



BANK OF GREECE  
EUROSYSTEM

# Working Paper

New perspectives on the Great  
Depression: a review essay

George S. Tavlas

212

SEPTEMBER 2016 RWORINGPAPERWORKINGPAPERWORKINGPAPERWORK

BANK OF GREECE  
Economic Analysis and Research Department – Special Studies Division  
21, E. Venizelos Avenue  
GR-102 50 Athens  
Tel: +30210-320 3610  
Fax: +30210-320 2432

[www.bankofgreece.gr](http://www.bankofgreece.gr)

*Printed in Athens, Greece  
at the Bank of Greece Printing Works.  
All rights reserved. Reproduction for educational and  
non-commercial purposes is permitted provided that the source is acknowledged.*

ISSN 1109-6691

# NEW PERSPECTIVES ON THE GREAT DEPRESSION: A REVIEW ESSAY

George S. Tavlás

## Abstract

The Great Depression was the most devastating and destructive economic event to afflict the global economy since the beginning of the twentieth century. What, then, were the origins of the Great Depression and what have we learned about the appropriate policy responses to economic depressions from that episode? This essay reviews two recently published books on the Great Depression. Eric Rauchway's *The Money Makers: How Roosevelt and Keynes Ended the Depression, Defeated Fascism, and Secured a Prosperous Peace* (Basic Books, 2015) tells the story of the ways Franklin D. Roosevelt drew on the ideas of John Maynard Keynes to place monetary policy front-and-center to underpin the recovery from the Great Depression and to underwrite the blueprint of the Bretton-Woods System. Barry Eichengreen's *Hall of Mirrors: The Great Depression, the Great Recession, and the Uses — and Misuses — of History* (Oxford University Press, 2015) shows the way the lessons learned from analysis of the Great Depression helped shape policy makers' response to the 2007-08 financial crisis, thus helping to avoid many of the mistakes made by policy makers in the 1930s.

*Keywords:* Great Depression, Gold Standard, Bretton Woods System, 2008 Financial Crisis

*JEL Classification:* E52, F33

*Acknowledgements:* I am grateful to Harris Dellas, Craufurd Goodwin, Benn Steil, and Michael Ulan for helpful comments.

## **Correspondence:**

George S. Tavlás  
Member, Monetary Policy Council  
Bank of Greece  
21, El. Venizelos Avenue  
102 50 Athens, Greece  
tel. + 30 210 3202370  
e-mail. gtavlás@bankofgreece.gr

## 1. Introduction

The Great Depression was the most devastating and destructive economic event to afflict the global economy since the beginning of the twentieth century. The unprecedented depth and breadth of the Depression, which “hung over the world, poisoning every aspect of social and material life and crippling the future of a whole generation” (Ahamed, 2010, p. 6), have long provoked a fascination among economists about its causes and consequences. As Margo (1993, p. 41) put it: “The Great Depression is to economics what the Big Bang is to physics.” Two recently published books attempt to cast new light on the reasons it is important to understand the origins of, and policy responses to, the Great Depression.

Eric Rauchway’s *The Money Makers: How Roosevelt and Keynes Ended the Depression, Defeated Fascism, and Secured a Prosperous Peace* tells the story of the ways Franklin D. Roosevelt drew on the ideas of John Maynard Keynes to place monetary policy front-and-center to underpin the recovery from the Great Depression and to underwrite the blueprint of the Bretton-Woods System. Barry Eichengreen’s *Hall of Mirrors: The Great Depression, the Great Recession, and the Uses — and Misuses — of History* shows the way the lessons learned from analysis of the Great Depression helped shape policy makers’ response to the 2007-08 financial crisis, thus helping to avoid many of the mistakes made by policy makers in the 1930s. In the following two sections, I review each book in turn. Section 4 concludes.

## 2. The Money Makers

Between 1929 and 1933 the U.S. economy imploded.<sup>1</sup> Real Gross Domestic Product fell by a third. The unemployment rate rose from 3.2 percent of the labor force to more than 25 percent. Wholesale prices dropped by 33 percent and consumer prices fell by 25 percent. At the trough of the depression in March 1933, the output of durable goods had fallen to 20 percent of its 1929 level. From 1930 to 1932 more than 5,000 banks, accounting for more than \$ 3 billion in deposits (about 7 percent of total deposits) suspended operations. In 1933, another 4,000 banks, accounting for more than \$ 3.5 billion in deposits, would close. In all, about one-third of the national banks

---

<sup>1</sup> The data presented in this paragraph are from Friedman and Schwartz (1963, Chapter 7) and Walton and Rockoff (2005, Chapter 23).

suspended operations from 1930 to 1933. By the time that Roosevelt assumed the U.S. Presidency on March 4, 1933, “the financial system had ceased to function” (Walton and Rockoff, 2005, p. 459).

The central theses of Rauchway’s book are the following. First, Roosevelt took over the reins of monetary policy from what had been a passive Federal Reserve during the four years of the Great Depression, and, by adopting a countercyclical monetary policy stance aimed at raising the price level and reducing unemployment, succeeded in engineering an “exceptionally” rapid recovery (p. xvi). According to Rauchway: “Under the New Deal, the U.S. economy grew at rapid rates, even for an economy in recovery. In Roosevelt’s first term, the U.S. saw economic growth of about nine percent per year on average” (p. 100). Second, the intellectual underpinnings of, and respectably for, Roosevelt’s monetary policy were provided by John Maynard Keynes, who, in his writings during the first half of the 1930s, had advocated abandonment of the gold standard in favor of a monetary-policy stance that put domestic economic conditions “ahead of stability of the exchange rate” (p. 49). Third, the combination of Roosevelt and Keynes did more than successfully bring about the recovery of the U.S. from the Great Depression: “working in tandem, [Roosevelt and Keynes] effected a revolution in monetary policy that [in addition to bringing] the Great Depression to an end, laid the foundations for the victory over fascism, and underwrote the prosperous peace that followed” (p. xxx). Rauchway points-out that Keynes teamed with U.S. Treasury official Harry Dexter White in the first half of the 1940s to create the architecture, including the International Monetary Fund and the World Bank, of the Bretton Woods System of fixed-but-adjustable exchange rates. Rauchway emphasizes that this system fostered a 30-year period of stable global economic growth before giving way in the early-1970s to a system of flexible rates because “[then-President Richard] Nixon could not manage the necessary diplomacy for nations to agree” on a continuation of the Bretton Woods System based on a devalued dollar (p. 244).

There is a good deal to admire in Rauchway’s well-written book. In contrast to the conventional view that fiscal expansion underpinned the recovery from the Great Depression, a view propagated by many non-monetary historians, Rauchway places the role of monetary policy front and center. In contrast to some prominent monetary historians, Rauchway gives Roosevelt his due credit for the recovery. Against strong

opposition from both outside and inside his Administration, Roosevelt took the U.S. off the gold standard in 1933, took control of the conduct of monetary policy away from the Federal Reserve, placing it with the Treasury, and reoriented monetary policy toward domestic stabilization.

Nevertheless, the book contains shortcomings that give rise to the following questions. If Keynes was the driving force behind Roosevelt's countercyclical monetary policies during and after the Great Depression, why did the Keynesian Revolution of the late-1930s and after become synonymous with the widespread view that monetary policy is a weak stabilization tool, a view which gave rise to the Monetarist Counter-Revolution of the 1970s? If the recovery of the U.S. economy during the period from 1933 to the U.S. entry into World War II in 1941 was exceptional, why was the unemployment rate still nearly 10 percent as late as 1940 (Romer, 1991, p. 6), and why did durable-goods production fail to regain its 1929 level until August 1940 (Walton and Rockoff, 2005, p. 454)?<sup>2</sup> If the Bretton-Woods System fostered an era of global stable growth, why did that System fall apart? Was it simply a matter of Nixon's lack of diplomatic skills? In what follows, I address these issues within the context of Rauchway's narrative.

Rauchway begins his book with an overview of the failure of the 1919 Treaty of Versailles to provide a lasting peace -- a failure that Keynes had eloquently analyzed and foreseen in his book *The Economic Consequences of the Peace* (Keynes, 1919) in light of the unbearable economic burdens placed on Germany. As Rauchway explains, by 1919, Keynes had begun to work-out a blueprint for an international monetary system based on managed exchange rates that would eventuate some 25 years later in the form of the Bretton-Woods System. In Chapter 2, Rauchway provides background material that helps set the stage for Roosevelt's policy initiatives in 1933. Central to understanding these initiatives, according to Rauchway, was the working of the gold standard, which gave priority to exchange-rate stability in place of stability of the domestic economy. The gold standard, in his view, precipitated the Great Depression in 1929 and imposed a deflationary bias to monetary policy after 1929, causing the depression to deepen.<sup>3</sup> This argument, however, overlooks

---

<sup>2</sup> Romer (1991, p. 6) reports that real GDP did not return to its trend path until 1942.

<sup>3</sup> In his discussion of the gold standard, Rauchway does not, himself, take the view that the gold standard caused the Great Depression although he clearly holds that view. He uses the views of others -- George Warren, an adviser to Roosevelt, and White -- to convey that message (see pp. 27 and 102).

Friedman and Schwartz's (1963) monetary hypothesis of the Great Depression which stresses the role of the Federal Reserve in *precipitating* the Depression through its policy tightening in 1928 and 1929.<sup>4</sup> This tightening took place during a period when the U.S. had ample gold reserves and was not a product of gold-standard policy, but reflected the Federal Reserve's aim to stem stock-market speculation. As Friedman (1967, p. 89) put it, the tightening led to a situation in which "the stock of money failed to rise and even fell slightly during most of the cyclical expansion from November 1927 to August 1929 -- a phenomenon not matched in any prior or subsequent cyclical expansion."

Between the presidential election on November 8, 1932 and inauguration day on March 4, 1933, the crisis in the U.S. banking system grew progressively worse as depositors sought to convert their deposits to cash (mainly gold coins), and banks and businesses deleveraged. By March 4, banks in a majority of states had either been shut down or had been subjected to limits on withdrawals imposed by state governments.<sup>5</sup> Rauchway points-out that President Herbert Hoover's advisers tried to persuade the President-elect to support (jointly with Hoover) a bank holiday prior to his taking office, but Roosevelt refused. Nevertheless, on his first full day in office, Sunday, March 5, Roosevelt issued a proclamation that closed all banks, first from March 6 to March 9, then later for two additional days. During his first week in office, Roosevelt signed the Emergency Banking Act which, among other things, extended the President's powers to close, liquidate, license, and reopen financially sound banks, and empowered the Secretary of the Treasury to order all domestic gold holders to sell their holdings to the Treasury (Meltzer, 2003, p. 389).<sup>6</sup> The bank holiday was a success; with the reopening of banks, beginning on Monday, March 13, the banking crisis came to an end. Rauchway (p. 56) argues that "the bank holiday had saved the financial system." Why was the bank holiday a success? As Rauchway points-out, the Emergency Banking Act helped calm depositors. It was not, however, the only factor that did so. What Rauchway does not mention is that, on Sunday, March 12,

---

<sup>4</sup> As discussed in Tavlas (2011), the monetary hypothesis of the Great Depression consists of two sub-hypotheses -- first, that the Federal Reserve initiated the Depression with its policy tightening of 1928 and 1929, and, second, that the Federal Reserve deepened the Depression with its policies of the early-1930s.

<sup>5</sup> According to Eichengreen (2015, p. 225), banks in 37 states had been shut down or were subjected to state-imposed limits on withdrawals.

<sup>6</sup> Banks in cities with Federal Reserve banks opened on March 13, with banks in other cities opening on March 14.

Roosevelt delivered his first “fireside chat” to the public in which he carefully explained his plan for reopening the banks. The “chat” had the effect of reassuring the public about the safety of deposits and played a key role in reversing what had been a panic-driven bank run.<sup>7</sup>

Chapters 3 through 6 of Rauchway’s book deal with Roosevelt’s policies during the economic recovery of 1933 to 1936. Key measures, many of which involved the President’s policy with respect to gold, included the following. In his first month in office, Roosevelt took the U.S. off the gold standard.<sup>8</sup> With the departure of a large number of nations from the gold standard in the early-1930s, in June 1933, the World Monetary and Economic Conference, comprised of representatives from 65 nations, was held in London with an aim of reaching an agreement on a return to the gold standard. During the conference, Roosevelt sent a message to the U.S. delegation which shocked conference participants. In that message, Roosevelt declared that the gold standard was among the “old fetishes of so-called international bankers,” and he made it clear that priority should be placed on stabilizing the purchasing power of money -- that is, on raising the domestic price level (Rauchway, p. 71). In October 1933, Roosevelt announced that the Reconstruction Finance Corporation (RFC), an agency established in 1932 to help bail-out banks, would begin buying newly-mined gold with the aim of raising the price of gold (and, thus, domestic prices) from its then-official value of \$ 20.67 an ounce; by the middle of December 1933, the price of gold had climbed to about \$ 32.60 an ounce. In January 1934, the U.S. Congress passed the Gold Reserve Act, which gave the President authority to devalue the dollar against gold by up to 60 percent. The following day the President fixed the price of gold at \$ 35 an ounce, a devaluation of 59.06 percent relative to its former price of \$ 20.67.<sup>9</sup> The increase in the price of gold resulted in some \$ 3.0 billion in profits for the Treasury (Friedman and Schwartz, 1963, pp. 470-71). The Treasury used \$ 2

---

<sup>7</sup> Eichengreen (2015, p. 230) convincingly argues that the success of the “fireside chat” is evidence that the banking crisis was driven by panic. Silber (2009) shows that the fireside chat and the Emergency Banking Act, combined with the Federal Reserve’s commitment to supply unlimited amounts of currency to banks (creating de facto 100 per cent deposit insurance), were instrumental in making the bank holiday a success.

<sup>8</sup> The aim of Roosevelt’s gold policy was to raise the price level of commodities, particularly farm products and new materials, which had sustained the greatest relative declines during the 1920s and the early-1930s.

<sup>9</sup> The nominal price of gold remained at \$ 35 an ounce until President Nixon stopped gold sales and purchases on August 15, 1971. Throughout his book, Rauchway incorrectly refers to increases in the dollar price of gold as a “revaluation of the dollar in gold” (*e.g.*, p. 90). The correct term is a “devaluation” of the dollar price of gold.

billion of the profit to establish the Exchange Stabilization Fund, which gave the Treasury a strong hand in setting monetary policy until 1951.<sup>10</sup> In the aftermath of the January 1934 devaluation of the dollar, gold inflows into the United States resumed, mainly the result of market participants' positive assessment of Roosevelt's monetary measures and safe-haven flows stemming from economic problems and political tensions in Europe.<sup>11</sup>

During the next few years, gold inflows raised the money supply and the price level and underpinned the rapid economic expansion of the U.S. economy. Net National Product rose at average annual rates of 14 percent in current prices and 12 percent per year in constant prices from 1933 to the cyclical peak in 1937 (Friedman and Schwartz, 1963, p. 493).<sup>12</sup> Rauchway shows that Roosevelt and his Treasury Secretary, Henry Morgenthau,<sup>13</sup> deserve considerable credit for the economic expansion. Monetary historians, however, have been somewhat reluctant to give Roosevelt his due credit. Friedman and Schwartz (1963, p. 544) pointed-out that the 1933-37 expansion was a "consequence of the gold inflow produced by the revaluation of gold plus the flight of capital into the United States," but those authors seemed more interested in criticizing the Federal Reserve for having effectively turned over (because of its passive behavior) the conduct of monetary policy to the Treasury than giving credit to the New Deal's gold policy in underpinning the recovery.<sup>14</sup> Similarly, Meltzer (2003, Chapter 6) seemed more intent on criticizing the Federal Reserve for its inaction during 1933 to 1936 and the Roosevelt administration's programs to redistribute income and initiate welfare-state measures than on crediting the New Deal's gold policy. The reluctance to give Roosevelt credit for his decisions to exit the gold standard and to devalue the dollar may reflect the

---

<sup>10</sup> The \$ 2 billion used to establish the Fund was about the size of the Federal Reserve's open market portfolio. The Fund operated secretly under the control of the Treasury Secretary, with the President's approval needed for policy initiatives. See Meltzer (2003, pp. 457-59). The 1951 "accord" between the Treasury and the Federal Reserve re-established the power of the Federal Reserve to set monetary policy.

<sup>11</sup> Rauchway (pp. 41-42) credits newspaper columnist, Walter Lippmann, who had wide access to Roosevelt, and sometimes sat-in on policy discussions, for being a key communicator of Roosevelt's views. In fact, Lippmann's role may have been more significant. Reeve (1943, pp. 41-42) wrote that "Newspaper dispatches indicate that he [Lippmann] was more effective in converting the President to devaluation and monetary action than any other individual."

<sup>12</sup> Friedman and Schwartz (1963, p. 495) characterized these rates of growth as "extraordinary."

<sup>13</sup> Roosevelt appointed Morgenthau governor of the Federal Farm Board in 1933. He appointed Morgenthau Secretary of the Treasury in 1934 when William Woodin resigned for health reasons.

<sup>14</sup> A similar point about Friedman and Schwartz's assessment of the New Deal's gold policy was made by Romer (1991, p. 2).

circumstance that the U.S. departure from the gold standard was not a path-breaking event; it took place only after a succession of other countries, including Britain, had cut their ties to gold. Nevertheless, as Rauchway shows, Roosevelt carried-out his gold policy against considerable domestic opposition from the banking community and from members of his administration. Eugene Meyer, the Chairman of the Federal Reserve at the time that Roosevelt took office, was the first official to resign over Roosevelt's policy on gold. Others who resigned their positions included Dean Acheson (in 1933), who had been Under Secretary of the Treasury, and Lewis Douglas (in 1934), who had been Roosevelt's first Budget Director. Rauchway explains that these resignations took place against the backdrop of domestic political strife, especially within the farming community, and growing radical political movements within the United States. Throughout, Roosevelt remained unflappable and self-assured. He appears not to have had a well-defined gold policy upon assuming the presidency (Edwards, 2015), but his instincts on gold policy during his first year in office were right on the mark and were instrumental in fueling the recovery that followed.<sup>15</sup>

Roosevelt was a fiscal conservative.<sup>16</sup> During the 1932 campaign he advocated a balanced budget and decreased expenditures (Friedman and Schwartz, 1963, p. 465). During the first year of his presidency, the budget was in deficit, but, as Keynes (1933, p. 2) wrote in December of 1933, the deficit was "too small to make a difference." During the 1936 campaign, Roosevelt again ran on a platform of a balanced budget, and, in the event, fiscal policy was sharply tightened in 1937. Eichengreen (2015, p. 252) assessed Roosevelt's thinking about fiscal policy as follows: "[Roosevelt] was conflicted. He sincerely believed in balancing the budget, but [not] ... on the backs of the unemployed." The result was a series of emergency budgets that aimed at providing relief, but that were not an integral part of a countercyclical policy.

---

<sup>15</sup> Edwards (2015, p. 30) argued that "on March 4<sup>th</sup>, the day ... Roosevelt took over as President, there was no concrete or definitive plan for taking the U.S. off gold and devaluing the dollar." Edwards credits Roosevelt with a willingness to experiment.

<sup>16</sup> Treasury Secretary Morgenthau was also a fiscal conservative.

## 2.1 Roosevelt, Keynes, and monetary policy

As Rauchway makes clear, monetary policy was Roosevelt's instrument of choice for engineering recovery from the Great Depression. Where Rauchway goes astray, however, is in attempting to establish a link between Roosevelt's monetary policy and the policy advocated by Keynes during the 1930s. A recurrent theme in Rauchway's book is the following: "The monetary policy of the Roosevelt administration, from the beginning to the end, followed broadly Keynesian lines. And this policy, through which Roosevelt reinvented the United States dollar, was a central instrument for both recovery from the Great Depression and victory in the Second World War" (p. xvii).

The core of Rauchway's argument in support of this view is that, beginning with his *Tract on Monetary Reform* (Keynes, 1923) and continuing with his 1930 *Treatise on Money*, Keynes favored international monetary cooperation, a system of pegged-but-adjustable exchange rates, and the use of interest-rate policy to stabilize the domestic price level and, thus, employment. While Rauchway's interpretation of Keynes's emphasis on international monetary cooperation is correct, it contains an important oversight: by the time of the publication of the *Treatise* in 1930, Keynes stressed the role of monetary policy as a counter-cyclical tool *only for countries operating under a regime of international cooperation*. In the *Treatise* (Keynes, 1930 II, p. 337) he wrote:

it is the action of the lending countries of the world which mainly determines the market rate of interest and the volume of investment everywhere. Thus, if the chief lending countries would co-operate, they might do much to avoid the major investment disequilibria.

In the absence of such cooperation, Keynes (1930 II, p. 337) continued:

there remains in reserve a weapon by which a country can partially rescue itself when its international disequilibrium is involving it in severe unemployment. In such an event open-market operations by the central bank intended to bring down the market rate of interest and stimulate investment may, by misadventure, stimulate foreign lending instead and so provoke an

outward flow of gold on a larger scale than it can afford. In such a case ... the Government must itself promote a programme of domestic investment.

With the departure of Britain from the gold standard in 1931, international considerations took a back seat in Keynes's thinking on monetary policy. As Moggridge and Howson (1974, p. 239) documented, from that date, "monetary policy came to take up a supporting role, as the emphasis shifted to loan-financed public works as the means to increase the level of economic activity in a slump." With the development of his liquidity-preference theory of interest-rate determination, including the possibility of a liquidity trap, and with the experience of an unprecedented depression behind him, Keynes's views about the ineffectiveness of monetary policy sharpened in the *General Theory* (1936, p. 164):

For my own part I am now somewhat sceptical of the success of a merely monetary policy directed towards influencing the rate of interest. I expect to see the State, which is in a position to calculate the marginal efficiency of capital-goods on long views and on the basis of the general social advantage, taking an ever greater responsibility for directly organizing investment.

It was this view -- the ineffectiveness of monetary policy and the advocacy of direct government investment -- that became a distinguishing feature of the Keynesian Revolution, contrary to Rauchway's misconstrued attempt at reinterpretation of Keynes's view on monetary policy.

## **2.2 The 1937-38 recession**

As mentioned, a major theme of Rauchway's book is the following: "Roosevelt's policies had raised prices and sparked an American recovery that proceeded at record speed through much of the 1930s" (p. 176). This view, however, presents a puzzle. If the recovery proceeded at record speed during the 1930s, why did the unemployment rate remain near double-digit levels in 1940? As Friedman and Schwartz (1963, p. 493) put it, "the most notable feature of the revival after 1933 was

not its rapidity, but its incompleteness. Throughout the revival, unemployment remained large.” In a related vein, Meltzer (2003, p. 416) noted that “despite the strong recovery, many contemporary observers, including prominent [Roosevelt] administration officials, regarded President Roosevelt’s New Deal as unsuccessful.”<sup>17</sup> Shughart (2011, p. 528) argued similarly: “[As of 1941] the New Deal obviously had not achieved its objectives.”

What explains the contrasting views between Rauchway and others? The main reason has to do with Rauchway’s treatment of the 1937-38 recession. In the 13 months beginning with June 1937, real GDP plunged by 18 percent and industrial production fell by 32 percent; the unemployment rate peaked at 20 percent. According to the NBER, the 1937-38 recession was the third most severe recession after World War I (Meltzer, 2003, p. 522).<sup>18</sup>

Three points about Rauchway’s treatment of the 1937-38 recession merit comment. First, Rauchway vastly underplays the severity of that recession. By so doing, he draws a more positive assessment of the period from 1933 to 1940 as a whole than is warranted. Rauchway devotes a total of two pages (pp. 128-29) to discussing the 1937-38 recession; in those pages he provides no quantitative information about the recession’s magnitude or qualitative information about its severity. Here is his full characterization of the recession (p. 129): “Unemployment, whose fall had been the hallmark of the New Deal, began to rise again. Recession returned to an economy that had not fully recovered from depression. The renewed depression lasted into the next year [*i.e.*, 1938].” It was the severity of the 1937-38 recession, however, which sharply reversed earlier declines in unemployment, that led to the widespread view that the economic recovery between 1933 and 1940 was “incomplete.” In the absence of descriptive information about the severity of the 1937-38 recession, an uninformed reader of Rauchway’s book would come away with a more favorable view about the character of the overall 1930s economic recovery than was, in fact, the case. Second, Rauchway correctly points-out that the 1937-38 recession was preceded by the Treasury’s sterilization of gold inflows and Roosevelt’s sharp tightening of fiscal policy. What Rauchway does not mention is

---

<sup>17</sup> Raymond Moley, a member of Roosevelt’s so-called Brains Trust (an unofficial advisory group) in 1932 and 1933 wrote (1939, p. 399) that “immense treasure has been spent for economic rehabilitation that has not materialized, ... after seven years investment remains dormant, enterprise chilled, the farmers’ problem has not yet been solved, unemployment is colossal”.

<sup>18</sup> The two more severe recessions were those of 1929-33 and 1920-21.

that, in 1936 and 1937, the Federal Reserve sharply raised reserve requirements. This policy tightening is generally considered to have been a key contributing factor to the 1937-38 recession. Third, throughout the 1930s Roosevelt's anti-business rhetoric and policies, and his policies to redistribute income and initiate welfare-state measures, fostered uncertainty, undermining business and consumer confidence. I elaborate on the latter two points in my discussion of Eichengreen's book.

### **2.3 The Bretton-Woods system**

The remaining chapters (8 to 12) of Rauchway's book take the reader through the events leading up to President Truman's signing of the Bretton-Woods Agreement in July 1945.<sup>19</sup> An Epilogue provides a brief commentary on the workings of Bretton Woods. In brief: Chapter 8 covers the period 1939-41 and deals with the lead-up to the U.S. entry into World War II; Roosevelt's lend-lease policy, which aimed at shipping goods to Britain and, then, to the Union of Soviet Socialist Republics, both countries that were strapped of foreign-exchange reserves, is highlighted. Chapter 9 and 10 focus on the work of Keynes and White, as reflected in the respective Keynes Plan and the White Plan, and the negotiations between Keynes and White, in helping create the blueprint for Bretton Woods. Chapter 11 describes the negotiations among countries, and among members of the Roosevelt Administration and members of the U.S. Congress prior to the conference held in Bretton Woods New Hampshire in July 1944; that chapter also provides an account of the discussions at the conference. Chapter 12 provides an overview of political developments in the United States in the run-up to the ratification of the Bretton Woods agreement by the U.S. Congress in March 1945.

Throughout the latter part of his book, Rauchway discusses White's well-documented espionage activities in supplying U.S. Government documents to the Soviet Union. An example (p. 194): "After the May 1944 KGB message to White saying he 'must' cooperate, he did." The author minimizes the importance of White's espionage. Rauchway's attenuation of White's espionage activities rests on two arguments. First, Rauchway (p. 188) states that during the 1930s, the time when White had become associated with the Communist movement in the United States,

---

<sup>19</sup> President Roosevelt had passed away in April 1945, during his fourth term in office.

Communism in the United States had become “nearly respectable.” Second, Rauchway (p. 120) expresses the view that White’s association with Communism related to the latter’s wanting to “ensure that the Soviets would become an obstacle to fascists advances.” There are other scholars however who take a more serious view, and provide a more thorough analysis, of what White did than the author.<sup>20</sup>

As Rauchway points-out, the Bretton Woods System represented the culmination of Keynes’s efforts, spanning 25 years, to create an international monetary regime based on cooperation and comprised of fixed-but-adjustable exchange rates, even if, as Rauchway notes, many of specific features of the System were attributable to White. Rauchway also points-out that Bretton Woods underpinned a 30-year period of rapid growth before the System broke down in the early-1970s.

Why did the Bretton Woods System break down? The reason was not the one put forward by Rauchway -- namely, the assertion that the System did not continue because of President Nixon’s inability to negotiate a devaluation of the U.S. dollar with the other participants in the System. The Bretton Woods System failed because of fundamental reasons related to fixed-but-adjustable exchange rate regimes; in the absence of capital controls, such regimes invite speculative attacks, which lead to their breakdown.<sup>21</sup> In the case of the Bretton Woods fixed-but-adjustable regime, expansionary monetary policy by the Federal Reserve, accompanied by the unwillingness of countries such as Germany, Japan, and Switzerland to import U.S. inflation, led to its collapse (Meltzer, 1991; Bordo, 1993; Hall and Tavlas, 2013; Steil, 2013). Specifically, as foreign central banks accumulated US dollar reserves, the United States came under the threat of a convertibility crisis. To address this threat, in the late-1960s and early-1970s the US government and the Federal Reserve took a series of measures which had the effect of severing all links between the dollar and gold (See Hall and Tavlas, 2013, p. 343). However, those actions transformed the international monetary system from a commodity-based system to a fiat-money

---

<sup>20</sup> See Steil (2013).

<sup>21</sup> During the heyday of Bretton Woods, Friedman (1953, p. 164) accurately assessed the destabilizing properties of the fixed-but-adjustable regime: “This system practically insures the maximum of destabilizing speculation. Because the exchange rate is changed infrequently and only to meet substantial difficulties, a change tends to come well after the onset of difficulty, to be postponed as long as possible, and to be made only after substantial pressure on the exchange rate has accumulated”.

system. The Bretton-Woods regime was set adrift without an anchor. As a result, growth of global liquidity exploded in the early 1970s, and the regime collapsed, ushering in a new regime of managed-floating exchange rates. Ultimately, the collapse of the Bretton Woods System illustrated the unsustainability of fixed-but-adjustable exchange-rate regimes in a world of mobile capital flows.<sup>22</sup>

### 3. Hall of Mirrors

Eichengreen's superbly written and highly informative book begins by illustrating a fundamental dilemma faced by central banks. World War I had seen the collapse of the classical gold standard, which many contemporaneous observers believed had produced a global trade boom and given rise to unprecedented long-term capital flows (Morys, 2014). Benjamin Strong, the governor of the Federal Reserve Bank of New York and the dominant figure in the Federal Reserve System at the time, saw reconstruction of the pre-war gold standard as a priority. Under the pre-war gold standard, London was the leading international financial center, and the pound sterling was the leading international currency.<sup>23</sup> Consequently, "Britain's resumption of gold convertibility -- permitting sterling to once again be converted into gold at a fixed domestic-currency price -- was ... seen [by Strong] as a precondition for resumption by other countries" (p. 22). Beginning in 1924, he advocated a low interest-rate policy, an aim of which was to encourage funds to flow toward London to help the Bank of England acquire the reserves needed to return to the gold standard.<sup>24</sup> Moreover, since Britain had lost competitiveness vis-à-vis the United States during World War I, Strong's hope, according to Eichengreen, "was that keeping interest rates low would encourage [domestic] spending, putting pressure on U.S. prices and helping to correct the competitiveness gap" (p. 24).

Although prices in the U.S. rose between mid-1924 and mid-1925, the rise was not enough to erase the competitiveness gap. The low interest rates, however, fuelled

---

<sup>22</sup> The prevalence of capital controls among countries during the 1950s and 1960s helps explain why the Bretton Woods System lasted as long as it did.

<sup>23</sup> Silber (2007, pp. 151-75) carefully documented how the U.S. dollar replaced the pound sterling as the dominant international currency, and New York replaced London as the leading international financial center, during the mid- and late-1920s. Prior to Silber's work, the prevailing view was that these developments did not occur until the 1940s and 1950s. Eichengreen (2010) confirmed Silber's finding.

<sup>24</sup> Britain returned to the gold standard in 1925.

property bubbles in Florida and Georgia. The collapse of the bubbles in early 1926 led to sharp falls of local government revenues in those states and losses for depositors. Eichengreen argues that “the effect of Strong’s low interest-rate policy was ... less to rebalance the world economy than to unbalance the economy of the United States” (p. 24).

With hindsight, the Federal Reserve could have done more to restrain the property boom; but targeting a specific sector, housing, would have created the following dilemma: “Using monetary policy to damp down financial imbalances might have ended up only bludgeoning the economy” (p. 33). Eichengreen points-out that the Federal Reserve faced a similar dilemma in the late-1920s, when it moved away from focusing on the price level and decided to raise interest rates in response to a booming stock market. The result was the October 1929 stock-market crash and the Great Depression. A similar dilemma would occur in the early-2000s when the Federal Reserve focused on price stability despite a boom in property prices.

Eichengreen uses his singular knowledge of economic history to draw parallels between the events of the 1920s and the 1930s and those surrounding the 2007-08 financial crisis. In both the years leading up to the 1929 stock-market crash and the years leading up to the outbreak of the 2007-08 financial crisis in the United States, Federal Reserve policy, he believed, contributed to financial excesses. In both episodes, a loosely-regulated financial system abetted those excesses, which, in part, were centered on real-estate transactions (p. 26). Eichengreen embellishes his book with many other analogies between the 1920s and the 1930s, and contemporary economic issues. Examples include the following.

- The euro-area fixed-exchange-rate regime operates in a way similar to that of the gold standard of the 1920s. In both cases policy makers presumed that if “monetary institutions [were] in place, political adaptations required for their smooth operation [would] follow” (p. 23). In the case of the euro area, the idea that monetary union could proceed without political union turned out to be a “fatal” mistake (p. 23).
- During the 1920s and early-1930s, the “Allies’ reparations demands [on Germany] were enormous” (p. 37). France, in particular, refused to cut Germany any slack. In January 1923, in response to a German request

for concessions on reparations, “the French army re-entered the Ruhr Valley, Germany’s western industrial flank, with the goal of extracting reparations by force” (p. 38). During the euro-area crisis, it was Germany that had difficulty cutting slack: “the Germans were outraged over being asked to bail out their profligate neighbors” (p. 376). Nevertheless, “when push came to shove ... Germany provided emergency loans, not once but repeatedly” (p. 376).<sup>25</sup>

- In June 1932, the Hoover Administration bailed-out Central Republic Bank, a Chicago bank headed by Charles Dawes, a Chicago banker. The funds for the bail-out were provided by the Reconstruction Finance Corporation (RFC). Dawes had, in fact, been head of the RFC, but “tendered his resignation ... just days before Central Republic’s problems broke into the open” (p. 160). Eichengreen demonstrates that the rescue of Central Republic resembled the rescue of Bear Stearns in March 2008. In both cases, the decisions to bail-out the institutions in question involved high-level officials -- President Hoover in the case of Central Republic; New York Federal Reserve Bank President, Timothy Geithner, and Treasury Secretary, Hank Paulson, in the case of Bear Stearns. In both cases, there was a belief that the banks in question were too-big and too-connected to fail. In both cases, there was controversy about whether the agency extending the loan -- the RFC in the case of Central Republic, and the Federal Reserve, via a “back-to-back transaction” involving a loan to J.P. Morgan Chase (so that it could channel the funds to Bear Stearns) -- had exceeded its authority in extending the loan (pp. 162, 192-93).

Among Eichengreen’s main theses are the following.

- First, reflecting his previous path-breaking contribution,<sup>26</sup> the operation of the gold standard was central to understanding the Great Depression. In turn, adherence to the gold standard was informed by the flexible

---

<sup>25</sup> In the case of financial assistance to Greece, Eichengreen (p. 346) reminds the reader of the sensitive political issues involved in 2010 in setting conditions and exerting control over the assistance: “Germany had occupied Greece during World War II, and the application of policy conditionality by Berlin would inevitably be characterized as another German invasion.”

<sup>26</sup> See Eichengreen (1992).

exchange-rate experience of the early-1920s. In Germany, “the hyperinflation that reached its chaotic climax ... in 1923 came to be seared, seemingly forever, in the country’s consciousness. It took place when the gold standard was in abeyance ...” (p. 36). Similarly, although inflation in France “never quite reached hyperinflation levels, [it] nonetheless had the same socially corrosive effects” (p. 36). Concerns about the inflationary consequences, he shows, helps explain the reluctance of countries to abandon the gold standard during the Great Depression.

- Second, each crisis has its particular context. Whereas policies aimed at maintaining the gold standard during the Great Depression were informed against the back-drop of the inflation of the early-1920s, the responses of policy makers in the aftermath of the 2008-09 crisis were informed, in part, by the experience of the Great Depression, in particular, the knowledge of the consequences of the absence of policy responses during that episode. Knowledge of what happened in the 1930s emboldened policy makers to undertake expansionary monetary and fiscal measures in the wake of the 2007-08 episode, helping to prevent a repetition of another Great Depression.
- Third, that knowledge, however, turned out to be a double-edged sword. The severity of the 1930s crisis led to sweeping reforms, such as the 1933 Glass-Steagall Act, which separated investment from commercial banking and prevented deposit-taking commercial banks from engaging in security and insurance underwriting. In contrast, the success of the responses to the 2008 crisis led to a premature halt of reform efforts in the banking sector.
- Fourth, in contrast to the response to the 2007-08 crisis, Roosevelt prioritized reform over recovery under the presumption that the Great Depression reflected “ruinous competition.” Consequently, “the solution was to limit output and raise prices” (pp. 240-41). Eichengreen points-out that Roosevelt’s policies that aimed to limit competition and to increase trade unionism have been criticized for, among other reasons, “creating

uncertainty.” Nevertheless, Eichengreen argues that “the [uncertainty] effects should not be overstated” (p. 242).

- Fifth, Eichengreen attributes the 1937-38 recession to two factors: (1) Roosevelt’s “obsession with balancing the budget” (p. 266) and (2) especially the restrictive monetary policy produced by the sterilization of capital inflows, to which I referred in Section 2, and to which I return below.
- Sixth, despite the success of the expansionary policies following the 2007-08 financial crisis, policy makers should have done more. Eichengreen (p. 460) argues that “Fed policy was far from being as expansionary as called for under the circumstances.” He attributes “this reluctance to do more [to] the drumbeat of external criticism of the central bank.” Likewise, fiscal policy in the United States and Europe should have been more expansionary. Eichengreen (p. 301) argues that “historical experience ... suggests that fiscal policy worked where it was tried and didn’t where it wasn’t. ... It suggests that public spending, whether for rearmament or other purposes, had especially large effects in an environment of near-zero interest rates. All this implies that the Obama stimulus helped, but it would have helped more had policy makers aimed higher.” Eichengreen expresses the view that U.S policy makers could not aim higher because of opposition from conservative political groups.
- Seventh, the eruption of the euro-area crisis was enabled by private market participants, who greatly underpriced sovereign risk in the years leading up to the crisis; the austerity policies imposed on peripheral countries during the crisis have been unusually severe and harmful.

Several of Eichengreen’s conclusions merit comment. In what follows, I discuss the following issues: (1) The origins of the Great Depression and the gold standard; (2) the effects of Roosevelt’s reforms; (3) the origins of the 1937-38 recession; (4) Eichengreen’s view that fiscal policy could have done more following the eruption of the 2007-08 crisis; and (5) the origins of, and policy responses to, the euro-area crisis.

### **3.1 The Great Depression and monetary policy**

Eichengreen believes that the seeds of the Great Depression were sown by the resumption of the gold standard in the mid-1920s. Friedman and Schwartz (1963), in contrast, attributed the Great Depression to the Federal Reserve's tightening of monetary policy in 1928 and 1929, which aimed to stem what the Federal Reserve believed was a stock-market boom. As mentioned in Section 2, at the time of the tightening the United States had ample gold reserves so that the tightening was not part of gold-standard policy. Standard measures of share value did not indicate that composite indices of share prices were overpriced prior to October 1929 (Cecchetti 1993, Bierman 1991). Cecchetti (1993, p. 573) noted that the real and financial fundamentals of the economy were "sound" prior to the October crash. Consequently, the Federal Reserve's tightening was inadvertent and responsible for initiating the Great Depression. The gold standard worked to propagate the shock produced by the Federal Reserve's tightening to the global economy. It was not the major reason for the shock.

### **3.2 The effects of Roosevelt's reforms**

As noted in Section 2.2, a key characteristic of the recovery during the 1930s was its incompleteness. In addition to the effects of the 1937-38 recession, a contributing factor to this incompleteness reflected Roosevelt's reforms. These reforms affected output through two channels. First, they restricted competition and increased prices. For example, the National Industrial Recovery Act (NIRA) created the National Recovery Administration (NRA), which was authorized to, among other things, certify industry "codes of fair competition", binding industry leaders to cartel-like agreements restricting outputs, mandating privately-owned business firms to avoid engaging in price competition. As Eichengreen (p. 242) points-out: "that the NIRA was destructive of efforts to stimulate recovery is all but unanimously agreed by economists." Second, the reform initiatives, including the rhetoric that accompanied the initiatives, created market uncertainty, dampening investment. For example, in his 1936 State-of-the-Union message, Roosevelt castigated "the royalists

of the economic order” who, he said, opposed government intervention in economics affairs and received disproportionate amount of national income.<sup>27</sup>

As mentioned, Eichengreen downplays the effects of the uncertainty created by Roosevelt’s reform policies and anti-business rhetoric. Nevertheless, some economists have taken a different view. In this connection, Jacob Viner, the famous trade theorist, who worked in the U.S. Treasury under Morgenthau from 1934 to 1938, reported on his response to Roosevelt during a meeting when the latter suggested that he would renew his “warfare against business.” The meeting took place in 1936; it was comprised of a group of administration officials and was part of regular sessions that Roosevelt held with those officials. Here is Viner’s account of his intervention at the meeting.

In one instance, he [Roosevelt] tried out on the group an idea he had of renewing his warfare against business, prodding business. They all agreed that what he [was] suggesting was clever, would be effective politically, and so on. I spoke up and said that I didn’t think that was exactly what the country needed, that while he felt things were quiet, it still was true that there had been no reconciliation between the New Deal and business. Business still was suspicious and hostile. There still were anywhere from six to nine million unemployed after three or four years of the New Deal. He [Roosevelt] had failed to produce real recovery. ... My own guess as an economist was that the major reason was that business men just were living in an atmosphere of [a] lack [of] long-run confidence, and therefore were not investing and were not optimistic. Therefore, what he was thinking of doing was a mistake (Viner, 1953, p. 17).

Viner (1953, p. 17) then gave Roosevelt’s response, which was the following:

He [Roosevelt] said “Viner, you don’t understand my problem. If I’m going to succeed and if my administration is going to succeed, I have to maintain a strong hold on my public. In order to maintain a firm hold on [the] public I have to do something startling every once in a while. I mustn’t let them ever take me for granted.”

---

<sup>27</sup> Quoted from Walton and Rockoff (2005, p. 468).

Viner (1953) went on to say that, after he spoke-up, Roosevelt gave instructions to Morgenthau to make sure that Viner would no longer attend these meetings.

### **3.3 The origins of the 1937-38 recession**

In 1936 and 1937 three key macroeconomic policy actions took place. First, in December 1936 the Federal Reserve began to sterilize gold inflows, thereby reducing the money supply. Second, beginning in 1936, the Roosevelt administration tightened fiscal policy. Third, following the adoption of the Banking Act of 1935, which expanded the Federal Reserve's authority to set reserve requirements, the Fed doubled reserve requirements to their legal maximum rates, in three steps, in August 1936, March 1937, and May 1937.<sup>28</sup> Friedman and Schwartz attributed the 1937-38 recession to the high reserve requirements. Eichengreen argues that only the tightening of fiscal policy and the sterilization of gold inflows caused the recession.

Eichengreen expresses the view that “modern scholarship has not been kind to [the Friedman and Schwartz] argument” (p. 269). I have two comments on this assessment. First, in support of his view, Eichengreen cites two studies, one by Cargill and Mayer (2006) and the other by Calomiris, Mason, and Willock (2011). While the latter study supports Eichengreen's contention, the former study contradicts it. In their study, Cargill and Mayer (2006, p. 431) summarize their findings as follows: “The results support the hypothesis that the increase in reserve requirements reduced the availability of bank credit and contributed to the recession.” Second, most monetary historians include the increase in reserve requirements, along with the tightening of fiscal policy and the sterilization of gold inflows, as the main causes of the 1937-38 recession (see, for example, Meltzer, 2003, p. 573; Walton and Rockoff, 2005, pp. 468-69; Romer, 2009). I would suggest that modern scholarship has not been kind to the view that the increase in reserve requirements was an unimportant factor in the 1937-38 recession.

---

<sup>28</sup> For example, required reserves on demand deposits held by “central reserve city” banks were raised from 13 percent to 26 percent.

### **3.4 The role of fiscal measures**

Eichengreen claims that, had expansionary fiscal policy been applied more strongly during the 1930s, the Great Depression would not have been so severe. This view is the standard Keynesian view, which also purports that expansionary fiscal policy following the recent financial crisis cushioned the drop of output but it would have accomplished more had it been applied more generously. In this connection, Eichengreen refers (p. 301) to work by Blanchard and Leigh (2013) -- which reports large (above unity) fiscal multipliers -- in order to support his claim. The Blanchard and Leigh estimates, however, appear to represent an outlier among recent empirical studies. Indeed, recent empirical studies suggest that the multipliers are significantly below unity (even at the zero lower bound and even during deep recessions). For instance, using an innovative measure of fiscal shocks and long samples, Ramey (2011) and Ramey and Zubairy (2014) report multipliers between 0.3 and 0.8. Consequently, attributing the better macroeconomic performance in the period following the 2007-08 crisis relative to that of the Great Depression to the conduct of fiscal policy seems hard to justify on the basis of the empirical evidence.<sup>29</sup>

Additionally, Eichengreen (p. 281) argues that, since the period of the Great Depression, “the growth of government strengthened the effectiveness of automatic fiscal stabilizers.” There is no consensus, however, on the relationship between government size and macroeconomic stability. As shown by Collard, Dellas and Tavlas (2017, forthcoming) this relationship depends very much on the type of private demand that is crowded-out by government spending. In other words, there is no presumption that the growth of government may have contributed to lower volatility. Moreover, the literature on the Great Moderation has not attributed any role to government size in contributing to that episode.

### **3.5 The euro-area crisis**

Eichengreen’s description of the origins of, and policy responses to, the euro-area crisis are insightful. He points-out that the euro-area policy makers overlooked the declines in competitiveness among the peripheral countries in the years leading up

---

<sup>29</sup> According to Eichengreen (p. 301) the evidence on the Great Depression suggests that the fiscal policy worked where was tried.

to the outbreak of the crisis in Greece in late 2009 and 2010. During the period 2004 to 2007, 10-year spreads between the sovereigns of the periphery and German sovereigns had fallen to close to zero. Policy makers operated under the presumption that markets would prevent reckless fiscal behaviour in a monetary union. As Eichengreen (p. 464) notes, this view was enabled by academic research -- such as that of Goldstein and Woglom (1992).<sup>30</sup> In the event, markets severely underpriced risk, ignoring the deterioration in the economic fundamentals in the peripheral countries during 2001-08.<sup>31</sup> In the aftermath of the eruption of the crisis, Eichengreen (p. 352) argues that a shift to austerity policies was “driven by a combination of political self-interest and deep-seated ideology.” Moreover, the austerity policies overlooked the fact that relatively-closed economies -- such as Greece -- would be subjected to larger (contractionary) fiscal multipliers than more-open economies. Eichengreen also argues that the effects of the austerity policies on residents of the peripheral countries were not a priority of official lenders. As he correctly points out, instituting a policy of expenditure cuts and tax increases while output is falling in return for new loans to be used to pay off old loans is a recipe for the deepening of a recession already in place and sharp rises in unemployment, and for unstable debt dynamics.

Eichengreen (p. 337) points-out that factors contributing to the severity of the crisis were the absences of (1) the exchange-rate tool to improve competitiveness, (2) a banking union with a single supervisor and a mechanism for winding down bad banks, and (3) a procedure for restructuring debt of troubled sovereigns. Here, I wish to note the self-reinforcing character of the crisis. As shown by Gibson, Hall and Tavlas (2016), a salient feature of the crisis was the fact that (1) sovereign downgrades by rating agencies and the resulting rises of sovereign spreads led to downgrades of banks within the sovereign’s jurisdiction, and (2) the bank downgrades contributed to both further sovereign downgrades and increases in spreads. Consequently, a single downgrade of a sovereign had the potential to set-off a chain reaction with multiple feedback loops. This circumstance explains why during the

---

<sup>30</sup> Goldstein and Woglom (1992) found that U.S. states which followed more prudent fiscal policies reaped lower borrowing costs than states with less prudent policies. A follow-up study by Bayoumi, Goldstein and Woglom (1995, p. 1057) concluded as follows: “The results reported in this paper are broadly consistent with the optimistic view of the market discipline hypothesis. Credit markets *do* appear to provide incentives for sovereign borrowers to restrain borrowing” (original italics).

<sup>31</sup> For evidence, see Gibson, Hall, and Tavlas (2012, 2016).

period from October 2009 until March 2013, Greece experienced 27 sovereign downgrades, Portugal had 16, Spain had 15, and Italy had 11.

#### **4. Concluding remarks**

To summarize, Rauchway's engaging book contributes to the literature on the Great Depression by showing that Roosevelt's policy on gold was the major reason for the recovery from the Depression. Rauchway's audacious -- and successful -- attempt to place monetary policy at the center of the recovery from the Great Depression represents a substantial contribution. The author, however, displays a one-sided view of the contributions of Roosevelt, Keynes, and White. He glosses-over the severity and effects of the 1937-38 recession, thereby presenting a more favourable assessment of the overall recovery during period 1933 to 1940 than is warranted by the economic facts, misconstrues Keynes's views on monetary policy during the 1930s, thus misattributing credit to Keynes for the contributions of monetary policy to the 1930s recovery, and provides a tendentious assessment of the sustainability of the Bretton Woods System constructed by Keynes and White. Eichengreen's book is what one would expect from that writer. It is an informative, insightful, and thoughtful tour-de-force of the 1920s, the 1930s and the 2000s. My former professor in international economics, Fritz Machlup, once made the following remark (in class) about Harry Johnson: "Everything that Harry Johnson writes is worth reading." I can say the same thing about Barry Eichengreen.

## References

- Ahamed, L. (2010), *Lords of Finance*. London: Windmill Books.
- Bayoumi, T., M. Goldstein, and G. Woglom (1995), 'Do Credit Markets Discipline Sovereign Borrowers? Evidence from U.S. States', *Journal of Money, Credit and Banking*, 27/3, 1046-59.
- Bierman H. (1991), *The Great Myths of 1929 and the Lessons to be Learned*. New York: Greenwood Press.
- Blanchard, O., and D. Leigh (2013), 'Growth Forecast Errors and Fiscal Multipliers,' *American Economic Review*, 103, 117-20.
- Bordo M. (1993), 'The Bretton Woods International Monetary System: A Historical Overview. In M. Bordo and B. Eichengreen (eds), *A Retrospective on the Bretton Woods System* (pp. 3-108). Chicago: University of Chicago Press.
- Calomiris C. W., J. R. Mason, and D. C. Wheelock (2011), 'Did Doubling Reserve Requirements Cause the Recession of 1937-1938? A Microeconomic Approach,' Working Papers 2011-002, Federal Reserve Bank of St. Louis.
- Cargill, T. F., and T. Mayer (2006), 'The Effect of Changes in Reserve Requirements During the 1930s: The Evidence from Nonmember Banks,' *The Journal of Economic History*, 66(2), 417-32.
- Cecchetti, S. G. (1993), 'Inflation Uncertainty, Relative Price Uncertainty, and Investment in U.S. Manufacturing: Comment,' *Journal of Money, Credit and Banking*, 25(3), 550-54.
- Collard, F., H. Dellas and G. S. Tavlak (2017), 'Government Size and Macroeconomic Volatility', *Economica*, forthcoming.
- Edwards, S. (2015), 'Academics as Economic Advisers: Gold, the 'Brains Trust,' and FDR,' NBER Working Paper 21380.
- Eichengreen, B. (1992), *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*. New York: Oxford University Press.

- Eichengreen, B. (2010), *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System*. Oxford: Oxford University Press.
- Friedman, M., and A. Schwartz (1963), *A Monetary History of the United States, 1867-1960*. Princeton, New Jersey: Princeton University Press.
- Friedman, M. (1953), 'The Case for Flexible Exchange Rates'. In M. Friedman (ed.) *Essays in Positive Economics*, pp. 152-208. Chicago: University of Chicago Press.
- Friedman, M. (1967), 'The Monetary Theory and Policy of Henry Simons,' *Journal of Law and Economics*, 10, 1–13. Reprinted in *The Optimum Quantity of Money and Other Essays*, edited by Milton Friedman, pp. 82–93. Chicago: Adeline, 1969.
- Gibson, H. D., S. G. Hall, and G. S. Tavlas (2012), 'The Greek financial crisis: Growing imbalances and sovereign spreads,' *Journal of International Money and Finance* 31(3), 498-516.
- Gibson, H. D., S. G. Hall, and G. S. Tavlas (2016), 'How the Euro-area Sovereign-debt Crisis Led to a Collapse in Bank Equity Prices', *Journal of Financial Stability*, forthcoming.
- Goldstein M., and G. Woglom (1992), 'Market-Based Fiscal Discipline in Monetary Unions: Evidence from the U.S. Municipal Bond Market.' In Matthew Canzoneri, Vittorio Grilli, and Paul Masson (eds.), *Establishing a Central Bank: Issues in Europe and Lessons from the U.S.* New York: Cambridge University Press, 228-70.
- Hall, S. G., and G. S. Tavlas (2013), 'The Debate About The Revived Bretton-Woods Regime: A Survey And Extension Of The Literature,' *Journal of Economic Surveys*, 27(2), 340-63.
- Keynes, J. M. (1919), *The Economic Consequences of the Peace*. New York: Harcourt, Brace, and Howe, Inc.
- Keynes, J. M. (1923), *A Tract on Monetary Reform*. As reprinted in Keynes's

*Collected Writings*, Vol. IV.

Keynes, J. M. (1930), *A Treatise on Money, Vol. II: The Applied Theory of Money*. As reprinted in Keynes's *Collected Writings*, Vol. VI.

Keynes, J. M. (1933), Letter to the Editor, *New York Times*, December 31, p. 2.

Keynes, J. M. (1936), *The General Theory of Employment, Interest, and Money*. As reprinted in Keynes's *Collected Writings*, Vol. VII.

Keynes, J. M. (1971-73), *Collected Writings*. London: MacMillan, for the Royal Economic Society.

Margo, R. A. (1993), 'Employment and Unemployment in the 1930s,' *Journal of Economic Perspectives*, 7(2), 41-59.

Meltzer, A. H. (1991), 'U.S. Policy in the Bretton Woods Era,' *Federal Reserve Bank of St. Louis Review*, 73, 54-83.

Meltzer, A. H. (2003), *A History of the Federal Reserve: Volume I, 1913-1951*. Chicago: University of Chicago Press.

Moggridge, D. E., and S. Howson (1974), 'Keynes on Monetary Policy, 1910-1946,' *Oxford Economic Papers, New Series*, 26(2), 226-47.

Moley R. (1939), *After seven years*. New York: Harper.

Morys, M. (2014), 'Gold Standard Lessons for the Eurozone,' *Journal of Common Market Studies*, 52(4), 728-41.

Ramey V. A. (2011), 'Identifying Government Spending Shocks: It's All in the Timing,' *The Quarterly Journal of Economics*, 126 (1), 1-50.

Ramey V. A., and S. Zubairy (2014), 'Government Spending Multipliers in Good Times and in Bad: Evidence from U.S. Historical Data,' NBER Working Papers 20719.

Reeve J. (1943), *Monetary Reform Movements: A Survey of Recent Plans and Panaceas*. Washington D. C.: American Council of Public Affairs.

- Romer, C. D. (1991), 'What Ended the Great Depression?' NBER Working Paper 3829.
- Romer, C.D. (2009), 'The Lessons of 1937', *The Economist*, June 18.
- Shughart, W. F. (2011), 'The New Deal and Modern Memory,' *Southern Economic Journal*, 77(3), 515-42.
- Silber, W. L. (2007), *When Washington Shut Down Wall Street: The Great Financial Crisis of 1914 and the Origins of America's Monetary Supremacy*. Princeton, New Jersey: Princeton University Press.
- Silber, W. L. (2009), 'Why Did FDR's Bank Holiday Succeed?' Federal Reserve Bank of New York, *Economic Policy Review*, 15(1), 19-30.
- Steil, B. (2013), *The Battle of Bretton Woods: John Maynard Keynes, Harry Dexter White and the Making of a New World Order*. Princeton, New Jersey and Oxford: Princeton University Press.
- Tavlas G. S. (2011), 'Two Who Called the Great Depression: An Initial Formulation of the Monetary-Origins View,' *Journal of Money, Credit and Banking*, 43(3), 565-74.
- Viner, J. (1953), 'Interview', Jacob Viner Papers, Princeton, New Jersey: Princeton University Press.
- Walton G. M., and H. Rockoff (2005), *History of the American Economy*. Mason, Ohio: South-Western.

## BANK OF GREECE WORKING PAPERS

185. Adam, A., and T., Moutos, “Industry-Level Labour Demand Elasticities Across the Eurozone: Will There Be Any Gain After the Pain of Internal Devaluation?” July, 2014.
186. Tagkalakis, O.A., “Fiscal Policy, Net Exports, and the Sectoral Composition of Output in Greece”, September 2014.
187. Hondroyiannis, G. and D., Papaoikonomou, “When Does it Pay To Tax? Evidence from State-Dependent Fiscal Multipliers in the Euro Area”, October 2014.
188. Charalambakis, C. E., “On Corporate Financial Distress Prediction: What Can we Learn From Private Firms in a Small Open Economy?”, November 2014.
189. Pagratis, S., E., Karakatsani and E. Louri, “Bank Leverage and Return on Equity Targeting: Intrinsic Procyclicality of Short-Term Choices”, November 2014.
190. Evgenidis, A. and C., Siriopoulos, “What are the International Channels Through Which a US Policy Shock is Transmitted to the World Economies? Evidence from a Time Varying Favar”, January 2015.
191. Louzis, D. P., and A.T., Vouldis, “Profitability in the Greek Banking System: a Dual Investigation of Net Interest and Non-Interest Income”, February 2015.
192. Papaspyrou, S.T, “EMU 2.0 - Drawing Lessons From the Crisis - a New Framework For Stability and Growth”, March 2014.
193. Litina, A and T, Palivos, “Corruption and Tax Evasion: Reflections on Greek Tragedy”, June 2015.
194. Balfoussia, H. and H.D. Gibson, “Financial Conditions and Economic Activity: The Potential Impact of the Targeted Longer-Term Refinancing Operations (TLTROs)”, July 2015.
195. Louzis, P. D., “Steady-State Priors and Bayesian Variable Selection in VAR Forecasting”, July 2015.
196. Zografakis, S. and A., Sarris, “The Distributional Consequences of the Stabilization and Adjustment Policies in Greece During the Crisis, with the Use of A Multisectoral Computable General Equilibrium Model”, August 2015.
197. Papageorgiou, D. and E. Vourvachaki, “The Macroeconomic Impact of Structural Reforms in Product and Labour Markets: Trade-Offs and Complementarities”, October 2015.
198. Louri, H., and P. M. Migiakis, “Determinants of Euro-Area Bank Lending Margins: Financial Fragmentation and ECB Policies”, October 2015.
199. Gibson, D. H, S.G. Hall, and G. S. Tavlas, “The effectiveness of the ECB’s asset purchase programs of 2009 to 2012”, November 2015.
200. Balfoussia, H and D. Malliaropulos, “Credit-less recoveries: the role of investment-savings imbalances”, November 2015.

201. Kalyvitis, S., “Who Exports High-Quality Products? Some Empirical Regularities From Greek Exporting Firms”, December 2015.
202. Papadopoulos, S., P. Stavroulias and T. Sager, “Systemic Early Warning Systems for EU15 Based on the 2008 Crisis”, January 2016.
203. Papadopoulos, G., S. Papadopoulos and T. Sager, “Credit Risk Stress Testing for EU15 Banks: a Model Combination Approach”, January 2016.
204. Louzis, P. D., “Macroeconomic Forecasting and Structural Changes in Steady States”, March 2016.
205. Christodoulakis, N. and C. Axioglou, “Underinvestment and Unemployment: the Double Hazard in the Euro Area”, April 2016.
206. Bardaka, C. I., “Structural and Cyclical Factors of Greece’s Current Account Balances: A Note”, May 2016.
207. Lothian, J. R., and G. S. Tavlas, “How Friedman and Schwartz Became Monetarists”, May 2016.
208. Balfoussia, H. and H. D. Gibson, “Firm Investment and Financial Conditions in the Euro Area: Evidence from Firm-Level Data”, June 2016.
209. Samantas, G.I., On the Optimality of Bank Competition Policy, July 2016.
210. Malliaropulos, D., and P.M. Migiakis, “The Re-Pricing of Sovereign Risks Following the Global Financial Crisis”, July 2016.
211. Asimakopoulos, I., P.K. Avramidis, D. Malliaropulos, N. G. Travlos, “Moral Hazard and Strategic Default: Evidence From Greek Corporate Loans”, July 2016.