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Financial Crises by Franklin Allen and Douglas Gale, The International Library of Critical Writings in Economics, An Elgar Reference Collection, Cheltenham, UK, Northampton, USA, 2008, ISBN: 978 1 84376 424 3, pages 579, price £ 150

The genesis of a financial crisis, its consequent impact and the contagion to other regions are issues that have been in the forefront since the inception of the sub-prime crisis in the United States. The consequences of the crisis have no longer remained confined to any particular sector/economy. The contagion has traversed from the financial to the real sector, from the United States to the whole of Europe and has also affected the emerging economies. Even countries with good fundamentals have not managed to escape the contagion. The decoupling theory has also failed in today's globalised world. This has necessitated an analysis of the current crisis in terms of its origin and characteristics as well as the need to explore where does the present crisis stand in terms of the different types of crisis that have hit the world so far against the background of the available literature on financial crisis. The book on 'Financial Crises' by Allen and Gale is a good reading to start with. This book provides an excellent review of the literature on financial crises. It presents a collection of articles by the authors of the book as well as by other renowned economists on issues related to financial crises.

The book has undertaken the review of the available literature from various aspects: the historical perspective of crises, the empirical studies undertaken, the nature of crises *viz.*, banking crises, currency crises and the process of contagion. While looking at crises from a historical perspective, the period since 1880 has generally been divided into four periods: (i) The Gold Standard Era – 1880-1913, (ii) The Interwar Years – 1919-1939, (iii) The Bretton Woods Period – 1945-1971and (iv) The Recent Period – 1973-1997. Some of the general observations made (Bordo *et al*, 2001) are that Gold Standard

Era has been the most benign of the four periods even though capital markets were globalised then as now. Banking crises did occur in this period, but they were infrequent. Currency crises and twin crises also occurred much less frequently than in subsequent periods. During the Bretton Woods Period, countries either regulated bank balance sheets to prevent them from taking on much risk or achieved the same aim through direct ownership of banks. These measures were successful in suppressing banking crises. Banking crises and currency crises were widespread in the Inter war years. The recent period also appears more crisis-prone than any other period except for the Interwar Years. Over the last 120 years, crises have been followed by economic downturns lasting from two to three years and costing 5 to 10 per cent of GDP, on average. Twin crises are associated with particularly large output losses. Recessions that coincide with crises are more severe than recessions that do not coincide with crises.

Looking at the causes of the crises, two broad approaches have been adopted by economists. First, well expounded by Kindleberger (1978), is that crises occur spontaneously as the result of mob psychology or panic. If everyone expects a crisis and acts as if one is about to occur, then the crisis becomes a self-fulfilling prophecy and *vice versa*. The second view asserts that crises are an intrinsic part of the business cycle and result from shocks to economic fundamentals (Mitchell, 1941). When the economy goes into a recession or depression, asset returns are expected to fall. Borrowers have difficulty repaying loans. Depositors, anticipating an increase in defaults or non-performing loans, try to protect their wealth by withdrawing banks deposits. Banks are caught between the illiquidity of their assets of their liabilities and may become insolvent. This results in panic though actual cause is different. Empirical evidence on the cause of crises is mixed. While some support the panic view (Friedman and Schwarz, 1963), many counter it (Calomiris and Gorton, 1991 Calomiris and Mason, 2003).

Recognising that financial crises impose heavy costs on the real economy, empirical studies have tried to estimate the average present value of losses in a number of different ways. The mean loss empirically estimated has varied between 63 percent and 302 per cent of the value of real per capita GDP in the year before the crisis starts (Boyd, Kwak and Smith, 2005). The range of losses has also been large with the loss, for example, amounting to almost 1041 per cent of the value of real output the year before the crisis of 1997 in Hongkong.

The relationship between banking crises and currency crises has also been explored in number of empirical studies (Kaminsky and Reinhart, 1999). It has been observed that in the 1970s, when financial systems were highly regulated, currency crises did not coincide with banking crises. Post financial liberalisation of the 1980s, currency crises and banking crises have become intertwined. Although banking crises typically precede currency crises, the common cause of both is usually a fall in asset values caused by a recession or weakness in the economy. Often the crisis is part of a boom-bust cycle that follows financial liberalisation.

The authors then move on to give a detailed analysis of the literature on banking crises and currency crises separately. The first models of banking crises developed assume a continuum of consumers with random demand for liquidity (Bryant, 1980; Diamond and Dybvig 1983). Optimal insurance against these liquidity shocks can be provided by deposit contracts that promise depositors a fixed payment depending on whether they withdraw early or late. The deposit insurance model was, however, considered sub-optimal if depositors have access to capital markets (Cone, 1983; Jacklin, 1987) or if there are regulatory restrictions (Wallace, 1988). An article by Calomiris and Kahn, 1991 listed in the book provides justification for demand deposits by showing that they provide depositors with an incentive to monitor the viability of the bank. In case of any problem, the informed depositors out of panic will withdraw their money forcing the bank to liquidate all of its assets. Hence, the bank has to always maintain the value of its assets and avoid taking excessive risks. In contrast to the pure panic based models, literature has also focused on bank runs that are a natural outgrowth of the business cycle (Allen and Gale, 1998).

The book also lists out a couple of articles illustrating the global games approach in the context of currency crises to obtain a unique equilibrium. The panic-based and fundamental-based approaches have been linked using the global games approach to show how the probability of a crisis depends on the fundamentals (Morris and Shin, 2003). Rochet and Vives, 2004 use the unique equilibrium resulting from their global games approach to undertake policy analysis. They consider the role of *ex ante* regulation of solvency and liquidity ratios and *ex post* provision of liquidity by the central bank. The global games approach has also been used to show how the probability of panic based runs can be made endogenous and related to the parameters of the banking contract (Goldstein and Pausner, 2005).

The normative aspects of banking crises have been captured through a general equilibrium framework, objective being to investigate the welfare properties of financial systems and to discover conditions under which regulation might improve the allocation of resources (Allen and Gale, 2004). An interesting feature of the Allen-Gale framework is that it explicitly models the interaction of banks and markets. Financial institutions are the main players in financial markets, which allow banks and intermediaries to share risks and liquidity. Individuals do not have direct access to markets; instead, they access markets indirectly by investing in intermediaries. Financial intermediaries and markets play important but distinct roles in the model. Intermediaries provide consumers with insurance against idiosyncratic liquidity shocks. Markets allow financial intermediaries and their depositors to share risks from aggregate liquidity and asset return shocks.

The book also explores the relationship between banking crises and asset price bubbles (Allen and Gale, 2000). Financial liberalization, by expanding the volume of credit and creating uncertainty about the future path of credit expansion, at times lead to a bubble in asset prices. When the bubble bursts, either because returns are low or because the central bank tightens credit, banks are put under severe strain. While many of their liabilities are fixed their assets fall in value. Depositors and other claimants may decide to withdraw their funds in anticipation of problems to come resulting in bank runs. The book also has one paper by Diamond and Rajan, 2006 that takes into account the role of money into the models of banking crises and further investigates whether monetary policy can help avert bank failures. The model developed in this paper essentially deals with the role of banks in the transmission of monetary policy.

Apart from banking crises, the book has also separately to analysed the currency crises to explain the problems experienced by a number of Latin American countries in the 1970s and early 1980s. Not too long ago, currency crises were generally being explained in terms of a balance of payments crises model (Krugman 1979 and Flood and Garber 1984) that shows that fiscal imbalances coupled with a fixed exchange rate leads to a currency crisis. With any speculative attack, Government finds it difficult to defend the exchange rate and currency depreciates. But this first generation view has fallen out of fashion because in many crises the crucial fiscal disequilibria were absent. And, as Obstfeld [1994] has argued, currency crises have sometimes occurred even though central banks had more than enough resources to prevent them, as in the Exchange Rate Mechanism crisis of 1992.

Obstfeld (1996) put forward a second generation view in which central banks may decide to abandon an exchange rate peg when the unemployment costs of defending it become too large. This new perspective implied that crises could be driven by self-fulfilling expectations, since the costs of defending the peg may themselves depend on anticipations that the peg will be maintained. But Obstfeld's emphasis on mounting unemployment and domestic recession, while appropriate for the ERM 1992 crisis, was at odds with the facts in Mexico in 1994 and East Asia in 1997. Asian countries, in particular, were growing quickly until shortly before their financial meltdown. Instead of fiscal imbalances or weakness in real activity, recent crises in emerging markets have featured troubled local financial institutions and sudden reversals of short-term international capital flows. In most cases, the currency crashed along with the financial system. This suggests that a third generation model of crises should assign a key role to financial structure and financial institutions.

Having discussed the nature of financial crisis, the book has also touched upon the issue of financial contagion, the process by which a shock in one part of the financial system spreads to other parts through a series of 'linkages'. This is a very important aspect of financial crises in the current juncture considering the increasingly enhanced linkages, both trade and capital, across nations. The channels of contagion discussed in the book include interbank claims and flow of information. A fall in prices on one market may be interpreted as a negative signal about fundamentals. If these fundamentals are common to other markets, the expected returns and hence prices on those markets will also fall. Similarly, if one currency depreciates, other countries with common fundamentals may find that their currency also depreciates. Besides, considering that it is optimal for banks to hold deposits in banks in other regions or sectors in order to provide liquidity if demand is unusually high, when one region suffers a banking crisis, the other regions suffer a loss because their claims on banks in the troubled region fall in value. If this spillover effect is strong enough, it causes a crisis in adjacent regions. The crisis gets stronger as it passes from region to region and becomes a contagion (Allen and Gale, 2000; Eisenberg and Noe, 2001). In addition, multi-asset, rational expectations models have also been used to show how macroeconomic risk factors and country-specific asymmetric information can combine to produce contagion (Kodres and Pritsker, 2002).

On the whole, the book provides a very comprehensive and interesting review of literature, both theoretical and empirical, on the origin and nature of crisis and the contagion. The book has not really touched upon issues related to the impact of a crisis and the lessons to be drawn to avert a future crisis. Issues related to the current sub-prime crisis are also not covered in this book except in the introduction. Nevertheless, the theme of the book is highly topical and relevant in the present context. It presents a very vivid picture of the variety of crises that have hit the world during the period 1880-1997 and thus, lays the framework for analysing the 2007-08 crisis. This well-timed book will find wide readership among policy makers and researchers.

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