

Bridgewater®

Daily Observations

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Tightening at the End of the Supercycle?

To me, what one thinks about the Fed's tightening depends on whether one a) emphasizes the cyclical over the secular and b) thinks that the Fed, as the central banker for both the US and the world's reserve currency, should run monetary policy on the basis of what's best for the US versus what's best for the world. Said differently, if one agrees that either a) we are near the end of the developed country central bankers' ability to be effective in stimulating money and credit growth or b) the dollar is the world's reserve currency and that the world needs easier rather than tighter money policies, then one would hope that the Fed will be very cautious about tightening.

What We Believe

We believe that a) the same things happen over and over again due to timeless and universal cause-effect relationships that are logical, b) there is a long-term debt cycle that is very important to understand, yet not well understood, and c) we are near the end of the cycle when "pushing on a string" is more likely (i.e., actions by central banks to stimulate are more likely to fail). Since our confidence that the Fed can be effective in tightening is greater than ever while our confidence in the Fed's ability to be effective in easing is less than ever, we think it would be best for the Fed to err on the side of being later and more delicate than normal. To be clear, we don't know—nor does the Fed know—exactly how much tightening will knock over the apple cart. What we do hope the Fed knows, which we don't know, is how exactly it will fix things if it knocks it over. We hope that they know that before they make a move that could knock over the apple cart.

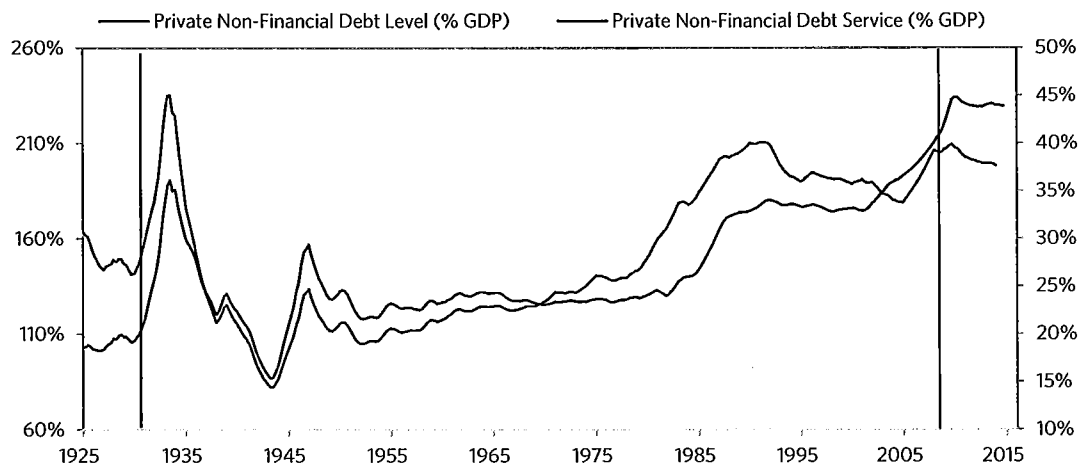
Clearly the Fed has created expectations that it will tighten in either June or September, and such expectations are difficult to deviate from. For those reasons, we expect a Fed tightening and are cautious about our exposures. To help convey why we are cautious, I'd like to remind you of the 1937 analog.

The 1937 Analog

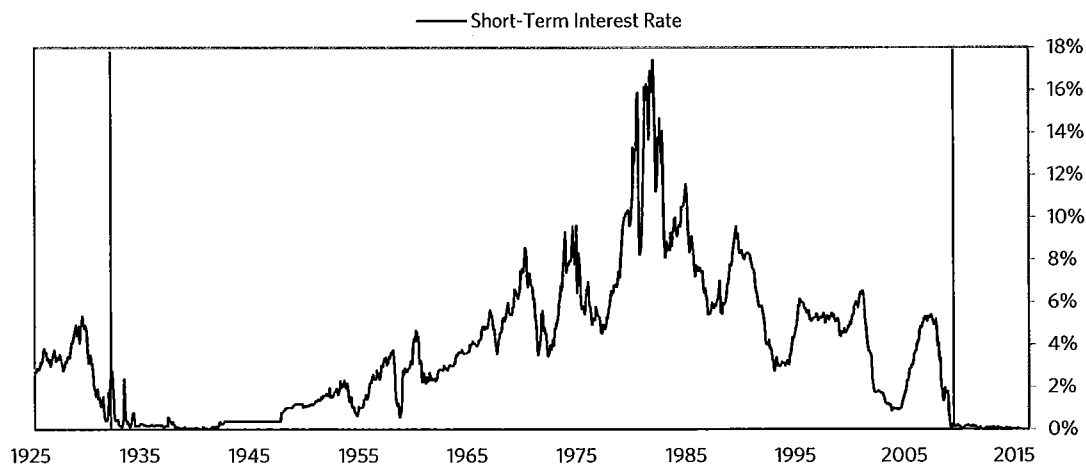
The following charts show the sequence of events in both the 1930s and recently listed below:

- (1) Debt Limits Reached at **Bubble Top**, Causing the Economy and Markets to Peak (1929 & 2007)
- (2) Interest Rates Hit Zero amid **Depression** (1931 & 2008)
- (3) Money Printing Starts, Kicking off a **Beautiful Deleveraging** (1933 & 2009)
- (4) The Stock Market and "Risky Assets" Rally (1933-1936 & 2009-2014)
- (5) The Economy Improves during a **Cyclical Recovery** (1933-1936 & 2009-2014)
- (6) The Central Bank **Tightens**, Resulting in a Self-Reinforcing Downturn (1937 & 2015?)

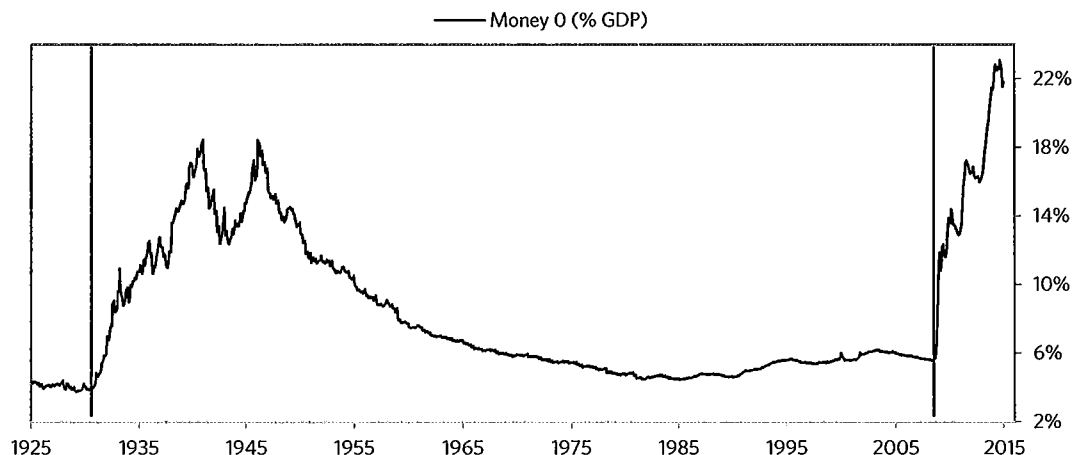
(1) Debt Limits Reached at **Bubble Top**, Causing the Economy and Markets to Peak (1929 & 2007). This chart shows the cycle and the key turning points in it.



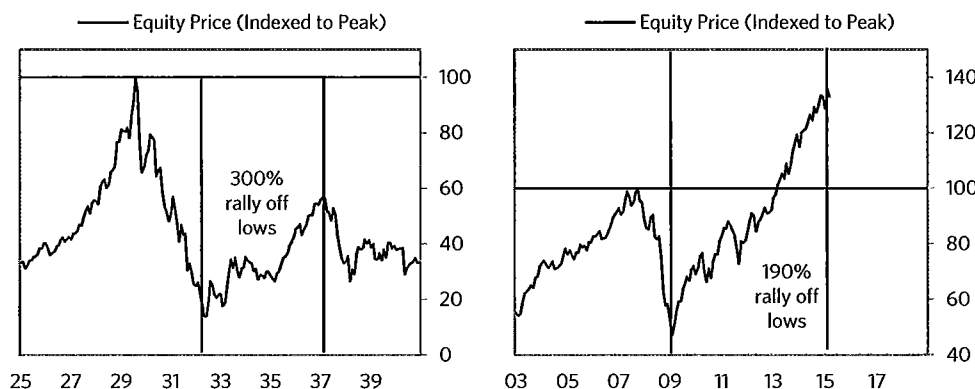
(2) Interest Rates Hit Zero amid **Depression** (1931 & 2008). In both cases, when interest rates hit 0% the upward waves in the debt cycles ended and interest-rate-based monetary policy ceased to work.



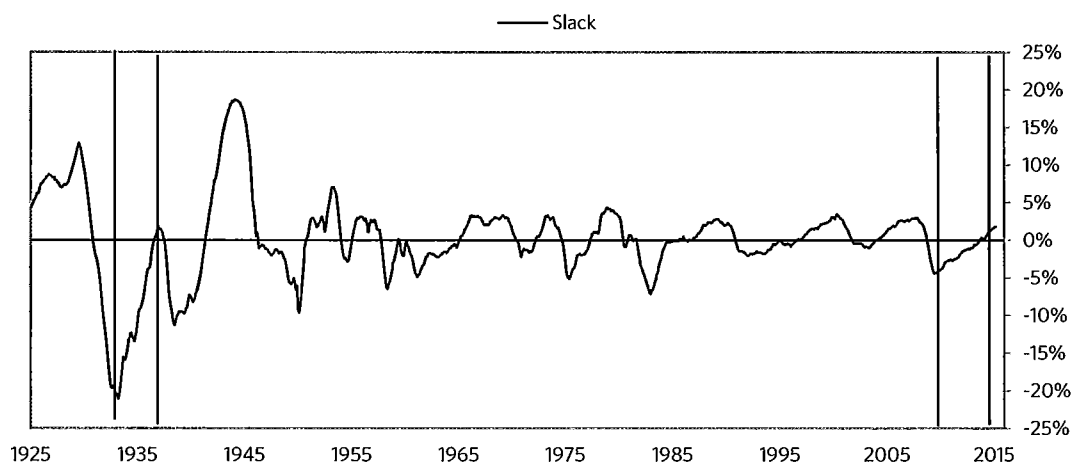
(3) Money Printing Starts, Kicking off a **Beautiful Deleveraging** (1933 & 2009). Since interest rates couldn't be lowered and increased demand couldn't be supported with more debt growth, "printing money" (i.e., "QE") occurred to reverse the downturn.



(4) The Stock Market and "Risky Assets" Rally. The printing of money to purchase financial assets, together with the wide spreads and illiquidity that existed, led to big rallies in stocks and other "risky" assets. In the charts below we focus on the stock market rally during both periods. Because the stock price rose much faster than earnings because of the massive amounts of liquidity, the price-to-earnings ratio rose a lot and the expected future return of equities fell to very low levels, not leaving one with much incentive to hold equities and bear the price risk.



(5) The Economy Improves during a **Cyclical Recovery** (1933-1936 & 2009-2014). As a result of the increased liquidity in the system and the wealth effect, the economy turned up.



(6) In 1937 the Fed **Tightened** resulting in a Self-Reinforcing Downturn (1937 & 2015?)

The Tightening in 1937

We can tell you what happened when the Fed tightened in 1937 but we can't yet tell you what will happen when the Fed tightens this time around. To paint the full picture, we will start in 1935.

1935

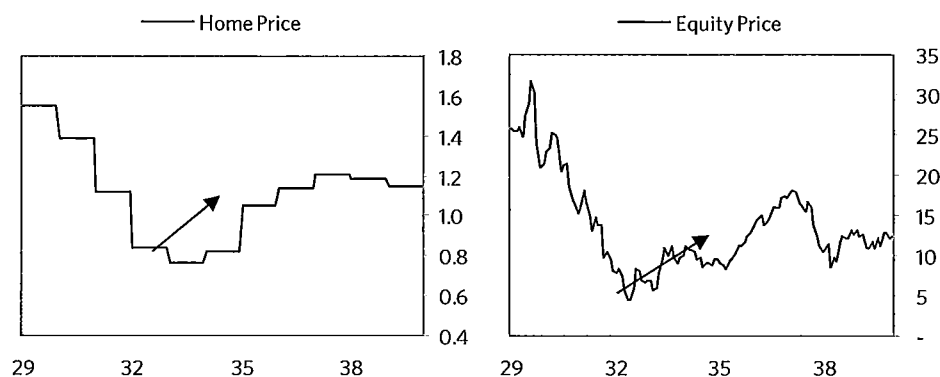
By 1935 the economy had recovered, deflation had disappeared, and stock prices had soared because of the Fed's earlier policies. As a result, in the spring of 1935 the Fed became increasingly concerned about the rise in excess reserves. It feared that the surge in excess reserves could create an expansion in credit and inflation in the future, much like the Fed has increased concerns for similar reasons over the last year or so. In March, a background memo was prepared to address the question of what the Fed should do. It recommended no action for the time being. The paper explored the question of whether excess reserves will encourage banks to lend more to the private sector by pushing down the yield on government securities, but it didn't see evidence of that yet happening, so it held pat. A second issue the paper looked at was how to exit—specifically whether to absorb reserves through asset sales. The paper rejected doing this for the time being, expressing the view that doing this would mean prematurely giving too much weight to inflation concerns that hadn't yet shown signs of materializing relative to encouraging the expansion, which they still felt should be encouraged.

The cyclical expansion and advances in the stock market and housing price gains continued, causing the Fed to become, by the end of the year, increasingly concerned about the possibility that its unconventionally easy policy would provide too much stimulation. In October another memo expressed heightened concerns over the excess reserves. It pondered the appropriate time to reduce excess reserves and whether to do that through 1) asset sales or 2) increasing the reserve requirement. In November, the pros and cons of these paths were explored. The argument for reducing excess reserves was to get ahead of the potential for future inflation; the argument against was that there was no evidence yet for restraint.

In its press release of November 22, the Fed discussed the stock market boom and expressed concerns about inflation. Policy makers in the Fed and the Treasury disagreed in much the same way and for essentially the same reasons as policy makers have been disagreeing today. Fears of fueling a bubble were rampant because a number of policy makers including FDR remembered that the bubble of the late 1920s caused the stock market

bust that contributed to the depression. As a result, they were very worried that the rise in the stock market in 1933-1935 (nearly a quadrupling!) could fuel a reoccurrence. In that November 22nd release they defined inflation to be "a condition brought about when the means of payment in the hands that will spend them increases faster than goods will be produced." The corresponding memo noted that inflation was still far off. The concerns being expressed were about future inflation.

At the time, home prices were rising faster than 25% per year, and the recovery in equity prices was even faster. The boost to wealth was big, though wealth remained below pre-depression bubble levels. See below.

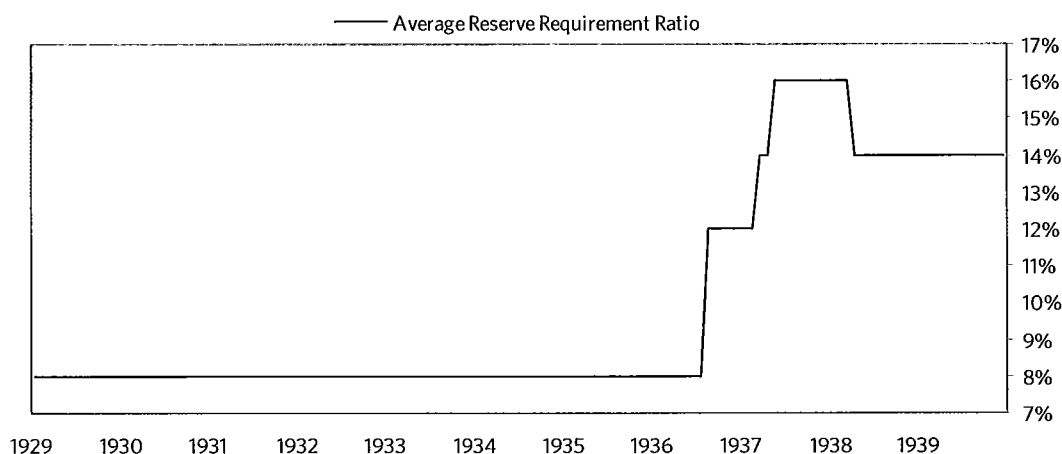


The Fed paid a lot of attention to how the purchases were being financed because they had heightened concerns about "speculative credit" after the excess in margin borrowing during the late 1920s. Raising margin requirements was considered. However, the November Fed memo noted that the purchases of stocks were being financed by money, not credit, so no action was taken. Still, the stock market advance was considered an emerging bubble, and fears about too easy of a monetary policy remained, so the arguments about whether or not to apply restraints continued. One board member (Harrison of the NY Fed) suggested raising reserve requirements to curtail the rise in stock prices. Treasury Secretary Morgenthau (still on the Fed Board at the time) rejected this notion. However, he recognized the concern that a rise in reserves could lead to inflation. The Fed's head of research, Goldenweiser, warned of a potential negative psychological reaction to raising reserve requirements. He argued it would be "precautionary" in nature, that "there is no need to worry about inflation at this time with the very large volume of unused plant capacity and unemployment." At the end of 1935, the Fed concluded its last meeting with the statement that the volume of reserves and gold inflows "continues to be excessive" and warning that "appropriate action may be taken as soon as it appears in the public interest."

1936

At the start of 1936, the debate continued. FDR wanted to signal a concern around inflation ahead of the election so he wanted to tighten reserve requirements that spring. Fed Chairman Eccles was worried that banks would accumulate a lot of bonds and loans at low rates and then get burned by inflation.

In May the Fed did not move. While the Banking Act of 1935 meant Treasury Secretary Morgenthau had to resign from the board, he still had influence and was a strong proponent against acting. By that July, Fed chairman Eccles met alone with FDR, explaining his intention to raise reserves and assuring the president he would not act if he felt interest rates would rise and that the FOMC would buy bonds if they sold off. The Fed tightened reserves later that month. Eccles and the Fed moved without informing Morgenthau who was furious. After a tiny sell off in bonds, Morgenthau ordered Harrison of the NY Fed to purchase bonds using the Treasury's accounts. The Fed joined in, buying bonds and selling bills as Eccles had promised the President. Between August 1936 and May 1937, the Fed doubled reserve requirements from about 8% to 16%, as shown below. The first tightening in August 1936 did not hurt stock prices or the economy, as is typical.

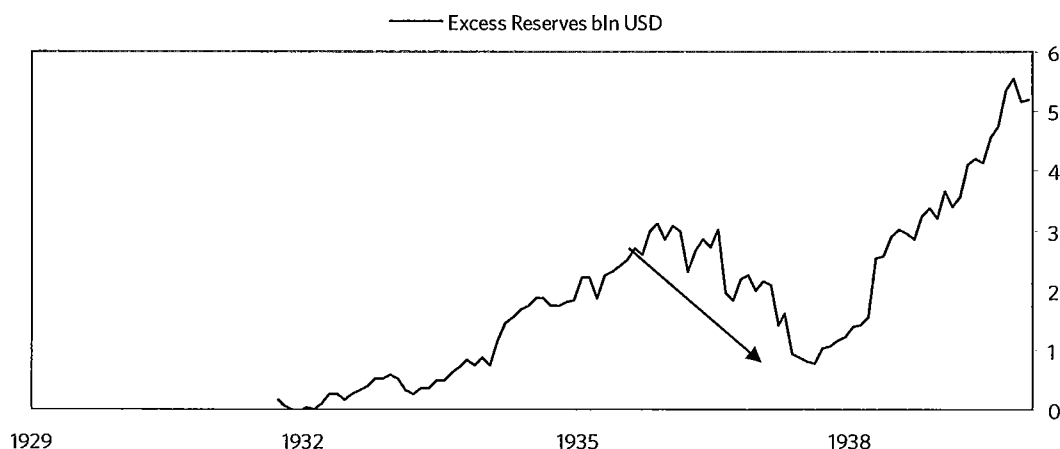


Because the tightening did not have an effect, reserves were tightened in three phases. After the first tightening in August 1936, there was one in March 1937 and another one in May 1937. The largest increase was the first (about half the total increase), with the rest coming in the next two increases, as shown below.

Deposit Reserve Requirements by Bank

	Prior to Aug 36	Aug 36 - Feb 37	Mar 37 - Apr 37	May 37 - Apr 38
Demand Deposits				
Central Reserve City	13.0%	19.5%	22.8%	26.0%
Reserve City	10%	15%	18%	20%
Country	7.0%	10.5%	12.3%	14.0%
Time Deposits				
All Member Banks	3.0%	4.5%	5.3%	6.0%

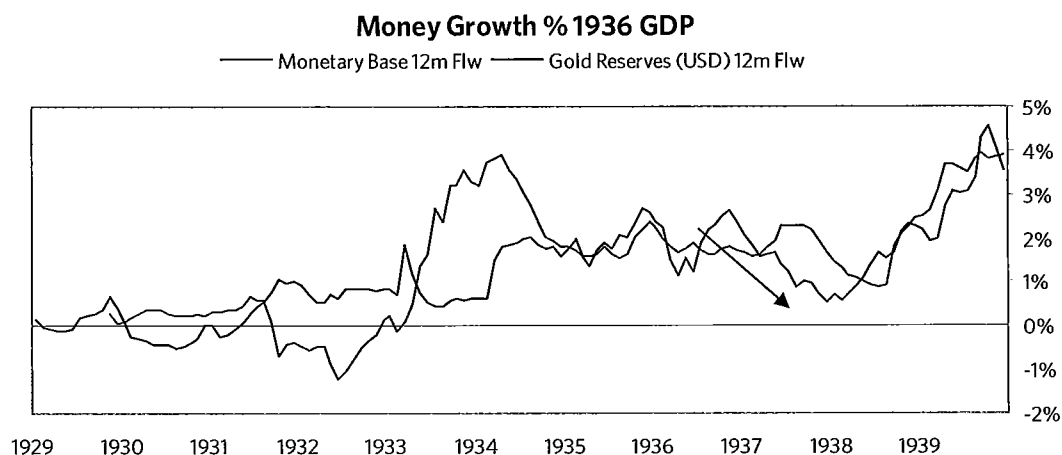
As a result of the reserve tightening, excess reserves fell in the manner shown in the chart below.



The tightening of monetary policy was intensified by currency devaluations by France and Switzerland, which chose not to move in lock-step with the US tightening. The demand for dollars increased. By late 1936, the President and other policy makers became increasingly concerned by gold inflows (which allowed faster money and credit growth). The concerns were threefold.

1. There was a concern about the rapid rise in the stock market. At this time stocks were up 4X from their bottom in 1933 (as compared with today when they are up 3X from their bottom). They had risen around 50% in 1935 and 30% in 1936. Policy makers worried that the gold inflows were coming from foreigners bringing in capital to buy up US stocks.
2. There was a concern about the inflationary impact of gold inflows increasing the monetary base. Inflation had risen from roughly 0% that summer to something closer to 2%.
3. There was a concern the US was becoming vulnerable to an outflow of gold (i.e., capital withdrawal). The specific concern was that the war in Europe would lead to European nations financing that in part by selling their US assets and pulling gold out, while preventing US holders of their assets from repatriating capital.

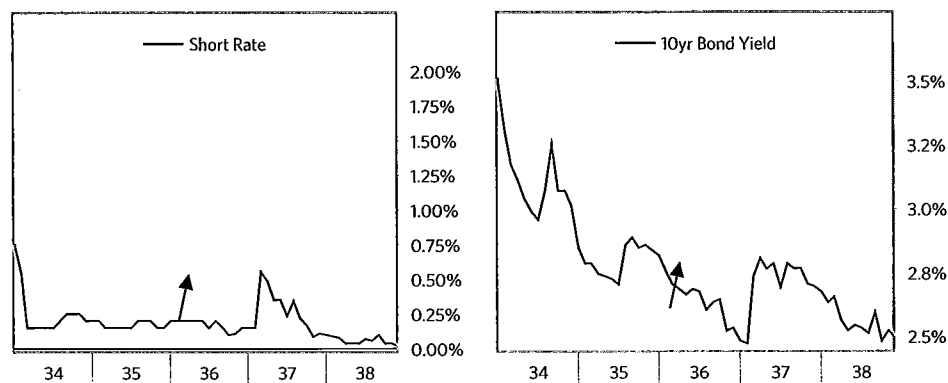
To neutralize the effects of these inflows, that December, FDR ordered sterilization to begin. Starting December 23, the Treasury began sterilizing both gold inflows and newly mined gold in the US. From the end of 1936 to July 1937 the Treasury sterilized about 1.3 billion of gold inflows (~1.3% GDP). We can see the increase in sterilization and slowing of gold and other asset purchases in 1936/1937 with money growth slowing and dropping below gold reserve growth.



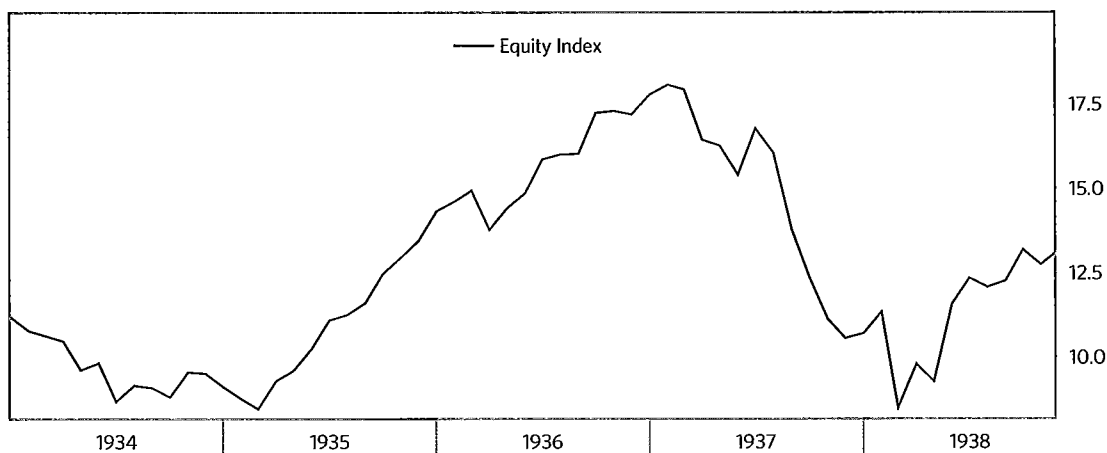
1937:

The economy remained strong going into early 1937. The stock market was still rising, industrial production remained strong, and inflation had ticked up to around 5%. The second tightening came in March of 1937 and the third one came in May. While neither the Fed nor the Treasury anticipated that the increase in required reserves combined with the sterilization program would push rates higher, the tighter money and reduced liquidity led to a sell-off in bonds, a rise in the short rate, and a sell-off in stocks.

Following the second increase in reserves in March 1937, both the short-term rate and the bond yield spiked (see below).

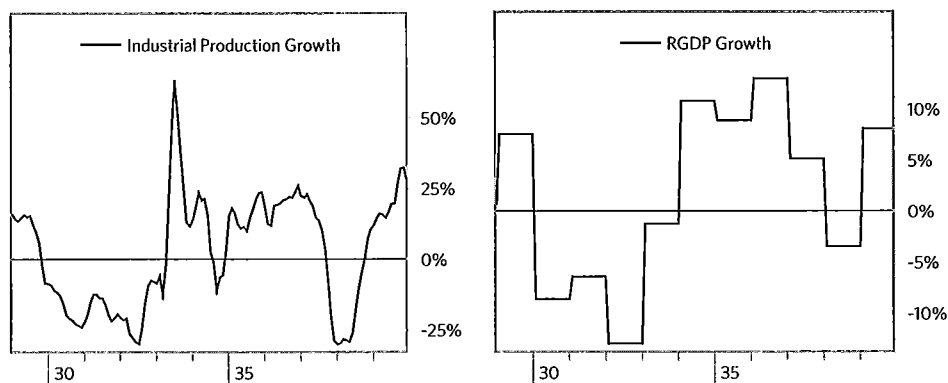


Stocks also fell that month nearly 10%. They bottomed a year later, in March of 1938, declining more than 50%!

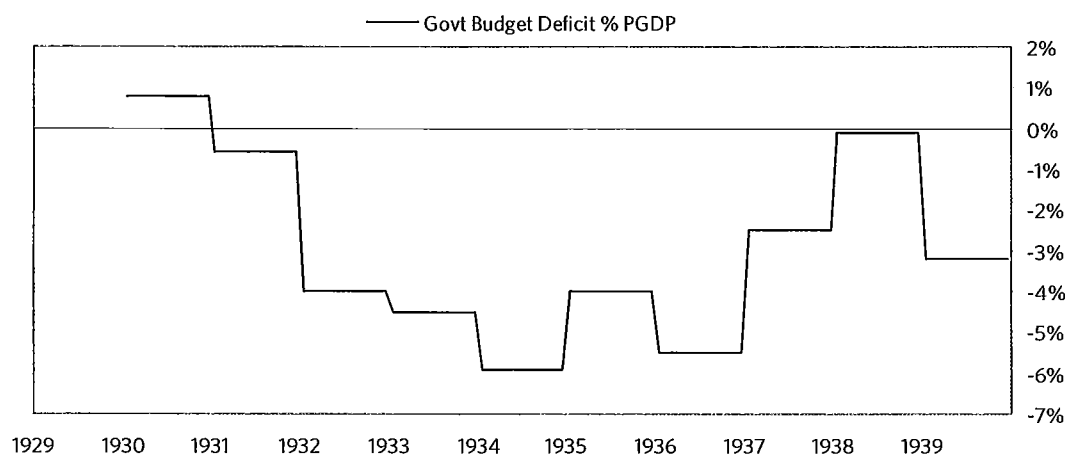


In response to the second increase in reserves that March, Treasury Secretary Morgenthau was furious and argued that the Fed should offset the "panic" through open market operations to make net purchases of bonds. He ordered the Treasury into the market to purchase bonds itself. Fed Chairman Eccles pushed back on Morgenthau urging him to balance the budget and raise tax rates to begin to retire debt.

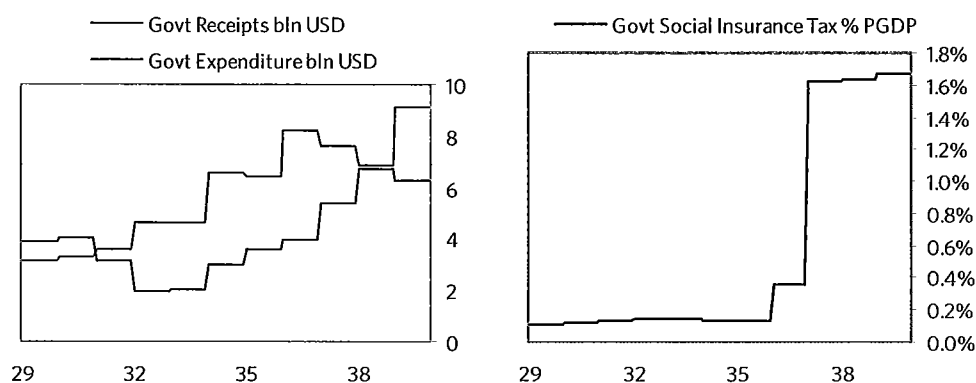
At the March meeting, Eccles and the Fed voted to continue to offset asset purchases by selling bills and notes. Later that month, as markets turned down, the Fed board considered revoking the planned May reserve requirement increase and ending gold sterilization but agreed none of these steps should be taken. Industrial production was still strong and the economy was coming off another year of strong growth.



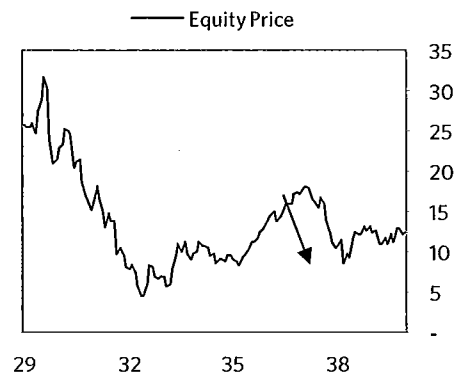
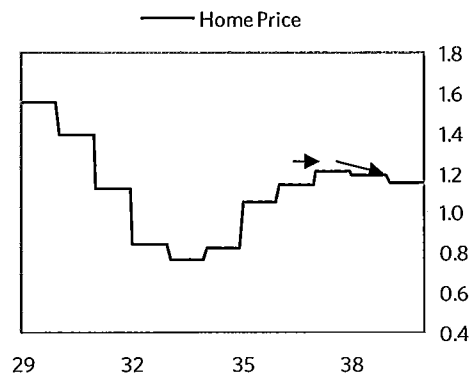
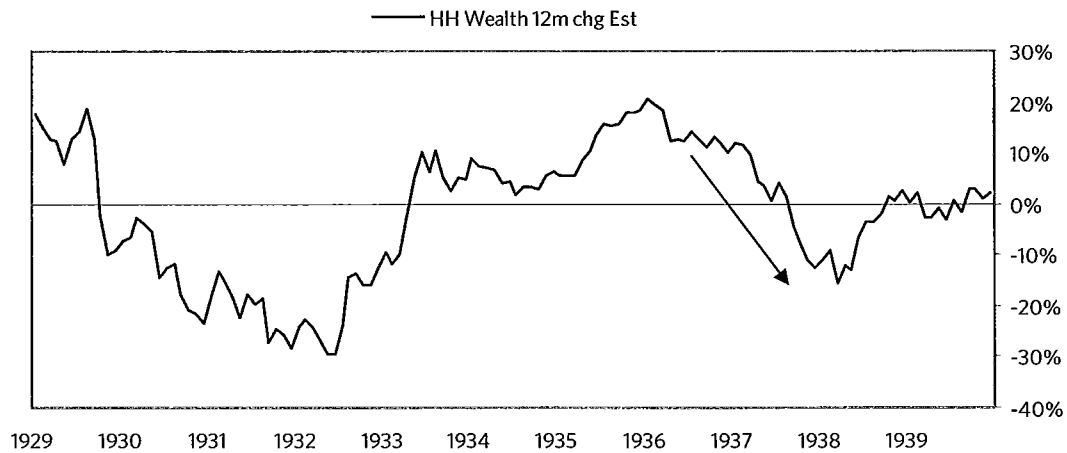
Additionally there was a fiscal tightening at the same time as the concerns about the budget deficits led to subsequent fiscal changes. Federal government outlays fell 10% in 1937 and another 10% in 1938, and the Social Security FICA tax was put into place to help to close loopholes in the 1935 "wealth tax." The federal budget deficit went from around -4% of GDP to neutral.



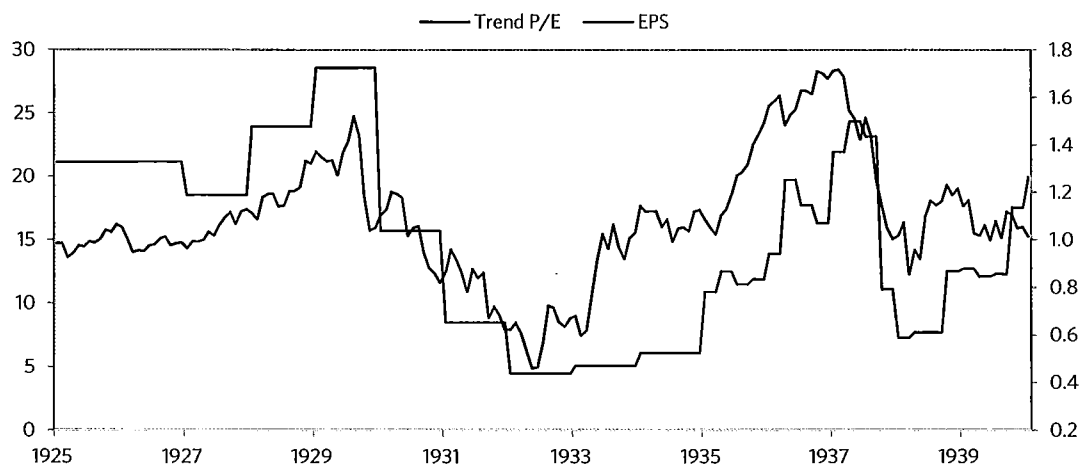
As shown below, the reversal in the budget in 1937 was a consequence of a large increase in taxes, mostly from a rise in the Social Security tax, along with sizeable but smaller cuts in spending.



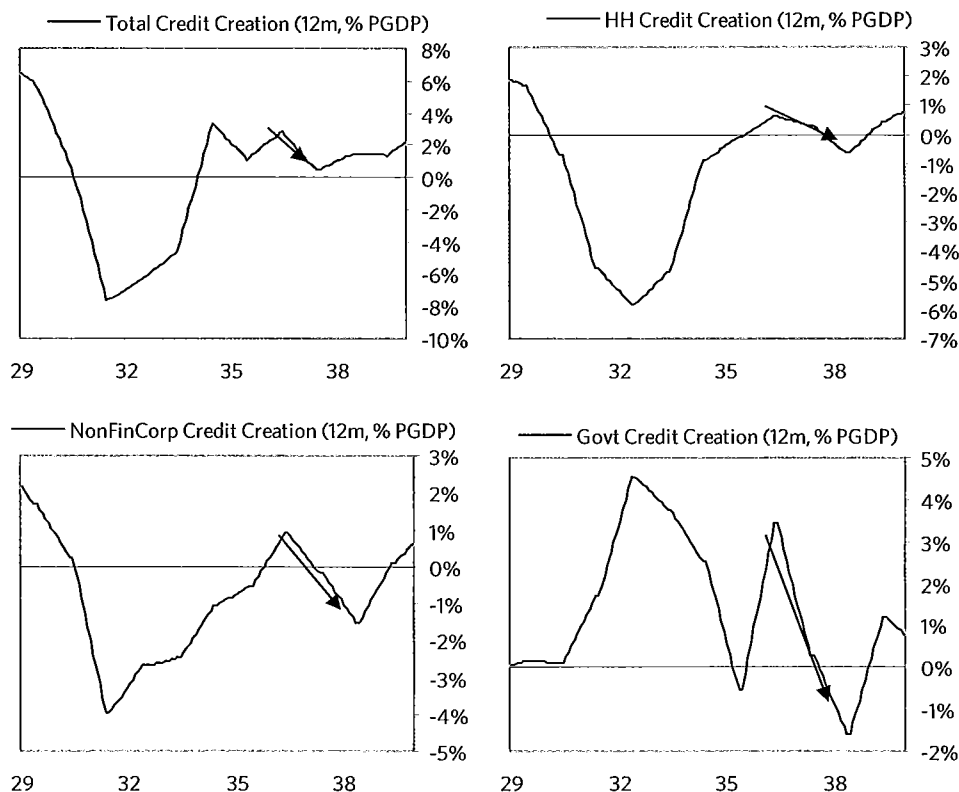
The combination of these monetary and fiscal tightening pressures created a significant sell off in risky assets. Stocks fell the most, but home prices arrested their gains and dipped negative as well. Below we show the decline in household wealth, followed by home and equity prices.



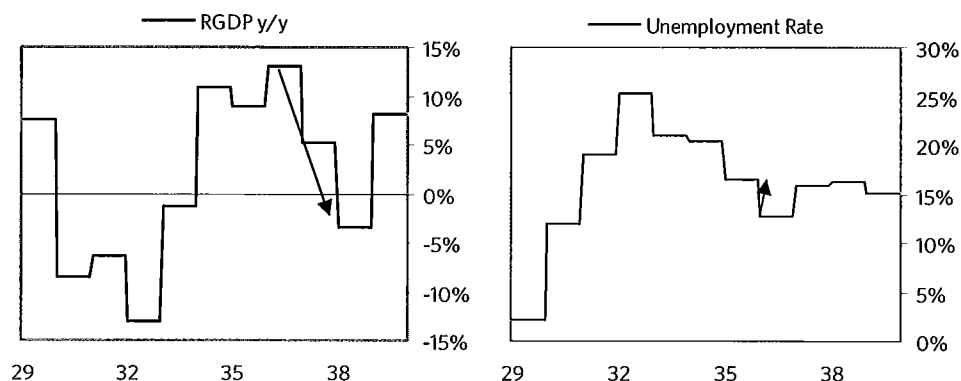
The decline in asset prices and wealth kicked off a self-reinforcing downward cycle, in which the decline in the stock market led to a weakening of the economy that reduced earnings, which contributed to further stock weakness (shown below).



As a result, credit growth slowed as well, both in aggregate and across all sectors...

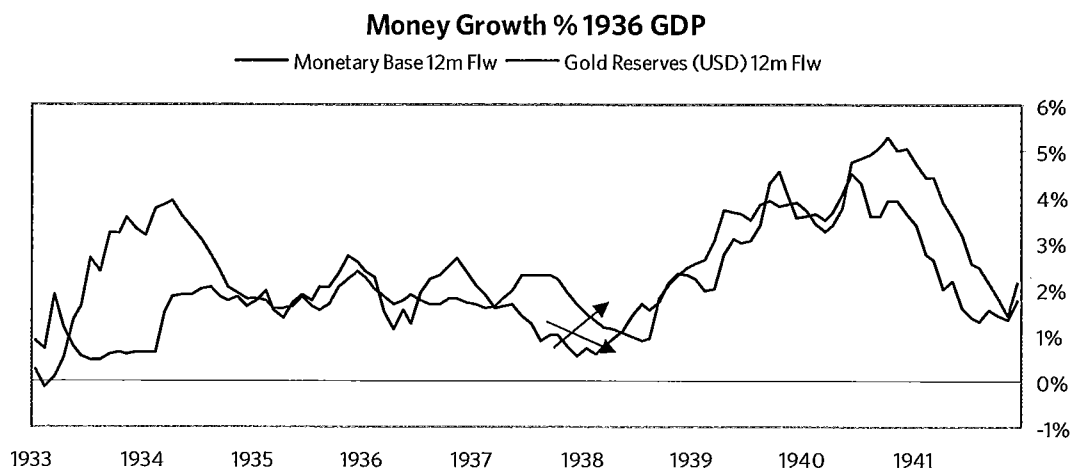


...and spending and economic activity fell. With that downturn, unemployment rose, though it was more like a short uptick, especially in comparison to the punishingly high rise at the start of the decade.



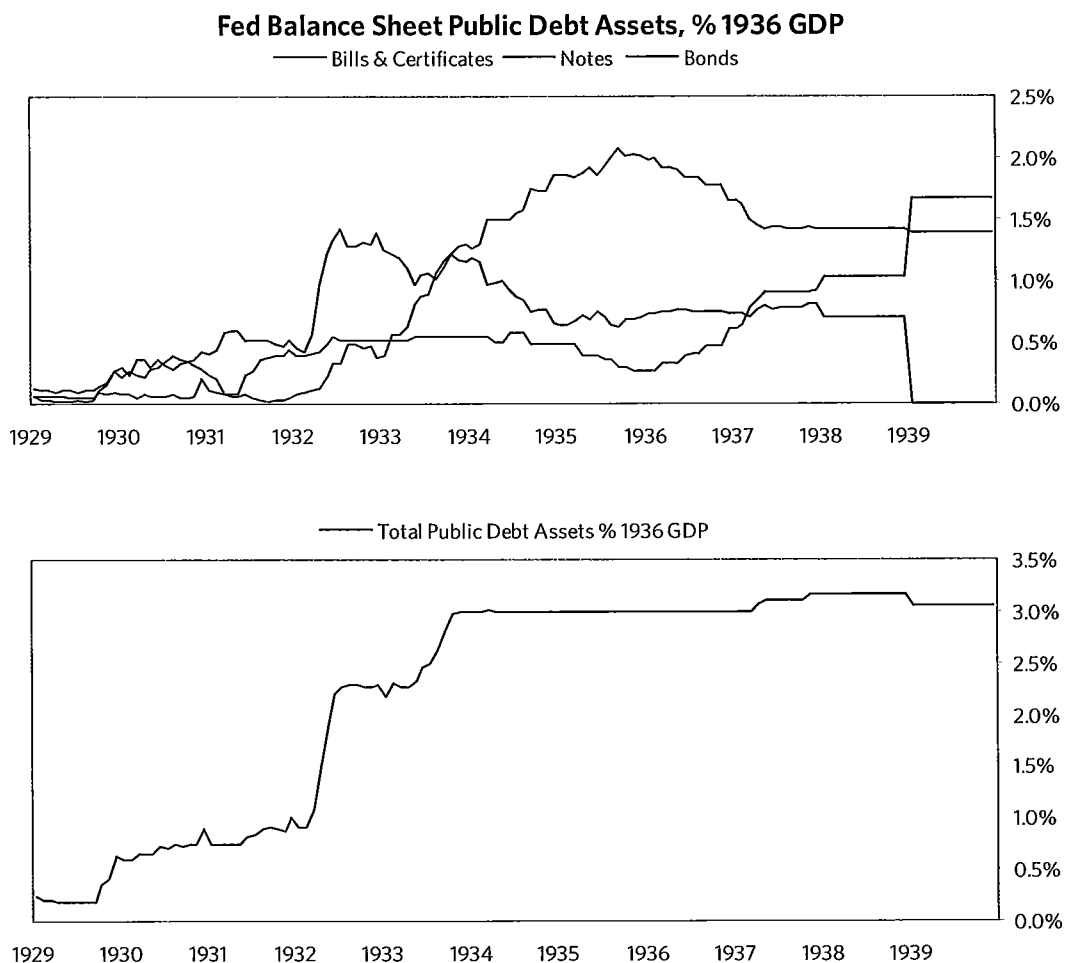
In Late 1937-1938 Policy Makers Reversed Their Course

As markets and the economy turned down in 1937, the Fed accelerated a twist into longer dated assets and started to do a small amount of net assets purchases and, by the end of the year, the Treasury began to reverse its sterilization program in partnership with the Fed.¹ Money growth picked up again starting in 1938 and continued to rise that year with the reverse sterilization and renewed money printing, at the same time that gold inflows slowed and the economy and asset prices deteriorated. You can see this reflected in money growth outpacing growth in gold reserves.

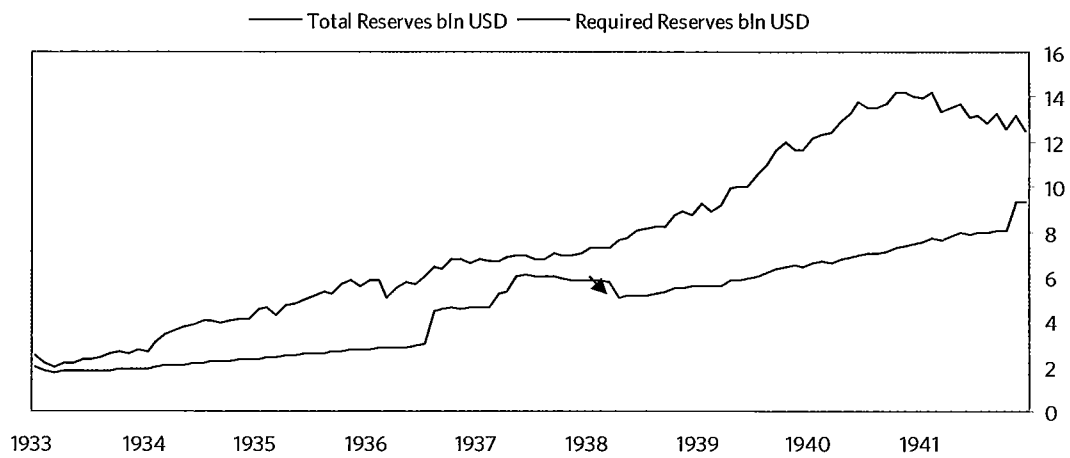


¹ The Treasury reversed its sterilizations by issuing gold certificates to the Fed and using the cash it got in return to buy back bonds.

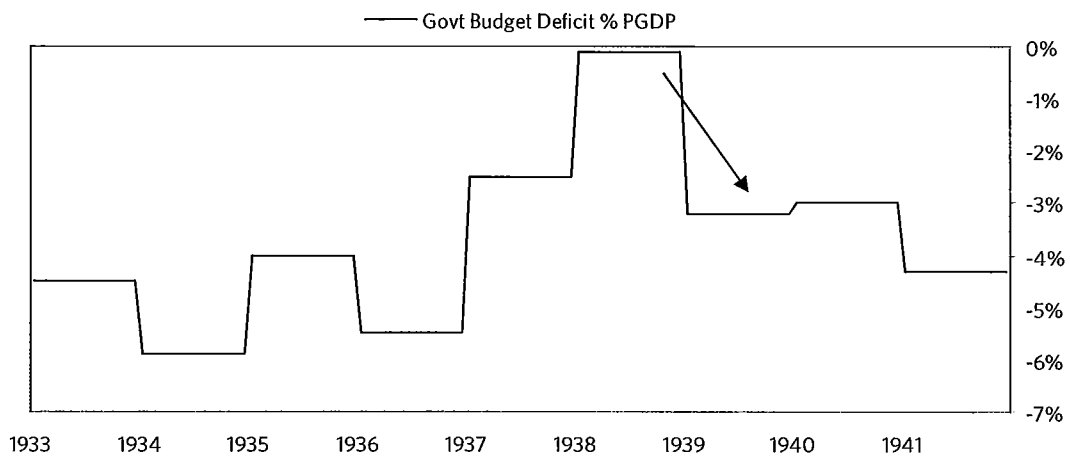
The Fed's twist is shown below. While the Fed didn't do much in the way of net asset purchases, in 1937 it accelerated its buying of long-term bonds while selling bills and notes (a process it had actually started in 1936). It also increased net assets by a small amount (shown in the next chart).



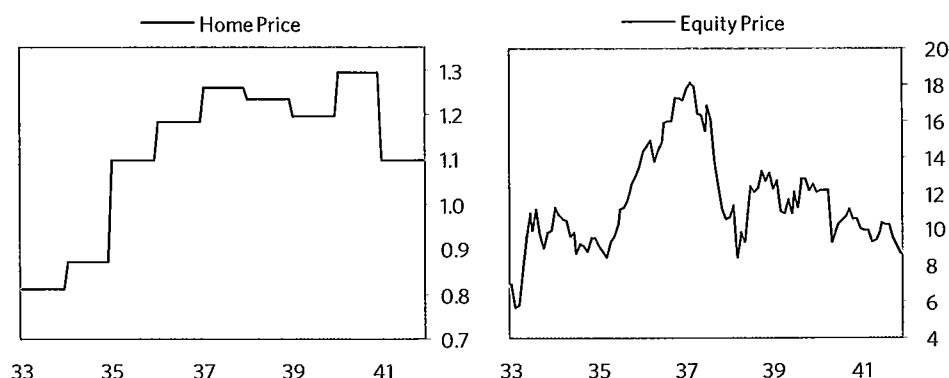
In the spring of 1938, the Fed added to the stimulus by lowering its reserve requirements.



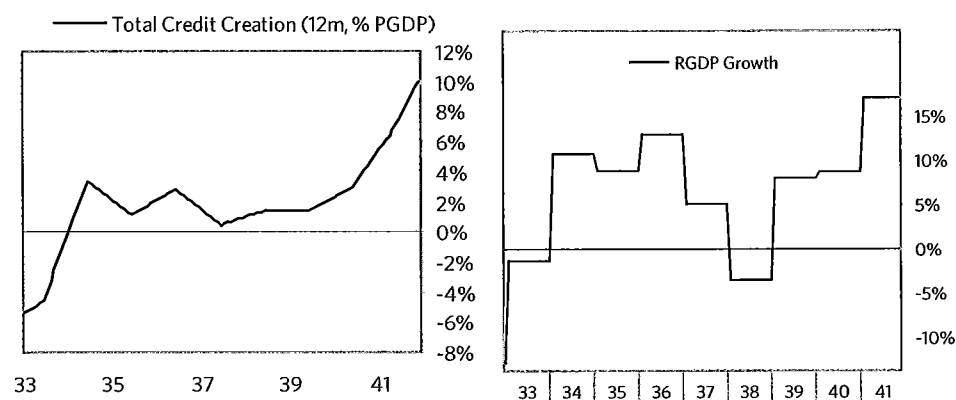
The Federal government also increased deficit spending that year and again in 1939 heading into the war.



In 1938, the stock market began to recover some. However, despite the easing stocks didn't fully regain their 1937 highs until the end of the war nearly a decade later.



Credit flows and the economy also recovered in 1939 following the stimulus and entry into the war.



Conclusion

Though the prices of risky assets are high, and the expected returns are low relative to traditional levels, these things are not in relation to existing levels of interest rates and liquidity. However, should interest rates rise and liquidity levels decline materially, that picture will change. Further, though cash returns are terrible, few investors in risky assets have given much attention to how quickly losses of capital can be worse and what the appropriate risk premia should be to make them indifferent. Additionally, in our opinion, inadequate attention is being paid to the risks of a downturn in which central bankers' abilities to ease are significantly impaired. Please understand that we are not sure of anything but, for the reasons explained, we do not want to have any concentrated bets, especially at this time.

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