Counterfactual Histories of the Great Depression[1]

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As Professor Balderston notes in his introduction to this volume, history is necessarily written in terms of a model, whether implicitly or explicitly, and a model invariably suggests counterfactuals. In this note, we first review our model of the Great Depression ("the ET model" as it is referred to by Balderston) and then explore the counterfactual that flow from its application to the monetary, macroeconomic and political history of the 1930s.

1. The Depression as It Was

It is necessary to understand the causes of the Great Depression in order to answer the question of whether things could have turned out differently. The simultaneous fall in production and prices in the early 1930s strongly suggests that the initiating factor for the Great Depression was a series of negative aggregate demand shocks. But how could so many countries have experienced a negative demand shock at the same time? The answer is that all of these countries, faithful to the dictates of the gold standard, pursued deflationary policies at the same time. The essence of the gold standard was the free flow of gold between individuals and countries, the maintenance of fixed values of national currencies in terms of gold and therefore one another, and the absence of an international coordinating and lending organization like the International Monetary Fund.[2] Under

[1] Afterward to Theo Balderston (ed.), *The World Economy and National Economies Between the Wars* (forthcoming).

[2] The large and melancholy literature on central bank cooperation in the 1920s proves how poor a substitute this turned out to be.

these conditions, when the United States and Germany adopted deflationary policies, other countries had little choice but to do likewise.[3] As confidence in this system waned, central banks and governments swore their allegiance to the gold standard even more loudly. But their actions betrayed the words; fearing for the stability of the system they shifted their reserves out of U.S. treasury bonds and British consols into gold.[4] The international reserve backing for global money supplies collapsed between 1928 and 1932: the share of foreign exchange in reserves of 24 European countries fell from 42% to 8%.[5] This was how deflation in two countries, which between them accounted for no more than a third of the world economy, could produce a vast deflationary shock than quickly engulfed the entire world economy.

This recession began at the end of the 1920s in the United States and Germany. Their economies has began to contract, partly as a result of central-bank pressure.[6] But while their initial downturns had some independent roots, their economies were connected, allowing tightening by the Fed to make it harder for Germany to maintain its customary level of capital imports, which in turn forced the Reichsbank to tighten. In any case, it was clearly gold-standard policies that turned the downturn into the Great Depression and pulled down the rest of the world.

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[3] The adjustment mechanism for a deficit country was deflation rather than devaluation—that is, a change in domestic prices instead of a change in the exchange rate. Lowering prices and possibly production as well would reduce imports and increase exports, improving the balance of trade and attracting gold or foreign exchange. This is the price-specie-flow mechanism first outlined by David Hume in 1752.
[4] Forcing the reserve-center countries, finding themselves to be losing gold, to further raise interest rates, applying more deflationary pressure to their economies.
[5] The data and the argument are both presented by Nurkse (1944).
[6] France, meanwhile, was not in recession (having stabilized much later than the others, in 1926, and was only beginning to recover from its post-stabilization recession in 1928-29), but it was accumulating large amounts of gold due to what was in effect a tight monetary policy. The impact on the rest of the world was thus much the same as that exercised by U.S. and German policies.

The choice of deflation over devaluation was the most important factor determining the course of the Depression. Contemporaries clearly saw this as the key decision of the authorities, and they supported it wholeheartedly. Policy makers in all industrial countries insisted that the way out of depression was not to "debase" the currency but instead to cut wages, lower production costs, and reduce the prices of goods and services. Devaluation did not become a respectable option until much later -- until after an unprecedented crisis had rendered the respectable unrespectable, and vice versa. For the time being, however, deflation remained the only accepted option.

Governments and central banks could not easily deflate their economies in the early 1930s. Given the sacrifices they had made in the Great War, workers who once had mutely borne the burdens of financial stability now expected, indeed demanded, a voice in policy. The inability of economic policy makers to force down wages was at the core of the period's economic strains. As a result of the difficulty of forcing down wages, labor demand was depressed. Profitability was squeezed. Credit was tight (the real value of the global gold stock, which provided the backing for money supplies, was low because price levels were high).[7] The political strains created by attempts to cut wages caused investors to fear for the stability of the gold standard even as policy makers struggled to maintain it. And as those investors grew less confident about the depth of political support for and therefore the operation of the system, the destruction of international reserves quickly got underway, as central banks shifted out of foreign exchange in favor of gold.

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[7] The last is the mechanism emphasized by Nobel Laureate Robert Mundell in a series of articles (see Mundell 2000) and by Clark Johnson (1998) in his variation on our theme.

At its inception, the Great Depression was transmitted internationally as a result of the hegemony of the gold-standard ideology, a mentality that decreed that external economic relations were primary and that speculation like that manifest in the booming stock market in New York was a threat to economic stability.[8] U.S., British and Germany policy makers thus acquiesced in the deflation and liquidation that set in at the end of the 1920s. And as the U.S., British and German economies contracted, they depressed other economies through the mechanism of the gold standard. These countries reduced their imports as they contracted, reducing the exports of other countries. They also reduced their capital exports (in the case of the U.S. and UK) in response to tightening credit conditions at the end of the 1920s.

No country on the gold standard could escape the discipline of this harsh regime as the Depression progressed.[9] Some found their prices falling as a result of the lack of demand for their products in export markets. Others compressed domestic demand, forcing prices to fall in order to maintain the value of the currency. In almost all cases, deflation was accompanied by depression as declining aggregate demand moved countries down along their aggregate supply curves. Banking systems collapsed under the weight of this deflationary pressure, further reducing money, credit and economic activity.

As confidence in the gold standard weakened, the deflationary pressure intensified. When sterling's devaluation raised questions in the minds of investors about

[8] There are really two strands of the financial orthodoxy of the time: one emphasizing excessive speculation and the need to liquidate those financial excesses, and another emphasizing the need for policy to hoe firmly to the dictates of the gold standard. Our argument is that these two strands were intertwined; they are both aspects of what we called the "gold standard mentalité" in Eichengreen and Temin (2000).
[9] Hsieh and Romer (2000) question whether the United States was in fact subject to this discipline in the key year of 1932. We are inclined to argue that it was, at least psychologically if not also technically.

the prospective stability of the dollar, the Federal Reserve felt compelled to raise its discount rate despite the fact that the U. S. economy was contracting rapidly. The Fed was clearly not worried about inflation in a period when prices were collapsing. It was not worried about excessive speculation now that the Wall Street bubble had burst. Rather, was worried about gold losses, prospective as well as actual, and their implications for confidence in the dollar. The gold standard, clearly, was a primary consideration shaping the policies that so compounded the U.S. Depression.

It follows that abandoning the gold standard was the only way of arresting the decline. Going off gold severed the connection between the balance of payments and the price level. It severed the connection between global gold stocks and global money supplies. Unless they took this critical step, countries could not reduce the level of interest rates or expand money and credit without precipitating a currency crisis. Changes in the exchange rate rather than changes in domestic prices could eliminate differences between the level of domestic and foreign demand without a painful deflation. Any single devaluation might beggar neighbors if it was not accompanied by a sharp expansion of domestic credit, but devaluation all around would have increased the value of world gold reserves and allowed worldwide monetary reflation and economic expansion.

2. The Depression as It Might Have Been

What would have happened if countries had abandoned the gold standard sooner than they in fact did? Instead of a large literature on the Great Depression, might there be only a small literature on the 1929-30 recession and the collapse of the interwar gold

standard, analogous to the literature on the late-1960s recession in the United States and the collapse of Bretton Woods?

Britain abandoned the gold standard in 1931, avoiding some of the horrors of the slump. But this policy did not allow either it or the world to avoid the Depression. Britain, one of the most open of industrialized economies, could not insulate itself completely from the rest of the world, which was still in decline. Britain also was not large enough for its apostasy to change the direction of the world economy. It was not large enough to do so even if it had in fact used that apostasy as an opportunity to initiate aggressively reflationary policies, which it did not.

With historical Britain as the base, we can ask what would have happened if other countries had also responded like Britain. Ferguson and Temin (2001) argue that the German currency crisis of 1931 was produced by political actions in the Weimar Republic, not by any iron laws of economics. If the German crisis was not economically inevitable – if it was not the result of the Austrian collapse or of changes in American capital markets – the situation there could have developed differently if politicians had made different choices.

Let us assume that the Weimar government had been less bellicose in the spring and summer of 1931. Specifically, assume that the Weimar government had resisted the impulses to push the boundaries of the Versailles Treaty by calling for a customs union with Austria and denouncing reparations in March and June 1931. Foreign loans would have continued to fund the German government's growing deficits, and the German banks would not have failed. This would have made life a little better in Germany. Even though conditions were very bad in Germany in 1931, they might not have continued to

get worse as quickly as they in fact did if the banking system had not been in crisis. But if the German government continued to adhere to the gold standard, to maintain capital mobility and a fixed price of its currency, any improvement in economic conditions would have been minor.[10] The course of German history would not have been very different because economic policy could not have been very different. The worst outcome, the currency crisis of 1931, might have been avoided, but the dictates of the gold standard would still have held sway. While output would not have fallen as fast or as far, it still would have fallen.[11]

German macroeconomic policy was deflationary in late 1931 even though Germany had slapped controls on currency transactions and could have used this shelter to dramatically stimulate its economy (without causing its currency to collapse). If these deflationary domestic policies had been held to in what we might term the first of our counterfactual worlds, then the German Depression would have been a bit milder, but it still clearly would have been the Great Depression. Other countries would have benefited only marginally, especially insofar as larger capital inflows into Germany, attracted by the government's less bellicose foreign policy, would have meant larger capital outflows from other countries, such as the United States, possibly impelling the Fed to jack up interest rates and thereby worsen the U.S. slump.[12]

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[10] Bruening's famous price-reducing decree of December 1931 would have depressed the economy, in other words, even if there had not been a crisis in July.

[11] Bernanke and James (1991) use panel data for several dozen countries and relate the evolution of output to the extent of deflation, the presence or absence of a banking crisis, and additional control variables. They find that output suffered both when deflation was more rapid and when a country experienced a banking crisis. Under the present counterfactual, Germany would have experienced the first of these adverse shocks in 1931 but not the second. Hence our conclusion that output would have still fallen, but by less.

[12] Thus, a different political stance in Germany, by itself, would have mainly redistributed the incidence of the Depression internationally. This underscores our previous point that more radically reorientations of

Assume now a second counterfactual in which the Weimar government also changed its macroeconomic policy in 1931. Assume that Germany either had currency controls, as it did, or that it devalued with Britain, and that in addition that Germany took advantage of the opportunity in the summer and fall of 1931 to adopt much more stimulative macroeconomic policies.[13] Almost certainly, economic conditions there would have begun to improve more quickly.[14] Moreover, if there had been no currency crisis in the summer (recall that this second counterfactual builds on the first), German consumers and investors would not have been subject to worries about their banks and currency. Conditions in Germany would have been even better in this second counterfactual.[15]

What about the rest of the world? Eichengreen and Sachs (1986) showed that devaluations are harmful to other countries when the devaluing country fails to take the opportunity to expand its economy by pumping up domestic credit. Britain in 1931 fell into this category; not until the spring of 1932 did the Bank of England lower Bank rate and begin to stimulate economic activity. At this point Britain's devaluation stopped being beggar-thy-neighbor and was neutral or helpful toward the rest of the world. The vast majority of other countries behaved similarly, in that they used their new freedom to pursue more expansion policies only tentatively and after some delay.

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policy would have been required to actually end it. We return to this "beggar-thy-neighbor" aspect of the problem below.

[13] This is something of a heroic assumption. Germany had after all experienced one of the most extreme hyperinflations of the early 1920s. This made policy makers and the public recoil, almost instinctually, from arguments for aggressively reflationary monetary policies (even after strict exchange controls were applied to bottle up some of the consequences). This observation of course just serves to highlight our essential argument.

[14] The use of "almost" means that there is one important qualification, as we explain below.

[15] The Bernanke and James model described above now predicts a much more favorable evolution of output.

The Eichengreen and Sachs model applies to Germany as well. If Bruening had devalued but persisted in the deflationary policies he actually pursued, then the devaluation would have helped Germany while hurting other countries. If, however, Bruening had understood that devaluation allowed more expansionary policies and responded accordingly, then the German devaluation could have also eased conditions elsewhere in the world. The German cabinet discussed the possibility of following Britain off gold in September 1931, and the tone of their discussions suggests that they understood that devaluation could be a package of actions: devaluation itself and a change in macroeconomic policy to expand the economy. It was the latter component that frightened these veterans of the German hyperinflation. Their fear was that devaluation would be less of a positive influence on prices and demand than a negative shock to confidence (whatever changes in domestic policy accompanied the change in parity). It is thus reasonable to ask what might have happened had Germany devalued in 1931 (or taken seriously the effects of currency controls) and then (possibly after six months or so, as in Britain) begun to prudently and cautiously expand domestic credit, stabilizing prices and demand. Unless one believes that the negative shock to confidence would have dominated, something that was not historically the case in any other country that took this tack, the answer is that the depression in Germany would have been eased and that the depression elsewhere eventually would have been eased as well.

A third counterfactual is quite different, both in the location of the change and its probable effect. Assume now that German history had followed its actual path to crisis and beyond in the summer of 1931. Let Britain also follow its actual path of policies in the fall of 1931. But assume that the U.S. Federal Reserve did *not* follow its historical

path when the United States suffered gold losses in September and October of 1931. As everyone knows, the Fed followed the dictates of the gold standard and raised its discount rate in two jumps a week apart, amounting to the largest rise in the discount rate in the Fed's history. As everyone from Friedman and Schwartz (1963) to Romer (1993) has noted, this action was widely applauded by the U.S. financial community. Of course it also was an extremely harsh blow to an already depressed economy.

The alternative would have been to follow England off the gold standard in the fall of 1931. Had the U.S. floated the dollar, the currency likely would have sunk with the pound, leaving the dollar-pound exchange rate more or less unaffected. This would have been a shock to the world financial system. As we know from other crises and from open-economic macroeconomic theory, exchange rates tend to overshoot their eventual equilibrium in response to changes in the policy regime. Assume, as we think reasonable, that this overshooting would not have been worse than the pound's overshooting, which was about 20%, and that exchange rates then would have stabilized. In other words, we think there is no reason to hypothesize the kind of exchange-rate chaos that the defenders of the gold standard anticipated at the time.[16]

In this case, a simultaneous devaluation of the world's largest currency area and of the world's most extensive trading area would have provided much needed liquidity to the world, assuming that the Fed and the Bank of England had followed up by expanding domestic credit. Devaluation would have allowed the Federal Reserve to consider domestic conditions instead of international strains, as it would do two years later under Roosevelt's guidance. Instead of taking an unprecedented deflationary action, policy would have turned expansive—even if only gradually, as in England. In this third

counterfactual, the world after 1931 would not have been saddled by uniformly deflationary policies.

Given that it typically took six months following the abandonment of the gold standard for central banks and governments to convince themselves that abandoning gold did not threaten inflation and to begin to cautiously reflate, and up to another year for monetary policy to begin to have effects on the real economy, 1932 would not have been a good year even under this counterfactual. Other countries would have mainly felt a loss of competitiveness. Only toward the end of the year would they have felt some relaxation of credit stringency and upward pressure on demand from the stimulus applied by the U.S. and British central banks. The positive response might have materialized more quickly if households and firms had anticipated the favorable effects of the reorientation of U.S. and British policies as soon as the latter were initiated. But most of the evidence is consistent with the view that time was needed for the change in policy to work.[17]

Our final fantasy is a combination of the second and third counterfactuals described above. In this fourth counterfactual, Britain, Germany and the United States all devalued in the summer or fall of 1931 and gradually changed their policies. Instead of being devout champions of the gold standard, they would have turned their attention more to domestic economic conditions. Perhaps they might even have encouraged each other to move faster and sped up the process relative to that actually observed in the

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[16] Their expectations are documented in Eichengreen and Temin (2000).

[17] The preceding sentence alludes to the regime-change argument of Temin and Wigmore (1990), which the authors use to explain the early recovery of industrial production in the U.S. following Roosevelt's abandonment of the gold standard. But the gold bloc countries did not experience a sudden rebound in industrial production in anticipation of any eventually favorable effects of U.S. policy in 1933, which is our point here.

English turn-around. The French of course would have been hostile to all this expansion, predicting chaos and disaster from these new policies. It is particularly fantastic to think of the French devaluing in 1931; it took five years of economic decline and bitter political debate to work them around to this position. But if the Germans could have taken the chance of expanding, perhaps even these faithful guardians of gold-standard orthodoxy could have joined the crowd (Franco-German rivalry being what it is). Whether or not France joined in, many other countries in the U.S., British and German spheres of influence would have presumably changed their policies, following these three countries, in the present counterfactual.

This final counterfactual thus effectively envisages a change in policy in the fall of 1931 by almost the entire industrialized world. Recovery would have begun almost immediately as investors and consumers realized that the policy regime had changed. The bottom would have been reached in 1931, and conditions in 1932 would have begun to brighten. There still would have been widespread unemployment and idle resources, to be sure, but the mood would have been altogether different as economic activity showed signs of picking up. We might remember the early 1930s only as a major recession, like the recession of the early 1980s, instead of the Great Depression.

3. Conclusions

It is of course great fun for economic historians to speculate on ways in which the Depression might have been moderated and shortened by the adoption of different economic policies. But there also is good reason for the general historian to take these speculative counterfactuals seriously. The most compelling such reason of course is the

momentous historical discontinuity that occurred when Hitler became German chancellor in January 1933. If conditions had been different enough to avoid the scourge of the Nazis and perhaps also the Second World War, the history of the twentieth century would have been profoundly different.

Rivers of ink have been spilled over the causes of the Nazi rise to power. Studies have championed and refuted competing hypotheses about the relationship between the German economy and the votes for the Nazi party. At some level, however, there cannot be any doubt that the Nazis were the party of the Depression. They were a fringe group in the 1920s and grew to electoral prominence only in 1930 when economic conditions deteriorated. They gained even more seats in the Reichstag in the first election of 1932, but lost seats in the second election later that year as economic conditions appeared to improve. Had that improvement come earlier, a new study using panel data shows clearly that the Nazi vote would have been smaller.[18] We do not have a model of the political process that tells us how weak the electoral support for the Nazis would have had to be to significantly affect the political maneuvering among the leaders of the Weimar Republic. But almost any model would say that better economic conditions would have decreased political support for the Nazis and therefore the probability that Hindenburg would have asked Hitler to be chancellor.

The point on which we are insisting is that economic-policy counterfactuals are more than a game for economists. Economic policy is an ingredient of politics. Had economic policy been different in the Great Depression, one can well imagine that the horrors of Naziism and the Second World War might have been avoided. The sequence

[18] Stögbauer (2001) combined the clear time-series evidence and the previously ambiguous cross-section evidence to show that unemployment was a major spur to the Nazi vote.

of counterfactuals we have described show the probable effects of progressively larger changes in economic policies. Each successive counterfactual considers a more radical change in policies and predicts a shorter depression. It is hard to know how many elements in this sequence would have been required to stop the Nazis' political gains. Unquestionably, the fourth and most ambitious counterfactual would have changed economic conditions sufficiently to foil the Nazi grab for power. It seems to us a minor question whether the second or third counterfactual would have been enough to do the job.

The ET theory of the Great Depression, as Balderston labels it, has two essential attributes. It provides a unified account of the macroeconomic history of the interwar years (as the reader will not be surprised to hear us say). And because it is based on an explicit model, the ET theory can also do more than this. It can provide a basis for considering history as it might have been. It can help us uncover the political actions that affected its course. It has led us to argue that it was the poor choices of the economic policy makers that exposed the citizens of the world to violence and even genocide for more than a decade.

As we argued in Eichengreen and Temin (2000), the officials and politicians in question failed to appreciate this fact. They continued to believe in the wisdom of their misguided policies even as the world descended into depression and chaos. It was only when they were replaced that the economic policy regime changed. They thought after the fact that they had been run over by a steamroller of suffering people.[19] Ultimately, the question, a definitive answer to which lies beyond the scope of this essay, is how economic policies and economic policy leadership come to be changed. The Nazi

acquisition of power is one example of how this can come about but in the least desirable possible way.

[19] "They still think it wicked that this steamroller came along (Edie, 1934, 227)."

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