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Exchange rate adjustment, monetary policy and fiscal stimulus in Japan's escape from the Great Depression

Masahiko Shibamoto [a,*], Masato Shizume [b]

[a] Research Institute for Economics and Business Administration, Kobe University, 2-1, Rokkodai, Nada, Kobe 657-8501, Japan
[b] Institute for Monetary and Economic Studies, Bank of Japan, 2-1-1, Nihonbashi-Hongokucho, Chuo, Tokyo 103-8660, Japan

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Abstract

A veteran finance minister, Takahashi Korekiyo, brought an early recovery for Japan from the Great Depression of the 1930s by prescribing a combination of expansionary fiscal, exchange rate, and monetary policies. To explore the comprehensive transmission mechanism of Takahashi's macroeconomic policy package, including the expectation channel, we construct a structural vector auto-regression (S-VAR) model with three state variables (output, price, and the inflation expectations) and three policy variables (fiscal balance, exchange rate, and money stock). Our analysis reveals that the exchange rate adjustment undertaken as an independent policy tool had the strongest effect, and that changes in people's expectations played a significant role for escaping from the Great Depression. During the second half of 1931, in particular, speculation on Japan's departure from the gold standard and the inflation that was likely to follow reversed the existing expectations: instead of expecting deflation, people began to expect inflation, months ahead of the actual departure from the gold standard. As a whole, the choice of the level of the exchange rate was crucial for changing people's expectations as well as promoting exports.

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1. Introduction

In the wake of the recent global economic turmoil, policymakers and economists around the world focus on the experiences during the Great Depression in the 1930s to learn lessons from them. In this respect, the Japanese economy in this period draws renewed attention as a canonical case of successful policy to bring an early recovery in the midst of the global depression. After two years of double-digit deflation in 1930 and 1931, Japan escaped from the deflationary trend in 1932. Over the next five years, it went on to experience robust economic growth and mild inflation, even as depression persisted in many other parts of the world.[1]

Korekiyo Takahashi, a veteran finance minister, brought about an early recovery for Japan, during his fifth, sixth and seventh terms as finance minister, by prescribing a combination of expansionary exchange

* Corresponding author. Fax: +81 78 803 7008.
E-mail addresses: shibamoto@rieb.kobe-u.ac.jp (M. Shibamoto), masato.shizume@boj.or.jp (M. Shizume).

[1] Patrick, "Economic Muddle." For an international comparison of economic performance during the early 1930s, see Shizume, "Japanese Economy."

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rate, fiscal, and monetary policies between December 1931 and February 1936. Right after his return as minister, Takahashi moved Japan off the gold standard to depreciate the yen. Over the next few years, he prescribed fiscal stimulus and an easy monetary policy.[2] Takahashi's policy has drawn attention from economic historians, economists, and policymakers from around the world. Ben Bernanke, among others, has spoken highly of Takahashi's accomplishments: "Finance Minister Korekiyo Takahashi brilliantly rescued Japan from the Great Depression through reflationary policies in the early 1930s."[3]

While most economic historians agree that Takahashi's policy package stimulated the Japanese economy as a whole, they do not agree on which parts of the package were more effective and which parts were less effective.[4] Some argue that Japan's early economic recovery can mainly be credited to the depreciation of the yen.[5] Others claim that the key was fiscal stimulus.[6] Others still are convinced that the easy monetary policy kick-started the recovery. Some emphasize the impact of the Keynesian path in creating effective demand, whereas others stress the central role of the expectations of price changes in the future.

Observing data in Japan's interwar period, we notice that Takahashi pursued a policy package of increasing fiscal deficit, depreciating the currency, and expanding the money stock during his term. We now know little, however, of the dynamics of the policy shifts. Which parts of the policy package were crucial for Japan's recovery from the Great Depression? What kind of policy shift brought about the changes in output? Which parts of the package were deliberate policy actions and which were reactions to changes in the economy or the influence of other policy changes?

To disentangle the various possible directions of causality, we need to identify and measure the exogenous and endogenous components of each macroeconomic variable in a systematic way. A structural vector autoregressive (S-VAR) methodology is useful for this purpose. Cha (2003) introduces a S-VAR analysis to capture the magnitude of respective policy effects in Japan during this period. He uses the S-VAR model with monthly data on world output, the real effective exchange rate, the real government deficit, high-powered money, the volume of railway freight (as a proxy for aggregate real output), and real wages for the period of January 1929 to September 1936 (93 months). He concludes that fiscal expansion stands out as the single most important cause of Japan's upswing in the early 1930s.

Recent macroeconomic policy debates shed new light on the role of expectations as the key element when escaping from a severe economic downturn. A number of studies explore the experience during the Great Depression to derive policy lessons. After the seminal works by Temin (1989) and Eichengreen (1992), the departure from the gold standard was regarded crucial for the economic recovery of the 1930s.[7] Temin and Wigmore (1990) argue that, in the United States, a "regime change" associated with the departure from the gold standard in 1933 was crucial in order to change people's expectations and behavioral patterns.[8] Romer (1992) states that the departure from the gold standard enabled monetary expansion which brought recovery.[9] Hsieh and Romer (2006) find that a large, but short-lived, monetary expansion in 1932 did not raise expectations for devaluation of the dollar because investors had no doubt about the Fed's commitment to maintaining the gold standard. They argue that the Fed was not constrained by the gold standard, but that the Fed refrained from a decisive monetary expansion because it adhered to the gold standard philosophy.[10] Eggertsson (2008) suggests that the elimination of policy dogmas of the gold standard, a balanced budget, and a small government generated an endogenous shift in expectations about future macroeconomic policies such that, rather than expecting contractionary macroeconomic policies, people expected expansionary policies, which triggered the recovery from the Great Depression.[11] In Europe, Crafts (2011) claims that the British government changed people's inflation expectations by abandoning the fixed exchange rate, gaining control over its monetary

[2] Smethurst, *Takahashi Korekiyo*, pp. 238–267; Nakamura, *Economic growth*, pp. 232–262.

[3] Bernanke, Ben, "Some Thoughts on Monetary Policy in Japan," Remarks by Ben S. Bernanke, Member, Board of Governors of the Federal Reserve System, before the 60th Anniversary Meeting, Japan Society of Monetary Economics, Tokyo, Japan, May 31, 2003.

[4] Okura-Teranishi and Iwami et al. claim that various factors such as the depreciated yen, deficit spending, and expansionist policy in the Asian Continent contributed to the recovery. Okura and Teranishi, "exchange rate and economic recovery," and Iwami, Okazaki and Yoshikawa, "the Great Depression in Japan."

[5] Nanto and Takagi, "Korekiyo Takahashi and Japan's recovery,"; and Takagi, the "flexible exchange rate."

[6] Cha, "Did Takahashi Korekiyo Rescue Japan?"

[7] Temin, *Lessons from the great depression*; Eichengreen, *Golden fetters*.

[8] Temin and Wigmore, "the end of one big deflation."

[9] Romer, "What ended the great depression?"

[10] Hsieh and Romer, "Was the Federal Reserve constrained by the gold standard?"

[11] Eggertsson, "Great Expectations and the End of the Depression."

[12] Crafts, "delivering growth while reducing deficits."