Barry Eichengreen, Golden Fetters: The Gold Standard and the Great Depression (Oxford University Press, New York, 1992) pp. xix + 448, $39.95.

This important book in the NBER series on *Long-Term Factors in Economic Development* follows in the tradition of W.A. Lewis, *Economic Survey* (1939) and W.A. Brown, *The International Gold Standard Re-Interpreted, 1914–1934* (1940). The book synthesizes many of the author's earlier articles on the pre-1914 classical gold standard and the interwar period and skillfully, with minimal jargon, uses recent theoretical approaches in macroeconomics, political economy and international finance to give a novel interpretation to the global Great Depression of the 1930s. The book will be of great interest to economic historians, international economists, policy-makers and the educated public at large.

The basic thesis of the book is that the interwar gold standard was a pale shadow of its pre World War I self and unlike the original did not stabilize the international monetary system. Instead, Eichengreen views the interwar gold standard both as an important cause of the worldwide collapse of output and prices and, following a long tradition going back to Fisher (*Bulletin of the International Statistical Institute*, 1935), Friedman and Schwartz (*A Monetary History of the United States*, 1963) and Temin (*Lessons from the Great Depression*, 1989), an obstacle to recovery. His view is in contrast to an earlier one [Kindleberger (*The World in Depression*, 1973)] that attributes the world depression to financial chaos brought about by the gold standard's collapse.

In a nutshell, the prewar classical gold standard provided price level, real output and exchange rate stability to the world but, according to the author, not because it was well managed by the Bank of England, but because of its multipolar nature. The credible commitment of the core countries – Britain, France and Germany – led market agents to believe that the monetary authorities would take whatever actions were required to preserve gold convertibility. This commitment – made possible by central bank independence from fiscal authorities, by limited political influence of those groups who would gain from inconvertibility and depreciation, and by the lack of understanding by policy-makers of the connection between adherence to convertibility and internal stability – encouraged stabilizing private capital flows which in turn facilitated the maintenance of convertibility.

The credible commitment was buttressed by international cooperation. In normal times the Bank of England setting its bank rate acted as leader and the other European central banks followed its lead. In periods of crisis – in the Baring crisis of 1890 and in 1907 – because of its limited gold reserves, the Bank of England was helped by loans from the Banque de France and other central banks. Cooperation was possible because of the absence of serious differences between the core countries, because they shared a common conceptual framework and strong domestic opposition to it was absent. The peripheral countries, when included the United States – because of their less sophisticated financial systems, their dependence on primary commodity exports, and the power of domestic interest groups – lacked a credible commitment. However, in normal periods, fearing loss of access to London's deep capital markets, even they adhered to the gold standard rule.

This rosy picture died with World War I. The exigencies of war finance ended convertibility. The attempt to restore the gold standard was difficult in the face of a new world order which attached great importance to internal stability and to redistribution of income to newly enfranchised groups. Countries with low inflation were able to restore their prewar parities with less difficulty; those with high inflation rates, such as France and Germany, had to resolve a fiscal war of attrition between the left and the right over who would bear the burden of restoring fiscal orthodoxy. In a brilliant analysis of the stabilization by these and other high inflation countries, the author argues that returning to gold, but at an undervalued parity, was a key part of the armistice in the war of attrition.

The restored gold standard lacked the credible commitment of the prewar system because it became apparent to market agents that monetary authorities could no longer be counted upon to subsume internal stability to external goals. Hence according to Eichengreen, international cooperation was essential for the system to work. Systematic cooperation, however, was not possible in a world divided over the issues of reparations and war debts, although on at least two occasions, 1924 and 1927, concerted international efforts were taken by the United States, Britain and France to aid sterling.

This system began to unravel in 1928 when the Federal Reserve raised interest rates to stem the Wall Street stock market boom. Tight U.S. monetary policy drastically reduced foreign lending which in turn put serious pressure on the balance of payments of debtor countries – many already hurt by a decline in their terms of trade. To maintain debt service these countries followed tight monetary policies. The consequent decline in economic activity in 1929, by reducing U.S. exports, reinforced its downturn.

The gold standard (a fixed exchange rate system) was crucial in the onset of the downturn because it transmitted shocks between countries and because monetary authorities were unwilling to follow expansionary policies fearing that the consequent gold outflows would threaten convertibility. The gold standard was also crucial in converting a serious recession into the Great Depression because of its connection with banking instability. Monetary authorities, according to Eichengreen, were unable to act as leaders of last resort to banking systems weakened by deflation because expansionary policies would be viewed by foreign depositors as a threat to convertibility. They in turn would withdraw their deposits and stage a speculative attack on the currency. The 'Golden Fetters' of the gold standard prevented expansionary policy. Even the United States, holding the lion's share of world gold reserves, was subject to 'Golden Fetters'. According to Eichengreen, the Fed did not act as lender of last resort during the second banking crisis of 1931 because it felt constrained by a shortage of 'free gold'.

The downward spiral could have been halted by an internationally coordinated reflation policy, but attempts to do so were stymied by limited understanding of the causes of the depression and conflicting domestic interests. Thus the only solution was to break the golden fetters and devalue. Here Eichengreen, following Fisher and Choudhri and Kochin (*JMCB*, 1980), documents the link between devaluation and subsequent recovery, but goes further and argues that successful recovery also required expansionary monetary policy, a step countries were at first unwilling to take because of a fear of igniting inflation. Those countries remaining on gold continued to suffer. In an excellent discussion of the Gold Bloc, the author argues that fear of a return to the chaos of the 1920s inflation and war of attrition tied France, Belgium and the other members of the Bloc to gold for close to five years after Britain left gold in 1931.

In conclusion, the author argues that the lesson to be learned from the interwar experience is the need for international cooperation. The more successful experiences of the pre World War I gold standard and the post World War II Bretton Woods System he attributes in large part to fewer impediments to cooperative actions.

The book tells a fascinating story which gives the impression of being a complete explanation for the world depression. Yet a close reading reveals some chinks in the foundation.

First is the treatment of the classical gold standard. That the core countries were committed to gold convertibility is certain, but the rule they followed was the contingent rule of adherence that pertained, except in well-defined emergencies such as major wars and financial crises. In the latter contingency, a temporary departure from gold would not be regarded as a breach of the rule sufficient to precipitate capital flight. The presence of this safety valve suggests that the success of the classical gold standard may not have depended on international cooperation.

Second, the importance of cooperation in the interwar period is overplayed. Given that the gold exchange standard had all the fatal flaws of Bretton Woods, coupled with gold maldistribution and perverse sterilization policies by France and the United States, how likely is it that this flawed system would have been preserved by international cooperation. It is far more likely that it lasted the few years that it did because of a favorable set of circumstances.

Third, according to 'Golden Fetters' the threat of capital flight prevented the monetary authorities in virtually every country from acting as lender of last resort to the banking system. For Thornton and Bagehot, the prescription for a central bank when facing both an internal and external drain was to lend freely but at a penalty rate. The circumstances in which lender of last resort action was to be taken was a scramble for high powered money. The action to stem panic takes place in a very short period of time – a matter of hours or days. In such circumstances the monetary authority should provide liquidity to the money market by whatever means necessary. In other words it must temporarily expand the money supply. Under a gold standard, market agents would understand that this was a temporary event, not the same thing at all as, for example, a permanent increase in monetary growth to finance a budget deficit – a circumstance that would prejudice maintenance of convertiblity. To lump the speculative attack on the Austrian schilling, which was in response to a bailout of the Credit Anstalt financed by a permanent increase in money growth [Schubert, *The Credit Anstalt Crisis of 1931* (1992)], with the failure of the Federal Reserve to increase high powered money in the second half of 1931 that could have averted the second banking crisis, is simply unjustifiable.

Most importantly, the argument in Chapter 10 that the Federal Reserve would not have been able to expand the money supply in the 1931 episode because it would have violated the free gold constraint, and forced the United States off the gold standard, is incorrect. First, the author argues that since M_1 fell by two billion dollars between August 1931 and January 1932, a two billion dollar open market operation would have been required to offset the decline and would have forced the United States off the gold standard with only \$400 million in free gold. This argument ignores the arithmetic of money supply relationships. The ratio of M_1 to high powered money fell between August 1931 and January 1932 from 3.2 to 2.8 – the average money multiplier over the period was approximately 3. Thus an open market operation to increase the monetary base by \$600–650 million was all that would have been needed if no other forces were at work. According to Friedman and Schwartz, other forces were present so that a one billion dollar purchase would have been needed. But would the one billion dollar purchase have exhausted free gold? It would have if the open market purchase, as Eichengreen assumes, had been absorbed by a dollar-for-dollar increase in currency, which has to be backed 40 percent by gold and 60 percent eligible paper. But if the purchase had increased bank reserves by one billion, which would have had the effect of calming depositors' fears about bank safety, then free gold would not have been exhausted.

Second, given that the United States had the largest monetary gold stock in the world and that at its lowest point in 1932 the Fed's gold reserve ratio was 56 percent, there was no reason before March 1933 why the threat of the United States being forced off the gold standard should have been a binding constraint. Were free gold a real problem, the Federal Reserve could have asked the Congress to alter the eligibility requirement before it enacted such legislation in February 1932. According to Friedman and Schwartz, free gold was 'largely an ex post justification for (Fed) policies followed, not on ex ante reason for them' (p. 406).

Finally, Eichengreen's claim that international cooperation could have averted the Great Depression seems quite heroic given the record of cooperation in the preceding decade.

In sum, *Golden Fetters* is an important contribution to the literatures on the gold standard and the Great Depression. It presents a coherent, overarching view of the interwar period. However, in the attempt to present a complete story it leaves unsettled some important issues that need to be resolved by future research.

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Stephen V. Marks and Keith E. Maskus, eds., The Economics and Politics of World Sugar Policies (University of Michigan Press, Ann Arbor, 1993) pp. 176 + viii.

Aficionados of U.S. international trade policies regard American policies toward sugar as one of the worst, if not the worst, abominations of U.S. protectionism. There are altogether no more than 10,000 sugar farmers. The U.S. price of sugar is more than double the world price; the average payment per sugar farm by virtue of U.S. sugar policy is in excess of $100,000. Under high domestic sugar prices, sugar cane production has expanded in Florida, contributing to the despoilation of the Everglades, Louisiana and Texas, while contracting in traditional growing areas such as Hawaii and Puerto Rico, despite high domestic prices.

Although the United States administers country-specific quotas permitting specified amounts of exports from trading partners at U.S. domestic prices, the induced substitution of high fructose corn syrup (HFCS) for sugar has reduced sugar's share of total caloric sweetner consumption (from over 80 percent to less than 50 percent) so much that American imports in total have declined from over 5 million tons annually to around 1 million tons, representing a drop in world imports of about 20 percent. There are now very few countries whose higher price received on their strictly limited sugar exports under quote to the United States compensates for the lower world price (resulting from the downward shift in demand from the United States, among other factors) received for the rest of their crop.

In other countries as well sugar is a politicized commodity. The EC subsidizes sugar exports under a complicated scheme, although unlike the United States it has limited domestic production (and banned the substitution of HFCS).