Kindleberger and the Lender of Last Resort

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C.P. Kindleberger 1996 [1978]. *Manias, Panics and Crashes*. 3rd ed. Macmillan. London. Pp xvii + 263. ISBN 0-333-67039 (HB), ISBN 0-333-67040-X (PB).

The first edition of Charles P. Kindleberger's seminal work *Manias, Panics and Crashes* was published in 1978. This timely volume, written with great wisdom and wit, appeared soon after the end of that peculiarly lengthy period of financial stability which ran from the conclusion of the Second World War to the final stages of the Vietnam War. The first economists to read this edition were consequently still reeling from the fringe banking crisis in England, the Franklin National Bank 'bail out' in the United States, the dramatic collapse of Bankhaus I.D. Herstatt in West Germany, and the more general financial distress associated with the early stages of the Great Inflation. With these background disturbances softening the intellectual ground, Kindleberger was able to shake his colleagues' faith in their banal and bastardised interpretations of Keynesian economics, and to help resurrect that rich unorthodox tradition in which financial relationships are made the cornerstone of economic analysis and the capitalist production process is characterised as a dynamic, inherently unstable, enterprise. His research subsequently became partly responsible for a sudden increase in interest in financial manias, panics and revulsions which has yet to subside. As Kindleberger himself states, his work on financial panics "coincided with what may prove to be a bubble in the economic literature on financial crises" (1996:x). Of course, not all of the literature which ensued reflected Kindleberger's unorthodox interpretation of financial crises, and, as time has passed, an ever-increasing number of economists have chosen to worship the classical re-birth, and thereby to deny the very existence of manias, to recast financial instability as a rational (and sometimes even efficient) process, and, ultimately, to impose monetary and financial neutrality on their models. It is nevertheless still of great credit to Kindleberger that these orthodox economists, while electing to worship an alternative religion, find it necessary to cite and politely criticise his research. In this sense he is unusual amongst that curious alliance of 'heretical' Post-Keynesian, Institutionalist, Marxist and 'literary' economists who, as a rule, are rudely ignored by orthodox economists.

The theoretical core of all three editions of *Manias, Panics and Crashes* is based upon the late Hyman Minsky's financial instability hypothesis, and hence indirectly on a series of long-neglected models of financial dynamics which had earlier reached a peak of theoretical refinement with the writings of Knut Wicksell, Irving Fisher, and, according to Minsky's own controversial exegeses, John Maynard Keynes. Following this tradition, Kindleberger depicts the capitalist economy as possessing a debt structure which alters in fragility over the financial cycle. This involves three main phases of variable length and amplitude. Initially, some exogenous force, or 'displacement', changes profit expectations for the better, and therefore induces a mild upturn in economic activity by encouraging deficit units to issue a larger volume of debt instruments in return for endogenously-created credit. After a period of time, this upturn mutates into a speculative boom or bubble, which, in the language of an earlier age, entails 'mania', 'euphoria' or 'overtrading'. Specifically, those physical commodities and financial instruments which are in short supply increase in price, create still more profit opportunities, and sooner or later encourage deficit units to make gearing decisions based on over-sanguine expectations or with an eye to obtaining funds for the sole purpose of buying for resale. This speculative boom itself eventually bursts when either the unrealistic expectations of some agents are not fulfilled or a few insiders simply decide to realise their profits. The financial players who remain in the market then suddenly realise that there is insufficient demand to fuel the rising prices, and hence participate in a panic or 'revulsion', a rush to liquidity and 'discredit' (the cessation of lending on the basis of collateral). Although Kindleberger's analysis is not replete with references to Minsky's famous notions of hedge, speculative and ponzi units, nor reinforced by the now common diagrammatic and algebraic representations of the associated theoretical relationships, he is entirely correct to insist that it amounts to a stylised Minsky model. If he was less modest, Kindleberger could in fact further claim that his highly readable account of the financial cycle has done just as much to disseminate Minsky's ideas as Minsky's own writings.

Kindleberger deploys this model of the financial cycle to recreate many of the countless financial debacles which have occurred throughout history. Indeed, following a brief delineation of the aforementioned theoretical framework, the predominant part of the book consists of reconstructions of historical events from before Tulipmania to beyond the second Baring crisis. The main differences between the third and second editions, and, for that matter, between the second and first editions, of *Manias, Panics and Crashes* arise in this part of the book, with each successive revision including additional historical reconstructions of both earlier and more recent vintage. Moving forward in time from the date of the first edition in 1978, Kindleberger has included appraisals of the Penn Square failure, the 'bail out' of the Continental Illinois National Bank, the Hunts' attempt to corner the silver market, the Black Monday of 1987, the bursting of the Japanese bubble in 1990, and the foreign exchange attack on the pound in 1992. Moving backwards in time from 1978, he has added or expanded upon appraisals of historical episodes ranging from the fringe banking crisis of the early 1970s to the *Kipper- und Wipperzeit* of the seventeenth century. Although Kindleberger also uses the successive editions to reply to his orthodox critics and to elaborate on his belief that irrational manias indeed exist, these new features, though providing the student with a sound review of the recent literature, are of secondary interest compared to the additional historical reconstructions. It should also be emphasised that the historical episodes of all three editions are not merely reconstructed in the light of the stylised Minsky model. They are also employed as protocol statements to test and, ultimately, to verify this model. This explains why the historical crises are not presented in chronological order or as complete 'stories', but are, instead, repeatedly drawn upon in different chapters to confront various aspects of Kindleberger's analytical depiction of the financial cycle.

From this perspective, *Manias, Panics and Crashes* can be interpreted as an excellent illustration of the comparative form of historical economics in which numerous reconstructed historical episodes are employed to corroborate an analytical model, which itself has been developed or adopted under the careful eye of someone who has already immersed themselves in the historical evidence. It is, in fact, a manifestation of that form of historical economics which became popular amongst English economists towards the end of the nineteenth century, and which eventually helped settle some of the more important aspects of the long-winded and acrimonious English *Methodenstreit*. It represents the middle ground between the bastardised Baconian method of accumulating meaningless historical facts, and the narrow version of the hypothetical-deductive method of repeatedly attempting to verify a highly abstract hypothesis which has little connection with the concrete world. Alfred Marshall, the great conciliator in the English *Methodenstreit*, endorsed and illuminated this middle course for both 'static' and 'historical' economic analysis by employing his now famous 'ladder' analogy. Specifically, he argued that the scientific process entails "a passage upwards from particulars to general propositions and ideas; and a passage downwards from them to other particulars" (1897:298). Kindleberger himself represents his work as historical economics (but without tracing its lineage), and, like his nineteenth century counterparts, he adds that the history of economic thought is essential for its success (1996:5). He points out that the limited primary material on financial crises which resides in the archives must be supplemented by the secondary historical commentaries, together with the analytical models contained in these commentaries, if a full and well-rounded appraisal of an historical event is to be constructed. Indeed, historians of economic thought may well learn from the way in which Kindleberger marshals the work of Joplin, Overstone, Sprague and Bagehot, to name but a few, for practical ends, and they could do worse than adopt his research as a template for making their sub-discipline more relevant and topical.

This historical method of analysing an economic problem is now unfortunately unfashionable, especially compared to the increasingly popular competing approaches of econometrics, mathematical economics and the 'new economic history'. Kindleberger nevertheless explicitly rejects the need to bolster his historical conclusions by dovetailing the currently favoured empirical and mathematical models into his historical sweep. He submits that this refusal is more a product of his comparative advantage in what is often derogatorily labelled the 'literary' approach to economics than an outright rejection of modern 'quantitative' methods. He candidly admits, for example, that he received his training in the 1930s and that he possesses little understanding of either mathematical economics or econometrics (1996:ix, 5). Similar admissions about his technical limitations, together with a fuller description of his eclectic and largely untutored introduction to economics, may be found in his autobiography *The Life of an Economist* (1991). Yet, despite these honest self-appraisals and explanations for his actions, Kindleberger repeatedly displays a clear suspicion of some of the claims made by economists following the orthodox line. He is particularly bemused by some of the cliometric interpretations of financial history, likening them to the recent empirical 'demonstration' that France enjoyed the same per capita income as Britain at the time of the French Revolution, despite the fact that the researchers needed to draw upon incomplete data sets hundreds of years after the event and found it necessary to dismiss "the abundant evidence to the contrary of contemporary travellers as superficial" (1996:ix). At no time, of course, does Kindleberger dismiss out of hand an idea which he does not fully understand, and his years of experience force him to realise that very nearly every methodological approach sheds some light on an economic problem. It is, in fact, refreshing to read the work of an economist who is taking an unorthodox line which is not replete with shrill denunciations of the presently accepted techniques. However, for all this, his final word on his technical failings and attitude to the 'moderns' must be his tale of the concert-goer, who, on leaving the hall, said "I don't know much about modern music, but I know what I like" (ibid:ix).

Kindleberger orchestrates the 'music' of his liking with great success within *Manias, Panics and Crashes,* and my only serious criticism of this book is directed not so much at his historical scholarship but at certain policy recommendations constructed on the basis of this scholarship. The majority of Kindleberger's excursions into the 'art' of political economy reveal a degree of wisdom which one would expect from an ageing economist who has experienced the Great Depression, served in the Second World War, and held numerous civil service and academic posts over several decades. He states, for example, that markets "generally work, but sometimes they break down", and that the general rules "that the state should always intervene or that it should never intervene are both wrong" (1996: 2-3). Although some of these 'sage-like' pronouncements are admittedly in danger of ringing hollow, especially when taken out of context, Kindleberger's deft use of historical evidence invariably brings them to life and gives them new meaning. This same sort of scholarship and carefully-weighed judgment is less successfully brought to bear on his principal policy proposal, namely, that the best means by which to mitigate a financial panic is to provide liquid funds via a particular form of lender-of-last-resort facility. This recommendation, which I wish to criticise at length in the rest of this review, is developed in the final chapters of all three editions of *Manias, Panics and Crashes*. In these chapters, Kindleberger once again depicts financial crises as entailing the sale of illiquid financial instruments in return for more 'capital secure' liquid funds, and, because of the limited supply of liquid funds, massive asset deflation. This asset deflation reduces the quality of the asset portfolios held by banks and thereby encourages depositors, who are not sufficiently sophisticated to determine the true financial position of the institution they bank with, to withdraw their deposits and participate in a bank run. The bankers are subsequently forced to sell their illiquid assets at 'fire-sale' prices in order to fund the withdrawals of deposits, and hence exacerbate the more general asset deflation. Kindleberger maintains, and most would concur, that the central authorities supervising a lender-of-last-resort facility can moderate this asset deflation (and therefore reduce the myriad of associated transmission effects on the real economy) by providing liquid funds to the market agents (usually via the banks) in exchange for the illiquid assets, or with their illiquid assets as collateral. In addition to creating a floor to asset prices directly, such an action will reassure agents that there are sufficient liquid funds to enable very nearly everyone to substitute away from 'sound' illiquid assets at non-bankruptcy prices, and therefore reduce one of the central motivations for the asset sales causing the deflation (the fear of being the last person to make this substitution in the face of limited liquid funds).

It must be emphasised at the outset that I find no fault with a lender-of-last-resort facility which is correctly conceived. I only find fault with the way in which Kindleberger has designed his version of this facility to solve a certain moral hazard problem. Kindleberger recognises that a moral hazard problem arises with the introduction of an elastic supply of liquid funds. Bankers seek less liquid and riskier portfolios in the expectation of being able to exchange their unwanted illiquid assets for liquid funds in times of a crisis, and, for the same reason, depositors cease to demand a constraining risk premium from those bankers who choose to embark on such portfolios. The introduction of a lender-of-last-resort facility may therefore, ironically, make the debt structure of an economy more fragile than it would otherwise have been, and, for this reason, expose the system to even more dramatic financial crises. Kindleberger proposes to mitigate this moral hazard behaviour by the two-rule strategy of making the provision of lender-of-last-resort funds uncertain and dividing the responsibility for dispensing these funds amongst a small number of institutions (1996:155ff). According to Kindleberger, economic agents will baulk at undertaking 'moral hazard' behaviour once they are persuaded that liquid funds will not be forthcoming with any certainty, and they will be convinced that the provision of liquid funds will remain uncertain only once the responsibility for providing these funds is distributed amongst a small number of public institutions. Multiple responsibility is required because such an organisational structure disperses the public pressure for assistance across a number of decision-makers, and thereby increases the likelihood that these individuals will desist from satisfying the demands of lobbyists and continue in their quest to manufacture an atmosphere of uncertainty. Kindleberger correctly argues that this two-part strategy was (implicitly) adopted by mid-Victorian decision makers. The directors of the Bank of England created uncertainty by repeatedly denying that they were obliged to accommodate the market during liquidity crises, and, because a letter from Parliament indemnifying the directors from prosecution was required under the Act of 1844 before notes could be issued beyond a prescribed limit, those in financial distress believed that they were required to lobby representatives from both Parliament and the Bank of England to obtain relief. Thus, in Kindleberger's words, the English "vaguely" understood "that there should be no formal provision for a lender of last resort, but that in a crisis there should be one", and "intuitively" realised that it is "best to give power to grant relief neither wholly to the Bank nor wholly to the government, but to leave it uncertain" (1996:155-6).

The first problem with Kindleberger's two-part solution is the potential for the financial crisis to be aggravated by the uncertain provision of lender-of-last-resort funds. This can best be seen by examining the way in which this aspect of the policy proposal affects the banking system during a more general financial breakdown. The engine of the banking crisis is the apprehension on the part of depositors, already made suspicious by reports of general asset deflation, that their bank will not be able to transform its illiquid assets into liquid assets to meet their personal demands before fire-sale insolvency transpires. That is, they realise that no bank, even those which are fundamentally sound and in a position to weather the initial phase of asset deflation, is able to sell illiquid assets at a moment's notice to meet the demands of every depositor without reducing the value of these assets below the value of deposit liabilities. It is apparent that, under these circumstances, anything which increases the depositors' apprehension that fellow depositors will seek to withdraw funds will reduce their expectations of receiving their own funds, motivate them to achieve the highest possible position in a bank queue, and thereby induce a bank run. The decision-makers responsible for the lender-of-last-resort facility must therefore endeavour to allay the depositors' anxiety and halt the run by declaring, boldly and publicly, that banks can obtain liquid funds. Kindleberger's suggestion that they should give the impression that funds would be occasional and uncertain, on the other hand, has quite the opposite effect. This was emphasised by Walter Bagehot, who, in *Lombard Street* (1878 [1873]) and elsewhere, repeatedly argued that the worst of all possible policies was for the supervisors of the lender-of-last-resort facility occasionally to provide liquid funds without signalling to the market that these funds would be forthcoming with certainty during crises. It was for this reason that he was highly critical of the very same mid-Victorian directors of the Bank of England whom Kindleberger applauds for intuitively creating an uncertain environment. It was Bagehot's view that the vacillation exhibited by these directors merely added to the atmosphere of uncertainty and exacerbated the scrambles for liquidity in the crises of 1847, 1857 and 1866 (ibid:65, 206-7). In short, unlike Kindleberger, Bagehot correctly realised that the goal of allaying fears should be the public servant's primary policy aspiration in an environment in which, to paraphrase Franklin D. Roosevelt, the greatest fear is fear itself.

The second problem with Kindleberger's two-part solution is the difficulty in determining the extent to which responsibility for providing liquid funds should be dispersed. If responsibility for the lender-of-last-resort facility is entrusted to a number of public servants from a number of different organisations, it is possible that they will fail to coordinate their actions and arrive at a policy decision in sufficient time to provide relief when it is in fact urgently needed. Kindleberger himself recognised the potential for this scenario, arguing, in a different publication, that the very process of choosing who would play lifeguard may let the "failing swimmer drown" (1987:17). His solution to this problem is to restrict the decision-makers responsible for the lender-of-last-resort facility to a number which is conducive to both collective decision-making and the construction of an uncertain environment. In Kindleberger's words: "Within too large a group, responsibility inheres in no one. With a single entity responsible, pressure for action may build up irresistibly. The optimum may be a small number of actors, closely attuned to one another in an oligarchic relation, like-minded, applying strong pressure to keep down the chisellers and free-riders, prepared ultimately to accept responsibility" (1996:156). It is an unfortunate fact, however, that such oligarchic structures are historically rare, and, in the few instances in which they have emerged, their success and continued existence has relied on one or two strong personalities. This excessive reliance on a few heroic individuals exposes the financial system to the danger of a leaderless committee inheriting the lender-of-last-resort facility at the very moment a financial storm approaches. Milton Friedman and Anna Schwartz argued that it was for this reason that the twelve Reserve Banks of the US Federal Reserve failed to provide adequate liquidity during the banking crises of 1930-3. They submitted, and interestingly Kindleberger himself agrees with them, that the death in 1928 of the mercurial Benjamin Strong, the governor of the New York Reserve Bank, led to indecision and deadlock on policy matters, and they added that the "detailed story of every banking crisis in our [US] history shows how much depends on the presence of one or more outstanding individuals willing to assume responsibility and leadership" (1963:418; Friedman 1979:ch. 3; Kindleberger 1996:157). There is, they argued, "more than a little element of truth in the jocular description of a committee as a group of people, no one of whom knows what should be done, who jointly decide that nothing can be done" (1963:415-6). It may be more prudent, then, to allocate the responsibility for the lender-of-last-resort facility to a single organisation, and expose that organisation to excessive lobbying, than to distribute this responsibility to a number of organisations, and risk the possibility of a policy vacuum emerging.

Kindleberger's over-riding error is, I think, that he believes that the uncertain distribution of liquid funds via a lender-of-last-resort facility achieves an optimum middle ground between the policy of staying panics through the unqualified provision of liquid funds and the policy of eliminating the moral hazard problem by refusing to dispense any liquid funds whatsoever. Unfortunately there is no such middle ground, as it is the uncertainty surrounding the likelihood of additional liquid funds which actually fuels the financial crisis. The financial crisis is, in short, psychological in nature and hence requires a psychological palliative in the form of a reassurance by the central authorities that liquid funds will be provided with certainty. At times, Kindleberger himself seems to recognise this. At one stage, for example, he states that a "certain amount of uncertainty, *but not too much*, is useful in building self-reliance in the market" (ibid:156, italics added). The question arises, however, as to how to mitigate the original moral hazard problem once the strategy of creating an uncertain environment is abandoned.

Bagehot, I believe, provided an answer to this question. He proposed a lender-of-last-resort facility in which funds would be dispensed, with certainty, on the presentation of 'sound' assets for discount, or as collateral, at a penalty rate. He recognised that in the middle of a panic what is usually regarded as good security ceases to be so, and hence he emphasised that by 'sound' he meant those financial instruments which would be marketable once business conditions were again normal rather than those instruments which would be marketable at the height of a crisis. Although Bagehot proposed these recommendations for a range of reasons related to the peculiar institutional arrangements of his time and place, it is evident that they also mitigate the universal moral hazard problem by encouraging bankers to manage their balance sheets in a more prudent manner. First, bankers realise that they will incur a capital loss if they present financial instruments for discount (or as collateral) at the penalty rate, and hence they will endeavour to hold greater reserves of liquid funds. Second, bankers recognise that liquid funds will be available only to those institutions presenting assets which would be 'sound' in normal times, and hence they will strive to hold a less risky asset portfolio in order to reduce the probability of being turned away from the central bank window in their hour of need. The depositors, moreover, will realise that their funds are no longer risk-free and therefore recommence monitoring their respective banks to ensure that they either hold assets of suitably sound quality or offer a compensatory premium for the additional risks taken. Bagehot therefore succeeds where Kindleberger fails. I am sure, however, that Kindleberger would not mind being upstaged by someone of Bagehot's stature, especially given that it is on an issue which he treats as an aside within a work which, I suspect, will soon be regarded as a minor classic of the economic literature.

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