

EC377.01  
The World Economy:  
From the Gold Standard to Globalization  
Homework Assignment 1

Fabio Ghironi  
*Boston College*

Due in class on Thursday, March 13, 2008

This homework assignment requires you to answer a large number of questions of the type that you may face in the exams (of course, for some of the model-based questions below, the text of an exam would include more information). Even if this assignment is due after the midterm exam, you should really use it as a tool to study for this exam.

Here are the questions:

1. Using the logic of arbitrage between metals, explain how Sir Isaac Newton's pricing mistake (setting too high a silver price for the gold guinea at the British mint, or too low a price of silver relative to its international market price) caused silver to flow out of Britain after 1717, leading Britain to adopt a Gold Standard regime in 1819.
2. Explain how France's commitment to a bimetallic system sustained circulation of both metals internationally as long as changes in metal supplies and relative prices were of limited size.
3. Summarize and explain the argument that the international adoption of the Gold Standard between 1870 and 1913 was the outcome of accident, path dependence, and network externalities.
4. Briefly discuss John Stuart Mill's (1865) explanation of price level dynamics under the pre-war Gold Standard and the deflation that characterized much of that period.
5. Explain David Hume's (1752) price-specie flow model of the Gold Standard (without and with international capital flows).

6. Summarize the discipline view of the Gold Standard.
7. Summarize the target zone view of the Gold Standard and the role of credibility.
8. Using the apparatus in the Lecture 2 Supplement slides, explain how the existence of a credible target zone stabilizes exchange rate dynamics inside the band.
9. Explain the countercyclicality of international capital flows in the pre-war Gold Standard and the procyclicality after World War I. Explain how countercyclical capital flows contributed to the stability of the system before 1913, and how procyclical flows instead contributed to instability in the 1920s.
10. Briefly summarize the experiences of some major countries returning to the Gold Standard after World War I.
11. Why did the interwar Gold Standard collapse?
12. Using equation (1) at page 6 of the Lecture 4 slides, summarize Ben Bernanke's discussion of how the interwar Gold Standard induced widespread monetary contraction and contributed to the Great Depression.
13. Explain the role of exchange rate policy choices in the Great Depression experiences of countries that made different choices.
14. Summarize the discussion of aggregate supply-side determinants of the Great Depression in Ben Bernanke's *Journal of Money, Credit, and Banking* article.
15. Summarize the key assumptions of the model of monetary policy interactions under the interwar Gold Standard developed in the Lecture 5 slides. Explain intuitively the importance of these assumptions for the results, and how the results help us understand observed dynamics during the interwar years.
16. Using the model described in the Lecture 5 slides and following steps similar to those for the home central bank, prove that the foreign central bank faces a tradeoff between its policy objectives, i.e., prove that  $dG^*/dR^* > 0$  and  $dP/dR^* < 0$ .
17. Consider page 23 in the Lecture 5 slides. Prove equations (18) and (19). (Note the hint at the top of the page.)

18. Prove also that  $dG^*/dR < 0$  and  $dP^*/dR < 0$ . (recall that  $P^* = P$  in this model).
19. Briefly explain Figure 2 in the Lecture 5 slides and use the figure to explain how non-cooperative central bank behavior under the Gold Standard leads to the Nash equilibrium (point N) starting from any initial interest rate choice by the home central bank. Make sure you explain the successive rounds of best responses by the central banks to their counterpart's behavior leading to this point.
20. Based on the same Figure 2, explain the differences between non-cooperative central bank behavior, a leadership regime, and cooperation. With reference to historical examples, use the model to explain how a competitive "scramble for gold" imparted a contractionary bias to monetary policy under the interwar Gold Standard, and explain the role that this had in the Great Depression.
21. Explain how the Bretton Woods system was a compromise between the White (U.S.) and Keynes (British) plans.
22. Why is it argued that the Bretton Woods system did not feature an adjustment mechanism for external imbalances?
23. Explain the role of capital controls in the functioning of the Bretton Woods system.
24. Why did the Bretton Woods system collapse?