not all) of the highly dollarized Latin American economies. It is not obvious either that de facto dollarization is necessarily irreversible. No doubt, the dollarization debate is only starting to heat up and readers will certainly look forward to seeing these (and other) issues discussed in a follow up volume.

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Bernholz, P.: *Monetary Regimes and Inflation: History, Economic and Political Relationships.* XI, 210 pp. Cheltenham, UK: Edward Elgar Publishing, 2003. Hardcover £ 55.00.

Two basic themes emerge from the historical accounts in Peter Bernholz's fascinating and useful new study, *Monetary Regimes and Inflation*. The first basic theme echoes Milton Friedman's famous quantity-theoretic dictum that "inflation is always and everywhere a monetary phenomenon." And so we see in Bernholz's history that only the mildest of inflations occur when monetary policy is governed by a strict gold or other metallic standard, for the workings of this first type of monetary regime allow the money supply to expand only when and to the extent that new stocks of precious metals are discovered. Somewhat higher and more sustained inflations can and do arise, however, when the monetary authorities systematically and progressively reduce the precious metallic content of their nation's coin or, what is the equivalent, reduce the quantity of gold that backs each unit of their paper currency. And the highest inflations of all, including all known hyperinflations, occur exclusively under fiat paper money regimes, where the government's ability to expand the money supply is limited only by the speed of the printing press.

This first theme, and the always interesting but sometimes terrible stories from world monetary history that support it, will of course be familiar to many economists, especially those with monetarist leanings. Nevertheless, students, economists, and politicians alike surely will find much to gain from a review of the lessons that history teaches us about the causes and consequences of high money growth and inflation – all the more so today, in an era when careful consideration of money demand and money supply have all but disappeared from macroeconomic analysis, when the expiration of the Humprey-Hawkins legislation has allowed the Federal Reserve to downgrade the role of the monetary aggregates in its policymaking process, and when the European Central Bank has been widely and forcefully criticized for its adherence to the monetary pillar supporting its operating strategy.

The second basic theme that emerges from Bernholz's history comes from the author's own detailed model of the political economy of the inflationary process. According to this model, governments invariably feel the temptation to expand the money supply, either to exploit the Phillips curve or to help finance a chronic budget deficit. The problem arises, of course, because the benefits of an expansionary monetary policy are enjoyed up front, while the costs are deferred to the future.

Indeed, starting from the simplest of monetary arrangements, where the economy's stock of money consists entirely of gold and silver coins, the introduction of a new debased metallic or paper currency initially may yield no inflation at all. In this case, Gresham's law implies that the older, more intrinsically valuable currency will be withdrawn from circulation, and while this process continues, the new currency simply replaces the old: the total money stock need not increase. But even in the most advanced industrialized economies of today, where consumers and financial market participants are quite familiar and comfortable with the workings of a fiat money regime, changes in inflationary expectations usually lag behind changes in observed rates of money growth, so that the initial stages of monetary expansion feature an acceleration of real economic growth and a fall in unemployment under relatively stable nominal prices. Eventually, however, all of the good old coins disappear from circulation, or inflationary expectations catch up with observed money growth, and prices begin to rise more noticeably.

Governments may, for a time, attempt to keep a lid on this incipient inflation by imposing price controls; simultaneously, governments may attempt to stay ahead of rising inflationary expectations by ratcheting up the rate of money growth still further. These desperate measures, though sometimes successful in the short run, inevitably break down if the monetary expansion continues. Galloping inflation results, as prices rise at an ever increasing rate.

At some point, however, inflation reaches a level at which it begins to seriously interfere with real economic activity: the slope of the Phillips curve changes sign, now associating higher rates of inflation with higher rates of unemployment. And at some point, the same inflation erodes the real stock of money to such an extent that additional seignorage revenues are reduced to nil. Beyond this point, with nothing further to be gained from higher rates of inflation, a political consensus emerges in favor of monetary stabilization. But, unfortunately, successful stabilization and the return of confidence in the currency often serve to restore the very same conditions that foster the emergence of inflation in the first place. According to Bernholz's model, economies may be doomed forever to repeat this circular pattern of inflation, followed by stabilization, followed by inflation once more.

Bernholz's book provides the details of numerous examples from history that display the circular pattern dictated by his model. Bernholz's book also describes the few special cases that appear to break from this pattern and highlights the unusual circumstances that make those special cases exceptional. Throughout, the prose remains lively and clear. A little bit of algebra appears here and there, when it usefully serves to make some key ideas more precise; but overall, the book is descriptive and nontechnical. The text could therefore be put to good use in both graduate and undergraduate courses in monetary and financial history. At the same time, however, Bernholz's broad scope – his book lists and describes, for example, all 29 of the hyperinflations known to have occurred throughout history as well as a large number of the more moderate inflations from ancient times to the present – helps make the book an excellent starting point for researchers who plan to study specific inflationary episodes; these researchers will, no doubt, go on to consult the numerous, more specialized references that are cited in the relevant chapters.

And all readers, I'm sure, will be delighted by the amusing anecdotes that pepper the text. My favorite of these concerns P.N. Christiernin, holder of the first chair in economics at the University of Uppsala, in Sweden. Professor Christiernin, it seems, correctly predicted that the growth of the paper money supply in 18th century Sweden would lead to inflation; and later, after that inflation had emerged, he also correctly predicted that the government's attempt to restore price stability through a sharp contraction of the money supply would lead to economic depression. After finding his predictions and advice ignored repeatedly by the Swedish government, and after witnessing firsthand a prime early example of Bernholz's circular pattern of inflation and stabilization, Christiernin abandoned his chair in economics and began a second career, this time as a professor of philosophy!

Bernholz's book, it should be noted, does leave at least two sets of important questions largely untouched, to be grappled with, presumably, in future research efforts. The first set of questions concerns the relative benefits and costs that shape the choice between different monetary regimes. Bernholz's history repeatedly shows us that a government's commitment to a strict gold or metallic standard places tight limits on the amount of inflation that can occur; during modern times, a government's commitment to an exchange rate pegged to a relatively stable currency like the US dollar or the German mark (or to its successor, the Euro) achieves the same goal.

But when a government commits to a metallic standard or an exchange rate peg, it also relinquishes its ability to use monetary policy as a tool for macroeconomic stabilization. What does history say about the trade-off between these benefits and costs of monetary commitment? Here, Bernholz firmly but gracefully declines to address this question; hopefully, in future work, he will take us through the historical evidence again, to suggest at least some tentative conclusions on this enduring and still highly relevant issue.

A second set of unresolved questions takes us back to the circular pattern of inflation, stabilization, and inflation observed repeatedly throughout history, and the role that scholars such as Bernholz might play in breaking this vicious cycle. Thanks to Milton Friedman and Edmund Phelps, thanks to Robert Lucas and Thomas Sargent, and thanks to Peter Bernholz as well, we now know a great deal more about the causes and consequences of inflation than economists and politicians did in decades and centuries past. But does our new-found knowledge, that rapid money growth is a necessary prerequisite for rapid inflation and that expected and unexpected movements in money growth and inflation can and do have dramatically different effects on the economy, offer up any hope that the policy mistakes of the past might be avoided in the future?

Here, again, Bernholz declines to address the issue directly. But we can find some useful clues scattered throughout his book. Reading through Bernholz's accounts of the world's great hyperinflations, for example, one cannot help but notice that more than half of these episodes – more precisely, 17 out of 29 – have occurred since 1990. Surely, this fact fails to invite much optimism that, from a practical perspective, we have the problem of high inflation solved!

Meanwhile, in the United States, the United Kingdom, and the European Monetary Union, the public now holds central bankers in very high esteem – to the point of awarding celebrity status to some – for their success in keeping inflation low and stable while, at the same time, steering their economies clear of major recessions. But before we draw any lessons from this most recent episode, we must remember that in the United States for instance, there really are only two independent observations, so to speak, that inform us about the Federal Reserve's true ability to conduct successful monetary policy under a regime of full discretion. The first observation, which begins with the breakdown of the Bretton Woods system in the late 1960s and the early 1970s and ends with the appointment of Chairman Paul Volker in 1979, is of a period in which inflation spun out of control; only the more recent observation, covering the period since 1980, provides any evidence that monetary discretion can produce favorable outcomes. Indeed, most of the supply-side shocks hitting the US economy during the 1970s were negative ones, confronting Federal Reserve officials with the cruel choice between lower output and higher inflation. Conversely, most of the supply-side shocks experienced since then have been positive ones, offering Federal Reserve officials the chance to work inflation down while still allowing the economy to grow at a more-than-politically-acceptable pace.

With all this in mind, let us ask now: what would happen if, over the course of the next decade, the US economy was again hit by a series of negative shocks, similar to those from the 1970s? Would the American political system continue to support the Federal Reserve's efforts to keep inflation low? Would politicians and their constituents remain willing to listen to the advice of academic economists, and continue to appreciate that the Phillips curve relationship that often appears so clearly in the data does not represent an exploitable menu of choices? Or, alternatively, would those academic economists find themselves in a position not too dissimilar from that faced by poor Professor Christiernin of 18th century Sweden: their advice ignored by politicians who, facing an angry electorate, push desperately for benefits today at the expense of costs tomorrow, no matter how unfavorable the exchange rate? Must we wait nervously for this scenario to actually play out, or does history give us any idea as to what the answers to these questions might be? On these issues, too, I hope to hear more from Peter Bernholz.

Thankfully, even after studying and observing numerous examples of the often vicious cycle of inflation and stabilization, Peter Bernholz has not followed P.N. Christiernin's lead by opting for a second career in philosophy. Instead, he has persisted admirably with his economic inquiries, and given us this fine new book and his many other writings to read and learn from. Let's hope that Peter Bernholz continues to forge ahead with this line of research, in an effort to teach us more about what monetary history has to say about our possible monetary future.

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Cordon, W. M: *Too Sensational: On the Choice of Exchange Rate Regimes.* XIV, 274 pp. MIT Press, Cambridge, Mass. 2002. Hardcover £ 20.50.

Max Corden has given us an excellent book on the exchange rate regimes of emerging market countries. The choice of an appropriate exchange rate regime for financially open developing countries has given rise to a lively debate since the crises of the late 1990s. This book provides a very nice and balanced review of the main arguments. The style is engaging and non-