are two broad orientations toward fiscal phenomena, which can be labeled the Anglo-Saxon and Continental orientations. Coherent expositions of the development of fiscal theorizing could surely be fashioned about either of these orientations, or of the interplay between them. To organize a history of public finance around the nationalities of fiscal scholars, however, seems to be more a vehicle for creating confusion than for sharpening insight.

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Frank G. Steindl, *Understanding Economic Recovery in the 1930s: Endogenous Propagation in the Great Depression* (Ann Arbor: The University of Michigan Press, 2004), \$55.00, pp.xi + 228. ISBN 0472113488.

Following his impressive *Monetary Interpretations of the Great Depression* (University of Michigan Press, 1995) that focused on the 1929–33 collapse, Frank Steindl has turned his attention to a detailed macroeconomic analysis of the long, discontinuous recovery period from spring 1933, when Franklin Roosevelt took over, through to the summer of 1942 when Gross Domestic Product (GDP) finally regained its long-term trend value.

Steindl has long been impressed by Friedman and Schwartz's influential monetary history. His earlier work largely endorsed their interpretation of the monetary causes of the 1929–33 contraction. In his new book, Steindl runs two econometric models that between them purport to identify the respective impact of monetary, fiscal, credit, and real interest rate variables on the post-1933 recovery of industrial production. (One problem here, not mentioned by Steindl, is that industrial production is imperfectly correlated with GDP, which should be the main focus of recovery studies, since service sectors and agriculture grew far more slowly than industrial production over the period.) He finds that money and real interest rate effects are significant, accounting for about half of the recovery, while fiscal variables and the credit channel (via an industrial and commercial loan series) are insignificant. This gives some support to Friedman and Schwartz's insistence on the importance of money, though Steindl finds that this variable is significant only with much shorter lags (between zero and three months) than is usually expected from the impact on output and/or prices from changes in the money supply alone.

However, the key implication Steindl draws is that macroeconomists' conventional aggregate demand variables explain only about one half of the reversion to trend between 1933–1942. He calls this reversion process "endogenous propagation," in the sense that something rooted in the dynamics of the enterprise economy itself—qualitative, unmeasurable, and independent of exogenous events and policies—is quietly and automatically at work to bring the economy back to its trend growth path whenever it falls below it. He has in mind incentives, opportunities, and flexibilities that are intrinsic to a market-based economy.

This view is strengthened for Steindl when he comes to examine the later years of the recovery, a period given only cursory treatment by Friedman and Schwartz. In 1938–40 prices were falling yet the economy was rebounding from the sharp contraction that began in early 1937 (after nearly four years of strong recovery) and ended in May 1938. Steindl sees this period as a conundrum for the Friedman and Schwartz line on money, but as confirmation of his own view on the importance of endogenous propagation to trend. Consistent with Friedman and Schwartz (except, it should be stressed, for the shortness of the lag between money and prices), wholesale prices began to fall sharply in May 1937. This deflation coincided with the fall in industrial production and followed hard on the heels of decline in the money supply. But despite strong economic growth after May 1938, prices continued to fall for fifteen months (by about five percent) until the sharp upward blip (about seven percent) in September-October 1939 associated with panic buying at the outbreak of war in Europe. Thereafter prices fell a further two and one-half percent until August 1940, when they rose for the rest of the recovery to June 1942.

What intrigues Steindl most is that the May 1938-August 1940 period was one in which prices were falling in twenty-five of twenty-seven months, while both output and the money supply were increasing strongly. He considers this inconsistent with a conventional aggregate demand explanation of policy-induced recovery toward trend. As noted above, fiscal variables were insignificant in his regression equations, and the influx of gold from Europe had no impact because demand for money (the inverse of its velocity) apparently increased faster than the supply. Steindl concludes that output moved toward trend over this period primarily because of automatic mean reversion. Furthermore, these underlying forces must also have been at work in 1933–37 and 1940–42, though disguised then by the help of exogenous monetary inflows or the hindrance of policy errors such as increased reserve requirements and gold sterilization in 1936–37.

Whether the latter measures were to blame for the ensuing recession is controversial. Steindl is convinced that banks *desired* their huge accumulation of excess reserves, 1933–37. It resulted from fear of lending in light of recent bank failures, not from failure of borrowers to come forward as Irving Fisher and the Fed (largely through Lauchlin Currie's influence) believed. However, both influences were surely at play: banks feared to lend, industrialists feared to borrow (drawing instead on their own accumulated idle balances as and when they had the incentive to invest). Many who wanted to borrow were poor risks, and this contributed to the banks' fear of lending. The best credit risk was the government, and banks increased their stock of government securities far faster than their loans during 1933–37 (illustrated in one of Steindl's useful charts on bank assets, money, output, prices, fiscal variables, and excess reserves).

Steindl downplays the significance of this last point. He showed that the influence of fiscal policy was insignificant in various econometric studies. However, there are at least two problems here. First, one could question Steindl's measure of the fiscal effect. It comes from what he calls the "real budget balance": the ratio of real Federal cash receipts to real cash expenditures. This differed significantly from the Currie-Krost "net federal income-increasing expenditure" series (pre-*General Theory*, having started in 1934) that adjusted fiscal receipts and expenditures to allow for the widely differing propensities to save from different items in the cash deficit series. The Currie-Krost series showed a much more drastic decline in the federal contribution to income and expenditures in 1937 compared with 1936. This coincided with the downturn in the economy, as one might expect, but also with the downturn in the money supply. Given the importance of fiscal deficits in 1933–36 to supplying banks with safe earning assets, and then the sudden drying up of that supply in 1937 through to early 1938 and its resumption thereafter, one cannot divorce the fiscal stance from the behavior of money. Thus, what the econometrics pick up as the effect of an exogenous money supply may actually be the indirect effect of endogenous money-financed fiscal policy when banks are looking for safe earning assets. Incidentally, contrary to Steindl (p. 131), surely it does make a difference whether banks buy extant or newly issued government bonds (to finance deficits). Only in the former case is there upward pressure on the price of bonds, hence increased risk for risk-averse banks.

Second, the fiscal effect derives from a combination of (i) policy-induced changes (such as the inflationary veterans' bonus payments in 1936 and the deflationary social security fund collections in 1937) and (ii) automatic fiscal changes that result from movements in the economy itself. Thus, in the upswing of 1933–36, for example, there was an underlying tendency for the deficit to fall. Econometric tests with monthly data would show that the economy improved as the deficit fell (budgetary tightening)—the opposite of the theoretical expectation. Of more interest to policymakers (and historians) would be the power of fiscal *policy* to boost or depress the economy in the exceptional conditions of the 1930s. It clearly had that power, though mainly through the way it helped inject or withdraw money from the circular flow.

That said, one may still be left with a large "black hole"—Steindl's endogenous propagation. This does not gainsay that the speed of reversion to trend would have been greater if fiscal and monetary effects had been better understood, and had policies consistently worked with rather than against the trend. Also, Alexander Field (*American Economic Review*, September 2003) showed that the 1930s notched up greater advances in productivity than in any other decade of the century. Much was due to the generalized benefits of governmental infrastructure projects (part of the fiscal activism of Roosevelt's New Deal), particularly those involving improved transport.

Nonetheless, Steindl's speculations on automatic trend reversal deserve to be treated seriously. In Allyn Young's seminal theory of increasing returns and economic progress (*Economic Journal* 1928) growth is self-sustaining rather than self-exhausting as an increase in market size engenders qualitative and quantitative improvements. Exogenous policy mistakes can knock the economy off trend, and policy corrections can return it more quickly. Meanwhile, past improvements are not lost and the silent operation of market forces—generating Steindl's "incentives, opportunities and flexibilities"—continue to spur productivity through depression years. Part of the price declines of 1938–40 may have been due to these beneficent cost reductions (especially since real wages lagged productivity growth at that time) rather than to a deflationary increase in the demand for money (decline in velocity) that partly neutered the increased supply. We should be grateful to Steindl for stressing the need to research these issues more seriously.

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