, the book at hand shall be considered as a starting point within this new research endeavour. According to Gorton and Ordoñez, financial crises are all tied together by three underlying conditions namely (1) credit booms, (2) technological change and (3) information dynamics. Credit booms always precede financial crises while not all credit booms actually end up in a crisis. Technological change in the form of an exogenous production shock induces the boom in credit (and implicitly the economy) and is measured by total factor productivity (TFP) and labour productivity (LP). Information dynamics change over the course of a business cycle from information-insensitive (stable) periods to information-sensitive (unstable) periods. An argument is made that under information-sensitive regimes lenders inspect collateral more closely which could lead to financial crisis. Under information-insensitive regimes the opposite is true.

Leaning on Real Business Cycle theory (RBC) the authors create an overlapping generations (OLG) model that is populated by households which are the lenders, and firms, which are the borrowers. An exogenous technology shock that is introduced into the model leads to an initial improvement in TFP. The increase in TFP also increases the probability of success for firms' projects which results in information-insensitive debt where lenders do not investigate the underlying collateral (land). If the increase in TFP can be retained, the economy experiences a good (credit) boom without a crisis. However, if TFP declines, a crisis can be expected (bad boom). Under the assumption of decreasing marginal returns (average production declines as more firms enter the market), TFP declines. In addition, and over the course of (bad) credit booms the information on collateral has due to information-insensitivity also declined. Taken together, those two elements reduce the probability of successful firm projects. Hence, the incentive of lenders to examine collateral increases even if information acquisition is costly. Therefore, the information regime within the economy shifts from information-insensitive to information-sensitive where firms with bad collateral are unable to obtain further loans. Once a wave of collateral examinations takes place a financial crisis is to follow. As such, financial crises are not caused by an exogenous shock. Instead, they are endogenous information events signalling a sudden shift from an information-

insensitive to information-sensitive regime. Leaning on the efficient market hypothesis (EMH) and under the inclusion of stock markets the authors then assert that such markets could relax the pressures of information acquisition inducing crises. Information about (weak) firms is conveyed in stock market prices. This information is transmitted to credit markets which in turn slows down credit growth potentially avoiding financial crises. Hence, stock markets are to be understood as automatic macroprudential tools. The role of the government is mostly reduced to central bank intervention aimed at avoiding bank runs. An argument is made that since crises are information events, secrecy in central bank intervention via lending facilities (e.g. which banks participate) will limit the social cost of such interventions by mimicking information-insensitive regimes.

While the intentions of the authors are good, the book fails to deliver on its promise. All the fallacies that made previous explanations tied to RBC (and adjunct) theory(ies) incapable of accounting for economic crisis episodes are retained here. The equilibrium assumption, and tied to that the need for exogenous shocks, the classical dichotomy and methodological individualism all are preserved, whereas active financial markets, endogenous money creation and the resulting debt obligations, real time and space continue to be neglected (for example Arnsperger & Varoufakis, 2006; Dymski & Shabani, 2017; Kuehnlentz et al., 2022). Yet, to understand (financial) crises within capitalist economies those theoretical considerations are important. The Post-Keynesian approach in the Minskian tradition where financial markets are anything but automatic stabilizers, where endogenous money creation is important and where stocks and flows on balance sheets matter appears to be a much better starting point than the one employed here (see for example Minsky, 2008). At the same time, and from a methodological point of view, it is wrong to say that no economic models exist that can create endogenous fluctuations and crises. While the employed model here continues to rely on external shocks to “run”, models based on complexity sciences have long solved this issue. These models have been around since at least the 1990s and have, with increasing computer capacity become ever more sophisticated and popular. Complexity models can now be found in both the orthodox (see for example Arthur, 2021) neoclassical economics assumes perfectly rational agents (firms, consumers, investors as well as in the heterodox (see for example Keen, 2013) 1995 sphere. Hence, if the aim is to truly understand and then attempt to model endogenous financial and economic crises, this book is unfortunately not fit for purpose and one has to look elsewhere.

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