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Book Review

Neil Irwin (2013). *The Alchemists: Inside the Secret World of Central Bankers* (London: Headline Business Plus), pp. 430, £25.00, ISBN 978-0-7553-6266-0.

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Introduction

What do the alchemists have to do with central banks? For those interested in the history of science, it is well-known that the alchemists were the predecessors of modern chemists in the middle ages. The alchemists were those who – in the first instance - believed that it is possible to turn base metals into a precious metal like gold. While the method necessary for doing so was never discovered in the history of chemistry, many new chemical entities and processes were discovered by the alchemists in the attempt to do so there by paving the way for the 'science' of chemistry. Neither the alchemists nor the US Federal Reserve for that matter found the proper method to generate a precious metal out of a base metal. On the contrary, the US Fed's reserves of gold were simply not adequate to implement a gold standard forcing Richard Nixon to take the dollar off the gold standard in the early 70's. Ben Bernanke's recent comments at the Fed do not give us any reason to believe that it is either technically or historically feasible to return to the gold standard in the United States. Neil Irwin's argument then simply put is this: monetary theory – indeed much of macroeconomic theory - is now struggling to move from the realm of alchemy to that of a pure science of combinatorial possibilities. The permutations and combinations in question however pertain to mixing monetary policy tools in addition to the routine determination of the federal funds rate like those that have come to public awareness under the aegis of QE0-QE3 (or quantitative easing) to increase the money supply in both the US economy; and, by extension, the global economy.

Summary of the Book

The QE approach basically involves - as Ben Bernanke himself takes the trouble to explain repeatedly - buying a combination of treasury securities and mortgage-backed securities amounting to $85 billion a month; this was reduced to $ 75 billion a month recently in a process that is described as 'tapering'. This, needless to say, is the most direct form of monetary policy intervention that is conceivable outside the Fed's traditional responsibility of determining the federal funds rate; it is however a source of endless controversy in monetary policy circles in the United States since there is no consensus on whether it made a substantial difference to the state of the economy(even though Bernanke has gone on record repeatedly as deeming it to be amongst his most important achievements during Congressional hearings and testimonies). The relentless attacks on the US Federal Reserve System in recent months and years by the libertarians and guardians of precious metals is based on the fear that the Fed will not taper its large-scale asset purchases adequately; and will - even if it does so in a timely fashion -wind up hurting the purchasing power of the US dollar. The US currency itself is under a continual state of siege and the US media is saturated with conspiracy theories and alarming news-reports about the imminent collapse of the dollar, the end of the dollar as the international reserve currency, and hysteria about the outbreak of currency wars that will devastate and soon lay waste to the US economy (Karmin, 2008). All this is blamed on Bernanke and the Fed as though there is always a direct correlation between the QE approach to monetary policy and the imminent end of the almighty US dollar; it is often overlooked that the process of globalization might force a rethink on what a reserve currency is in an increasingly multipolar world irrespective of what the Fed does or doesn't do with the US dollar (Steil, 2007).Here, for instance, is the counterexample to the libertarian critique of the Fed: If the naysayers on QE were right, the level of inflation would not be less than 2 percent currently in the US but something akin to the hyperinflation of the Weimar Republic, where it took a wheel-barrow of Germany currency to buy a simple meal.

All this should remind us that the history of monetary policy like that of American jurisprudence has been, as Justice Oliver Wendell Holmes Jr. put it, that of experience rather than logic (Holmes, 1881/2005; White, 1988). But this is not just a problem that has been foisted on the US economy by the Fed: it is instead a structural problem in the history of central banking world-wide. It is important to remember that the root of this problem on whether monetary theory itself is a reliable guide to monetary policy and whether macroeconomics itself is a science like physics or chemistry is still an open question in the social sciences (Prescott, 2006). The answer to these questions however depends on who you are talking to. It does not make much sense to ask the Fed to wait out for the resolution of these meta-theoretical questions by economists since they have to act in the *here-and- now of monetary policy during a crisis* rather than ask ultimate questions on the foundations of monetary theory (Bernanke, 2005). Economists, needless to say, are being forced to rethink these questions as well because of the near-financial meltdown of 2008 (Münchau, 2010); so, while economic theory might have had a high level of mathematical coherence, it did not necessarily correspond to the nature of economic reality – hence the high rate of mortality amongst economists in the last few years (Stiglitz, 2008; Soros, 2010). Irwin contends that most departments of economics have a combination of alchemists and chemists, but it is difficult to know – given the present state of knowledge in economics - which half of the economics faculty are doing alchemy and which half are doing chemistry.

What conspiracy theorists overlook is the difference between asking whether the Fed's approach is the best that is available given its *repertoire of monetary policy tools* at any given moment in history and posing much larger questions about whether monetary policy will ever become a reliable science in the future as monetary theorists take the trouble to do (Mishkin, 2008; Mishkin, 2007a). Jurisprudence, for instance, is not a hard science though the term 'science' is used in the context of discussions in legal theory. Here the notion of science is meant to indicate that legal theorists are serious about what they do, and try hard to get it right, and are aware of the need to invoke the necessary levels of methodological rigor that are commensurate with their recommendation of a given policy action; that is the same for judicial decision making as well (Posner, 2008).This is however not tantamount to saying that – as German theorists might put it – that the protocols of argument and theory building is the same in both those parts of the curriculum that answer to the rubric of *Naturwissenchaften* as those that may be termed *Geisteswissenchaften*. Those working in the latter (i.e. in the social sciences) aspire to the former without the ability to fully emulate its level of success. That however does not mean that the social sciences are useless or that they are only forms of subjective interpretation. That however is the dilemma in which central bankers find themselves. It is easy to overlook their achievements in stabilizing the banking system in particular and the financial system in general because their interventions prevent critics from thinking-through counter-factual scenarios. Where would the US economy be today but for the interventions made by the US Fed since 2008? Are there actually people out there who believe that the Fed should have done nothing whatsoever apart from determining the Federal funds rate and that alone would have been both necessary *and* sufficient when the financial system was on the verge of a full-fledged meltdown? So the first thing that a reader of this book must learn to appreciate is that *monetary policy is not a conspiracy against the laity*. If the Fed has hogged the limelight in recent years it has to do with the fact that by definition a central bank is the 'lender of last resort'. The crisis of 2008 was the ultimate test that any financial system could have thrown up to find out whether monetary policy rules, tools, and the ambit of discretion (constrained or otherwise) available to central bankers can actually make a difference as forms of intervention to save an economy from a full-fledged meltdown. There is a difference then between honestly evaluating what monetary policy tools were effective and what monetary policy tools were ineffective in assessing Bernanke's legacy and attempting to do away with monetary policy interventions as such.

The most important thing that lay-readers must understand is that Bernanke does not have a concealed agenda of his own and monetary policy is not a conspiracy to devalue the US currency. The reason that it appears to be so is because Bernanke himself took the lead in exposing the secrecy that was endemic to central banking not only in the United States but in many other parts of the world. The fact that it is even possible to sub-title this book 'inside the secret world of central banking' is not a critique of Bernanke's term as chairman; but, in fact, the ultimate proof of his achievements. The reason for that is quite simple and obvious and must not be overlooked in the attempt to circulate conspiracy theories about central banking and central bankers. The default assumption in central banking for nearly 600 years since central banking was invented in Sweden is that it must be conducted in secret: the very mystique of central banking was related to secrecy. This is the first time in the history of central banking that the fundamental assumption of secrecy has been re-visited, thought-through and decisively discarded as a policy option. Bernanke is often asked for instance on what if any of his achievements will set effective precedents for monetary policy. Bernanke's communication policy for the US Fed, I believe, will endure (Bernanke, 2004a; Bernanke, 2007). It will be impossible for future chairmen and FOMC committees to revert to a secretive way of doing things even if they decide to discard some of the specific QE-type tools of monetary policy intervention that Bernanke has made his own (Harris, 2008; Musacchio and Roscini, 2009). Another important achievement that is commonly over-looked amongst those who can only think in terms of theoretical oppositions is the notion of 'constrained discretion'. This is Bernanke's pragmatic way of resolving an endemic problem in monetary theory on whether a central bank should follow a model of 'rules' or 'discretion' in determining the federal funds rate. This is also why Bernanke is fond of saying repeatedly in Congressional hearings and testimonies that there is no simple or mechanical way of doing monetary policy though central bankers are acquainted with the mechanics of monetary policy transmission and the basic mechanics of money that are expressed as a function of circulation, quantity, velocity, etc. This physicalist language however should not be in interpreted in the literal sense that is possible in the hard sciences, where the relationship between cause and effect can be demonstrated objectively as Newtonian phenomena constituting the laws of motion.

The rules of monetary policy and the mechanical dimensions that constitute the physical presence or absence of money and the role played by the monetary base that is represented by categories of analysis like M1, M2, and M3 however cannot be applied in a way that is insensitive to the historical contexts in which they are applied. The FOMC has no choice in this matter – they have to apply their mind and calibrate effectively going forward since *there is an endemic gap between the basic mechanics of money* and *the applied mechanics of money*. How else will we explain the lack of inflation in the US economy given the inordinate increase in the supply of money in the wake of QE 0, 1, 2, and 3? It is also important to examine whether this gap is endemic because there is a gap in the mechanical model of money per se or whether there has been a significant change in what we mean by the definition of the terms 'money', 'money supply', and 'inflation', and in determining what the relevant indicators of inflation are both for the US economy and in a comparative context comprising the Asian, the European, and the emerging economies in the last few years. If the criteria invoked for the determination of inflation and inflation expectations vary significantly across monetary regimes and economies, then central banks will wind up talking at cross purposes on what constitute acceptable levels of inflation. If these cautionary measures are not implemented at the level of methodology, it will not be possible to identify correctly what is it that actually constitutes an effective representation of the *transmission mechanism(s) in monetary policy*, and on whether or not there is agreement between those doing monetary theory and those doing monetary policy on what these mechanisms and their symbolic representations might be.

What is ultimately at stake if monetary policy is to ever be a science is a model of cause and effect: *what exactly constitutes causality in monetary policy*? It is also important to remember that while Bernanke's monetary policy has necessitated the large-scale deployment of asset purchases in the form of QE, that doesn't have to always be the case in the future. What is important really is that the Bernanke approach has found favor with a large number of central banks and central bankers across the world as this book demonstrates. But there is always a possibility that new monetary policy tools may be activated in the future to deal with the next crisis. It is therefore important not to take a reductive approach to monetary policy tools and ask instead whether Bernanke and the central bankers profiled in this book and in the emerging literature on this area did reasonably well given the monetary policy precedents that they had to deal with, and the tools that they had to think up the forms of monetary policy intervention that would or have in fact made a difference (Wessel, 2009/2010).

That is why Irwin points out the importance of the Bagehot Doctrine of 1873. Walter Bagheot's main contention was that during a financial panic or a run on banks, a central bank must lend freely to those financial institutions and firms that are solvent albeit at a higher rate of interest. That is exactly what the US Fed and a number of central bankers have been doing in recent years. In fact, as Irwin points out, Bagehot's

Lombard Street has become the most influential text in the history of central banking. But because many of those who are subject to television newscasts on the Fed's latest round of asset purchases do not know the difference between 'solvency' and 'liquidity', they go away with the impression that the Fed's actions and interventions on so-called 'bailouts' are arbitrary and politically motivated (Turner, 2008). One of the important questions that Bernanke is often asked is about the size of the Fed's balance sheet before and after the interventions that began in 2008; he is at pains to emphasize that all the moneys lent out have been repaid with interest though this is a point that doesn't seem to get across effectively since *it doesn't make news when loans are repaid*; moral hazard is more newsworthy than moral integrity or financial probity. It is easy to overlook the fact that the Fed actually made a profit from its monetary policy interventions in recent years and that its balance sheet – though swollen to over two trillion dollars- is in good shape. Whether the Fed will be able make these types of policy interventions in the future is also worth discussing since the Dodd-Frank Act of 2010 has changed the rules of intervention - especially for banks that 'are too big to fail' and which therefore pose a risk to the financial system as a whole.

Given the changes introduced by Dodd-Frank to the powers vested in the Fed, it is not necessarily clear what forms of monetary policy intervention might be warranted in the future. This is an aspect of Fed policy that Irwin could have explored in more detail: I am thinking in particular about 'the orderly resolution authority' to wind up a firm without hurting everybody else in the financial vicinity. Some of the criticism that has been targeted at the Fed is also based on not understanding that the Fed's approach to future crises may well be different from this one. So unless the Fed and Fed watchers explain what aspect of the Fed's emergency powers under the Federal Reserve Act of 1913 have been affected by the Dodd-Frank Act of 2010, the apprehensions and confusions in place will persist into the near future. It might be worth the while for the Fed to do a series of scenario analyses of future crises in press conferences and explain how the revised rules under Dodd-Frank will affect the relevant provisions in the Federal Reserve Act of 1913, along with the Fed's interpretation of the Livingston Doctrine, and the Bagehot Doctrine. Such an exercise would be within the spirit of the Fed's preoccupation with the notion of 'forward guidance' that Bernanke and the FOMC have pioneered in recent years and help to calm the capital markets and financial markets in a fundamental sense; it will also help readers to make sense of the Livingston Doctrine and determine whether its legal provisions and the obligations that it imposes on the Fed have been nullified by Dodd-Frank – and, if so, to what extent (Gorton, 2012).

Another important source of misunderstanding about central banking relates to the problem of inflation targeting. Those who attack the US Fed for not being zealous enough in its approach to tackling both the problem of inflation and inflationary expectations are not factually aware that - unlike the Bank of England and the European Central Bank - the Fed has the Congressional 'dual mandate' to contend with (Mishkin, 2007b). What this means is that the Fed cannot concentrate on saving the US dollar to the exclusion of all other factors by targeting inflation as the libertarians demand in the United States (Bernanke, 2004b). The main libertarian demand is that the Fed must not devalue the US currency through QE-type approaches to monetary policy and must do what it can to prevent the erosion of the purchasing power of the dollar (which amounts to 2 percent per annum currently unless the Fed can reduce and keep inflation at zero percent). The Fed must always be conscious - unlike the central banks mentioned above - to make the necessary trade-offs between 'inflation and deflation' and in 'maximizing employment and price stability'. It is the inability to appreciate, understand, or sympathize with the Fed's 'dual mandate' that has led to the proliferation of conspiracy theories about central banking and central bankers in the US. This is, to invoke a political analogy, as ridiculous as blaming Mikhail Gorbachev for attempting to introduce 'glasnost' and 'perestroika' as economic policy tools to reform the ailing Soviet economy; and then blaming him yet again for the political and economic atrocities committed by past rulers which he more than anybody else took the trouble to expose. While libertarians worry about inflation and the need to remain focused on inflation targeting, they simply overlook the dangers of deflation: *falling prices can be as dangerous as rising prices* as the experience of the Japanese economy demonstrates (Bernanke, 2002). What is required of a central bank then is not the false choice between inflation targeting or deflation targeting but *an optimal approach to price stability* even though that is difficult to achieve in a globalizing economy. While libertarian arguments are not without merit if considered in isolation, or in the context of banks that do not have a dual mandate, or even in economies that are devoid of financial panics (if such a thing is conceivable) - that is not the legal or statutory position in which the Fed finds itself.

It is also easy to overlook that in order to understand Fed policy, Fed watchers must take on board not only the Congressional dual mandate comprising trade-offs between inflation and deflation and maximum employment and price stability, but also expose themselves to the legislative history that provides the legal contexts of Fed policy. Relevant pieces of legislation include not only the Federal Reserve Act of 1913, but also The Banking Act of 1935 and The Employment Act of 1946. It is also important to understand that the Fed does not always act alone but has important relationships with a number of regulators and financial institutions like the US Treasury, the Federal Deposit Insurance Corporation (FDIC), the Securities and Exchange Commission (SEC), and is the main regulator of the banking sector in the United States. Most of the interventions that constituted the Trouble Assets Relief Program (TARP) in 2008 were in conjunction with a number of additional agencies who helped *to co-ordinate the policy interventions* that were made by the Bush administration. However the main goal of the Fed is to serve as the lender of last resort and thereby prevent the recurrence of financial panics like the Panic of 1907 that made it historically viable to contemplate the idea of a central bank (given the troubled history of central banks of the United States in the 18th and 19th centuries) before the advent of the US Federal System in 1913-14. Insofar as the Fed has been able to stem such panics in the US banking and financial sectors and prevent the contagious effects of such panics from spreading across the economy, its interventions must be deemed a success.

The Fed itself is aware of its internal history and does not hesitate to compare the mistakes that it made during the Great Depression by stemming the money supply with what it is trying to do now. It is therefore important for the more responsible members of both business academia and the business media to situate Bernanke's interventions – especially QE – in the context of what the Fed learnt specifically about the consequences of contracting money supply during The Great Depression (Moss, 2007; Van Overtveldt, 2009; Wessel, 2009/2010). Given that Bernanke is the leading scholar in this area (i.e. on the causes of the Great Depression and the role that the Fed played in causing the economic contraction), it would be highly unrealistic to not expect him to leverage on the lessons of economic history or argue that these lessons are of relevance to central banking as such (Bernanke, 2000; Bernanke, 2013). As Irwin points out, the US Fed led an attempt to co-ordinate an effective policy response not only within the United States, but made credit available to a number of central banks, leading firms, and financial institutions through-out the world. However, misunderstandings persist on what Bernanke's legacy is to the world of central banking and central bankers. The endemic hostility to the Fed's interventions and the wide-spread misunderstanding amongst those interested in questions of economic theory and public policy is based on a misinterpretation of what exactly moral hazard is and the role that it supposedly plays when firms are bailed out. That is why those who are in the know within the community of central bankers are disseminating the Bagehot Doctrine that differentiates clearly between what central bankers should do during a bank run and what they should do when it is business as usual; and the importance of understanding the difference between a bailout that targets a solvent firm from that of an insolvent firm, and in differentiating both in theory and practice between lending in the contexts of solvency problems and liquidity problems.

The notion of solvency itself is an interesting theoretical construct that comes to finance theory from chemistry. So while solvency per se may not lead to the alchemical transmutation of a base metal into a precious metal as hoped for by the mediaeval alchemists, its persistence as a cognitive tool will help us to make sense of Irwin's title and the compare-and-contrast method that he uses to help readers appreciate the role played by a number of central banks around the world. The main strength of Irwin's book is that in addition to providing profiles of the leading central banks and bankers, he also provides a number of interesting insights on how they interact, affect, and influence each other. This is by far the most readable introduction to central banking that I have encountered in recent years, and will be of great use to both the academic reader and the intelligent layperson who wants to make sense of what is happening in the hitherto secret world of central banking.

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