

Credibility and the International Monetary Regime

A Historical Perspective



EDITED BY
MICHAEL D. BORDO
RONALD MACDONALD

CAMBRIDGE

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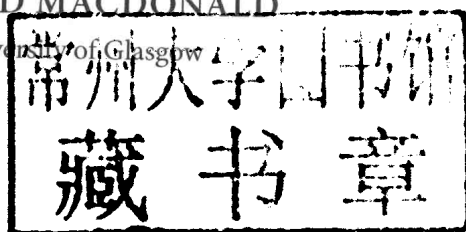
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CREDIBILITY AND THE INTERNATIONAL MONETARY REGIME

The present global monetary regime is based on change to floating exchange rates among the major advanced countries. A key underlying factor behind the present regime is credibility to maintain stable monetary policies. The origin of credibility in monetary regimes goes back to the pre-1914 classical gold standard. In that regime, adherence by central banks to the rule of convertibility of national currencies in terms of a fixed weight of gold provided a nominal anchor to the price level. Between 1914 and the present, several monetary regimes gradually moved away from gold, with varying success in maintaining price stability and credibility. In this book, the editors present ten studies combining historical narrative with econometrics that analyze the role of credibility in four monetary regimes, from the gold standard to the present managed float.

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PART ONE

INTRODUCTION

ONE

Credibility in Fixed Exchange Rate Regimes

Theoretical and Historical Perspectives

Michael D. Bordo and Ronald MacDonald

At present, the global monetary regime is based on floating exchange rates among the major advanced countries: the United States, Japan, the United Kingdom, Canada, Australia, and the Eurozone. The Eurozone is a monetary union. The rest of the world has a gamut of regimes, ranging from floating to hard pegs. A key underlying factor behind the current regime is credibility to maintain stable monetary policies.

The origins of credibility in monetary regimes go back to the classical gold standard, 1880–1914. In that regime, in the advanced countries, adherence by the monetary authorities to the rule of convertibility of national currencies in terms of gold provided a credible nominal anchor. Today gold is no longer the nominal anchor; instead this anchor is based on the credibility of independent central banks dedicated to keeping inflation low. Between 1914 and the present, the world exhibited several regimes that gradually did away with gold as the nominal anchor and that had varying success in maintaining credibility. In this book, we present nine studies of how credibility functioned in four monetary regimes, from the gold standard to the present regime of managed floating.

The issue of the appropriate exchange rate regime for a country has been a central theme in the international finance literature. Numerous currency crises in the last three decades of the twentieth century have given fixed but adjustable exchange rate regimes something of a bad name. The perceived wisdom is that such regimes are likely to be blown off track if the underlying macroeconomic fundamentals are at variance with the peg, or even if they are not, sunspot effects and pure contagion effects can produce the same unsatisfactory outcome. These apparent problems with fixed but adjustable rates led to the emergence of the so-called corners hypothesis as the perceived wisdom: To avoid the frenzy of speculative attacks and the consequent implications for the real economy and, more generally, the

international monetary system, countries should irrevocably lock their currencies to other currencies in some way (a monetary union or currency board), or they should allow their currencies to float freely, with little or no foreign exchange market intervention.

At the heart of the issue of how sustainable a fixed rate is likely to be is the credibility of the peg: A credible peg is much less likely to suffer the ignominy of a speculative attack than one that is not. Furthermore, the existence of a credible exchange rate can allow a central bank some flexibility in its ability to change monetary policy, despite the fact that the exchange rate is pegged. In this book, we focus on the issue of credibility. In particular, we bring together a group of papers that examine the credibility of a number of key regimes of the international monetary system, from the classical and interwar gold standards to the exchange rate mechanism (ERM) experience with fixed but adjustable exchange rates.

One key outcome of our work is that it would seem that credibility is a function of the particular international monetary regime in existence. For example, the classical and interwar gold standard systems seem to have a superior performance in terms of credibility compared to other regimes, such as the ERM experience with fixed exchange rates and sterling's experience under Bretton Woods. Therefore, in designing architecture for the International Monetary System (IMS), and indeed designing a reform of the IMS *per se*, a key question that arises from our work is: Do we need gold, or some other commodity, as the anchor, to impart credibility, or are there other mechanisms, institutions, and regulations that can replace a commodity-based system?

A further aspect of the work reported in this volume is that although the two main gold standard regimes did exhibit considerable credibility, there were key periods when they were non-credible. However, we show that there is usually an intuitive explanation for such non-credibility in terms of either economic or political fundamentals, and that such lack of credibility was short-lived. Another theme we seek to address in this book is what extent the existence of credibility in fixed-rate regimes lends to monetary authorities the ability to engage in independent monetary policies.

OVERVIEW

The book is divided into four sections after this introduction representing four exchange rate regimes: Part II, Classical Gold Standard; Part III, The Interwar Period; Part IV, Bretton Woods; and Part V, The European Monetary System Period.

Classical Gold Standard

In Chapter 2, C. Paul Hallwood, Ronald MacDonald, and Ian W. Marsh focus specifically on the issue of credibility in the classical and interwar gold standard periods. They adopt a target zone interpretation of the gold standard period and implement two categories of tests: tests of the mean-reverting properties of certain key exchange rates and the calculation of credibility confidence intervals for these currencies. Although the credibility test of Svensson is often seen as the simplest test of credibility, a test of the mean-reverting properties of exchange rate behavior in a target zone is in fact even simpler because it relies only on the time series properties of the exchange rate. To test mean reversion, the authors use variance ratio statistics and Dickey-Fuller type tests; for the classical gold standard period, evidence of very fast and significant mean reversion is reported: Within four months, half of a deviation is extinguished. For the interwar period, the authors also report evidence of mean reversion for key currencies, although this is not as clear-cut (as fast or as significant) as in the classical period.

In Chapter 3, Michael D. Bordo and Ronald MacDonald offer a framework to test the degree of monetary independence conferred on a central bank in a credible target zone arrangement. In the context of the classical gold standard regime, they show how to test the “stylized fact” of a failure of central banks to play by the rules of the game – sterilize gold flows and follow domestic policies independent of concern for convertibility – combined with an apparently credible IMS. Using an uncovered interest rate parity condition and a term structure relationship, the authors derive three testing systems. System one involves estimating Uncovered Interest Parity (UIP) as a long-run co-integrating relationship and then calculating the mean reversion speed to this equilibrium. The speed of mean reversion provides information on the degree of monetary independence.

The second system combines the UIP relationship with a term structure relationship. The latter is included to gauge how much long-term and short-term interest rates diverge as a result of a monetary impulse. If the target zone/central bank independence story is correct, long rates should be relatively insensitive to shocks (because any monetary independence can only be short-lived in this model), and this is demonstrated to hold in the data – long rates change by very little in response to impulses, and adjustment of long rates is relatively rapid.

The third system consists of the second system plus a vector of “short-run” fundamentals: the change in gold reserves, the change in industrial production, the change in prices, and the volatility of short-term interest rates. This