A Tale of Two Depressions

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1 September 2009

This is an update of the authors' 4 June and 6 April 2009 columns comparing today's global crisis to the Great Depression. World industrial production, trade, and stock markets are now showing signs of recovery. Still – today's crisis remains dramatic by the standards of the Great Depression.

Editor's note: The original Vox column by Barry Eichengreen and Kevin O'Rourke shattered all Vox readership records (30,000 views in two days, over 100,000 in a week, now fast approaching 350,000). Here the authors provide updated charts, presenting monthly data up through June 2009 (or latest).

What do the new data tell us?

- Global industrial production now shows clear signs of recovering.

This is a sharp divergence from experience in the Great Depression, when the decline in industrial production continued fully for three years. The question now is whether final demand for this increased production will materialise or whether consumer spending, especially in the US, will remain weak, causing the increase in production to go into inventories, leading firms to cut back subsequently, and resulting in a double dip recession.

- Global stock markets have mounted a sharp recovery since the beginning of the year. Nonetheless, the proportionate decline in stock market wealth remains even greater than at the comparable stage of the Great Depression.

- The downward spiral in global trade volumes has abated, and the most recent month for which we have data (June) shows a modest uptick. Nonetheless, the collapse of global trade, even now, remains dramatic by the standards of the Great Depression.

Figure 1. World industrial production, now vs then

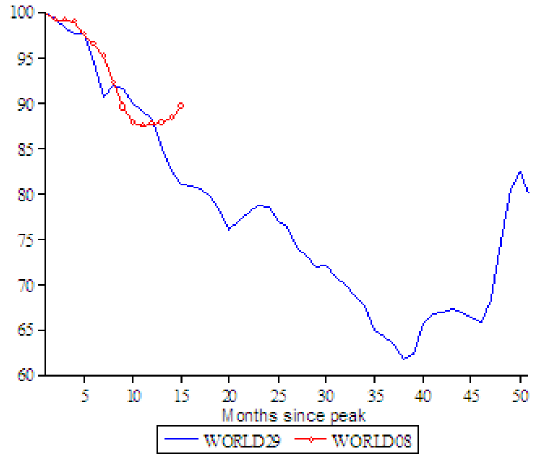


Figure 2. World stock markets, now vs then

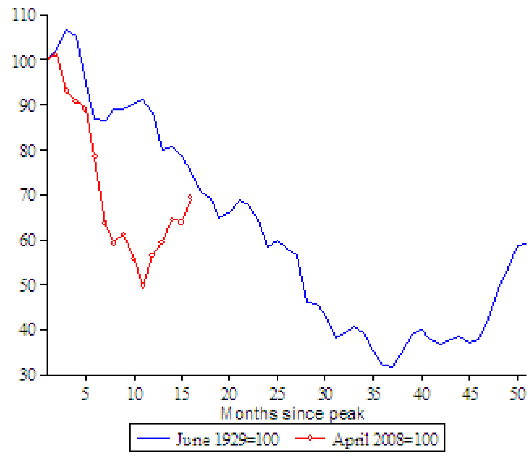


Figure 3. Volume of world trade, now vs then

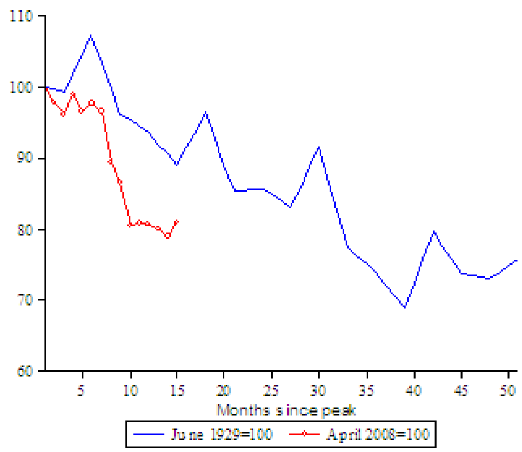


Figure 5. Industrial output, four big Europeans, then and now

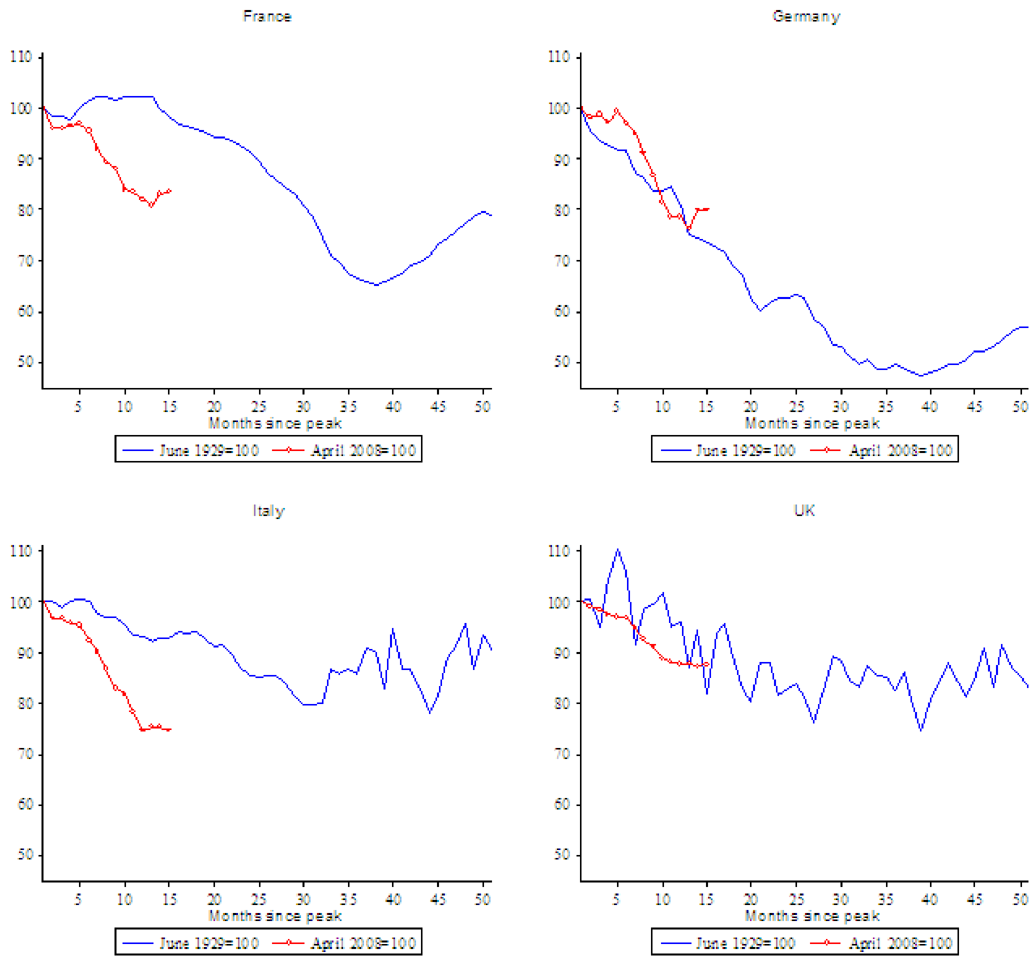


Figure 6. Industrial output, four non-Europeans, then and now

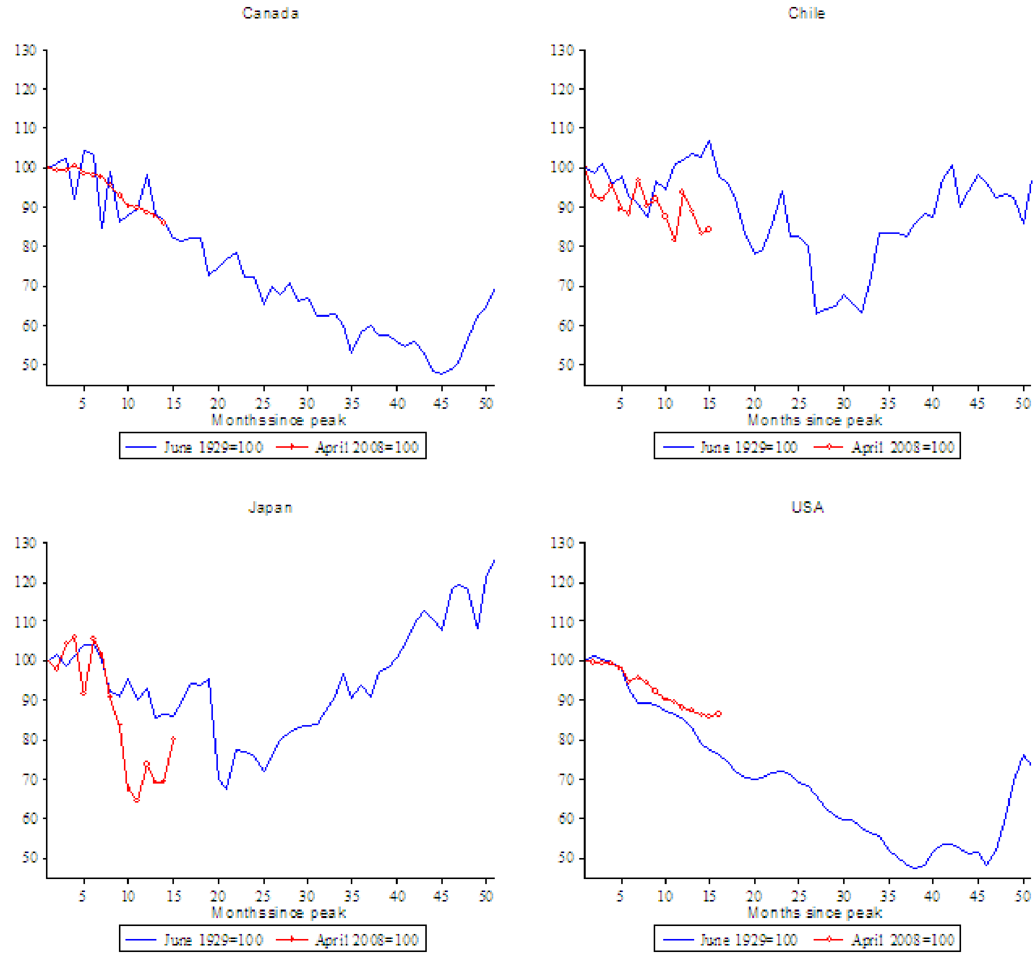


Figure 7. Industrial output, four small Europeans, then and now

Start of first update (published 4 June 2009); original column (published 6 April 2009) appears below

Editor's note: The 6 April 2009 Vox column by Barry Eichengreen and Kevin O'Rourke shattered all Vox readership records, with 30,000 views in less than 48 hours and over 100,000 within the week. The authors will update the charts as new data emerges; this updated column is the first, presenting monthly data up to April 2009. (The updates and much more will eventually appear in a paper the authors are writing a paper for *Economic Policy*.)

New findings:

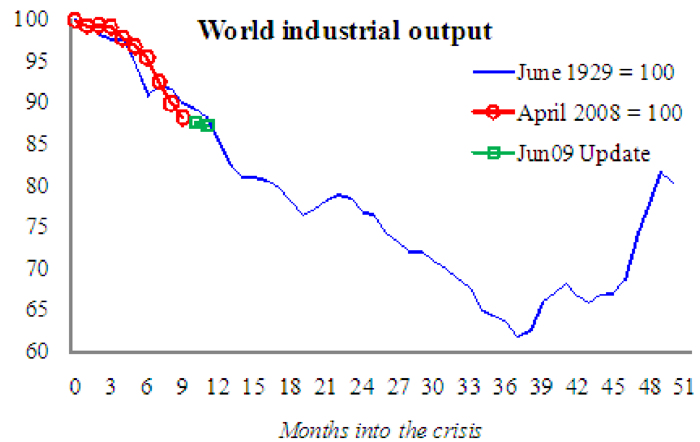
- World industrial production continues to track closely the 1930s fall, with no clear signs of 'green shoots'.
- World stock markets have rebounded a bit since March, and world trade has stabilised, but these are still following paths far below the ones they followed in the Great Depression.
- There are new charts for individual nations' industrial output. The big-4 EU nations divide north-south; today's German and British industrial output are closely tracking their rate of fall in the

1930s, while Italy and France are doing much worse.

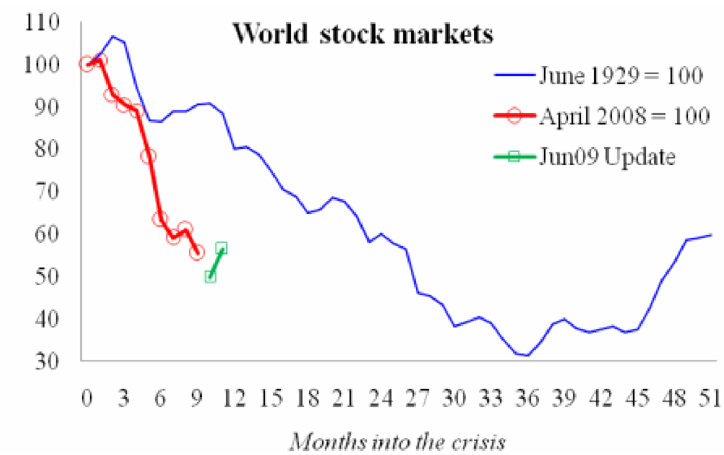
- The North Americans (US & Canada) continue to see their industrial output fall approximately in line with what happened in the 1929 crisis, with no clear signs of a turn around.
- Japan's industrial output in February was 25 percentage points lower than at the equivalent stage in the Great Depression. There was however a sharp rebound in March.

The facts for Chile, Belgium, Czechoslovakia, Poland and Sweden are displayed below; note the rebound in Eastern Europe.

Updated Figure 1. World Industrial Output, Now vs Then (updated)

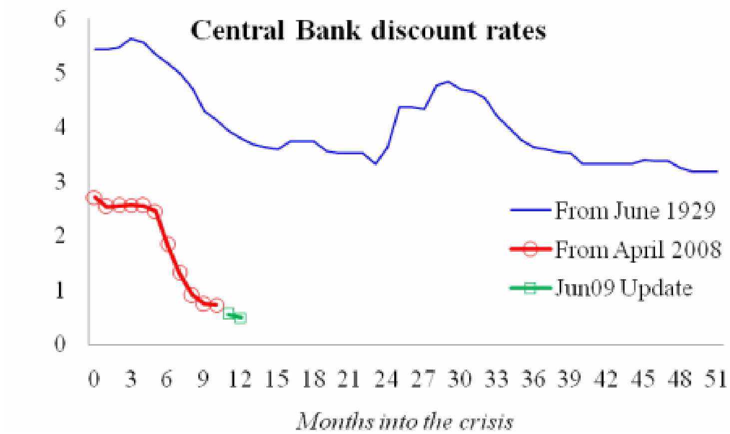


Updated Figure 2. World Stock Markets, Now vs Then (updated)

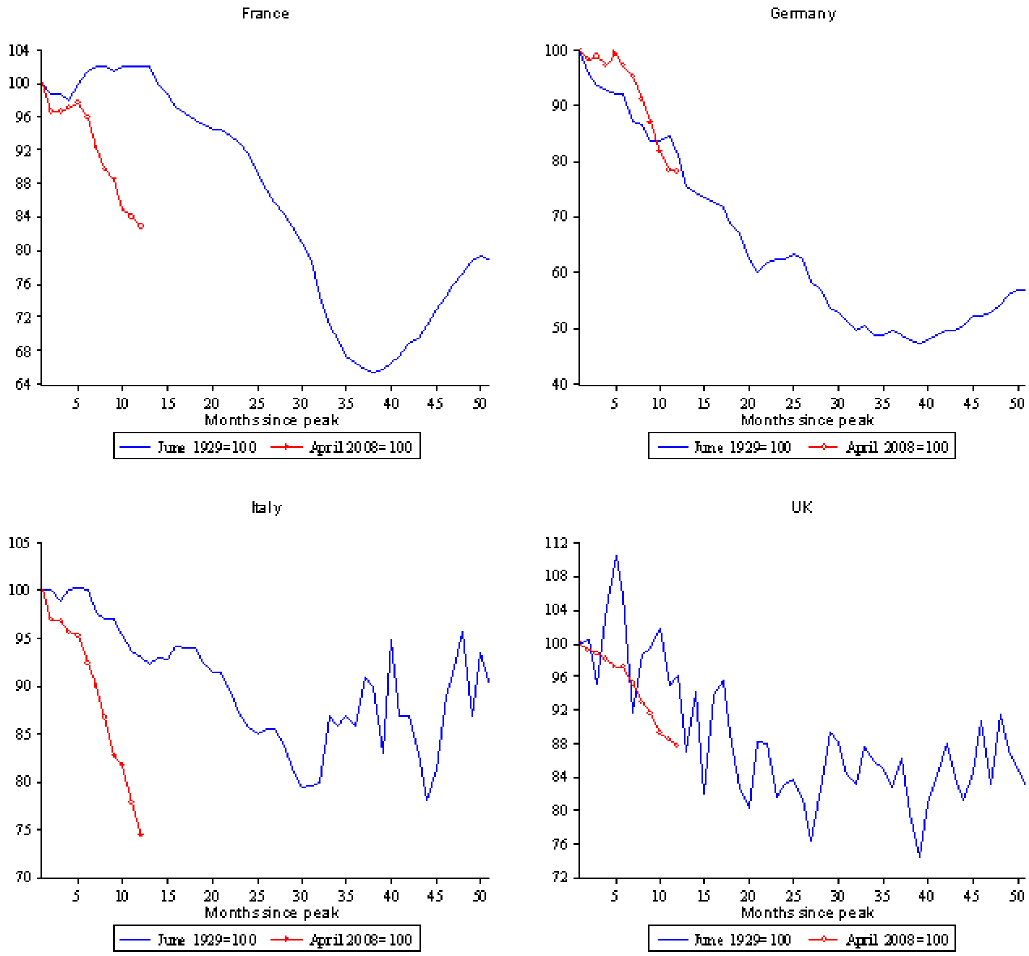


Updated Figure 3. The Volume of World Trade, Now vs Then (updated)

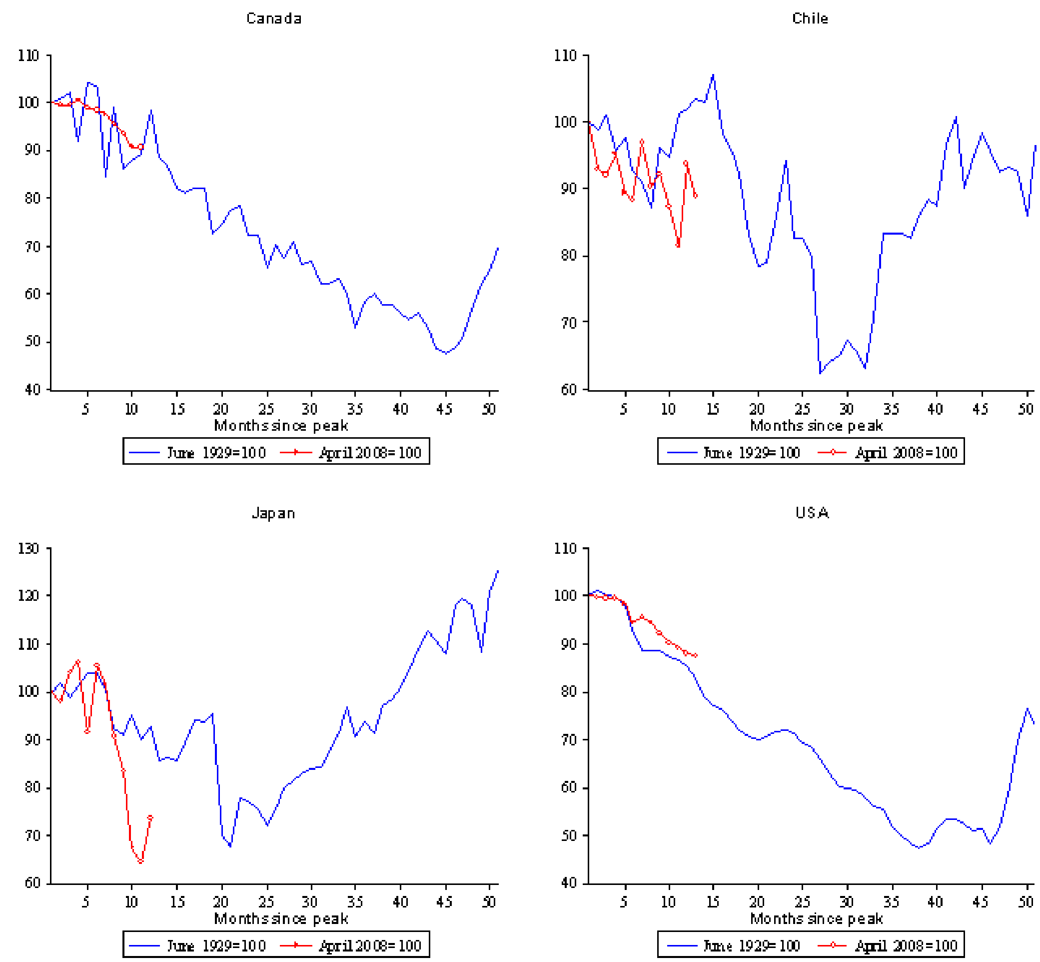
Updated Figure 4. Central Bank Discount Rates, Now vs Then (7 country average)



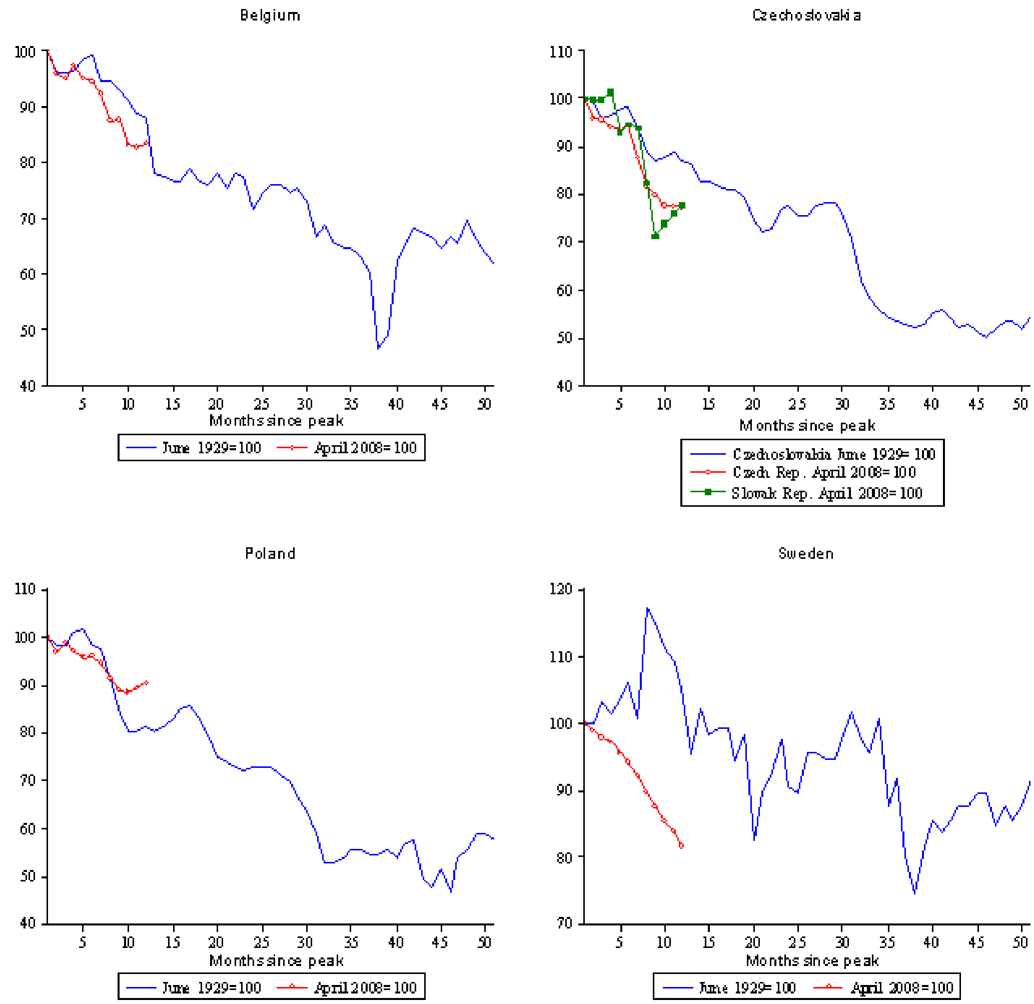
New Figure 5. Industrial output, four big Europeans, then and now



New Figure 6. Industrial output, four Non-Europeans, then and now.



New Figure 7: Industrial output, four small Europeans, then and now.



Start of original column (published 6 April 2009)

The parallels between the Great Depression of the 1930s and our current Great Recession have been widely remarked upon. Paul Krugman has compared the fall in US industrial production from its mid-1929 and late-2007 peaks, showing that it has been milder this time. On this basis he refers to the current situation, with characteristic black humour, as only “half a Great Depression.” The “Four Bad Bears” graph comparing the Dow in 1929-30 and S&P 500 in 2008-9 has similarly had wide circulation (Short 2009). It shows the US stock market since late 2007 falling just about as fast as in 1929-30.

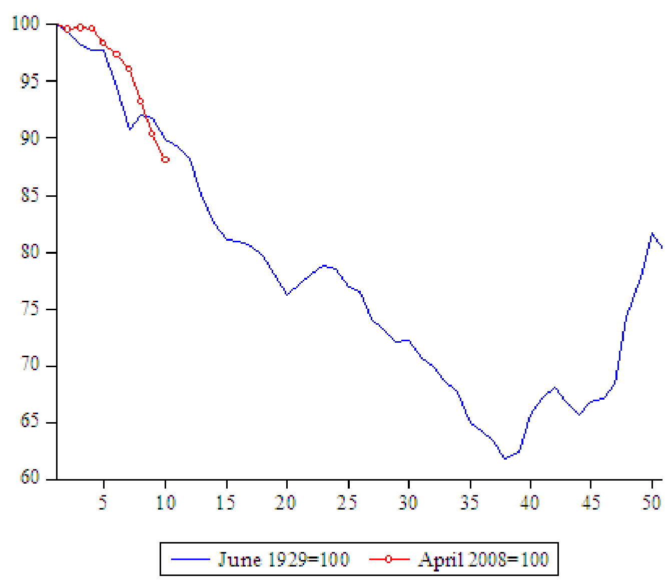
Comparing the Great Depression to now for the world, not just the US

This and most other commentary contrasting the two episodes compares America then and now. This, however, is a misleading picture. The Great Depression was a global phenomenon. Even if it originated, in some sense, in the US, it was transmitted internationally by trade flows, capital flows and commodity prices. That said, different countries were affected differently. The US is not representative of their experiences.

Our Great Recession is every bit as global, earlier hopes for decoupling in Asia and Europe notwithstanding. Increasingly there is awareness that events have taken an even uglier turn outside the US, with even larger falls in manufacturing production, exports and equity prices.

In fact, when we look globally, as in Figure 1, the decline in industrial production in the last nine months has been at least as severe as in the nine months following the 1929 peak. (All graphs in this column track behaviour after the peaks in world industrial production, which occurred in June 1929 and April 2008.) Here, then, is a first illustration of how the global picture provides a very different and, indeed, more disturbing perspective than the US case considered by Krugman, which as noted earlier shows a smaller decline in manufacturing production now than then.

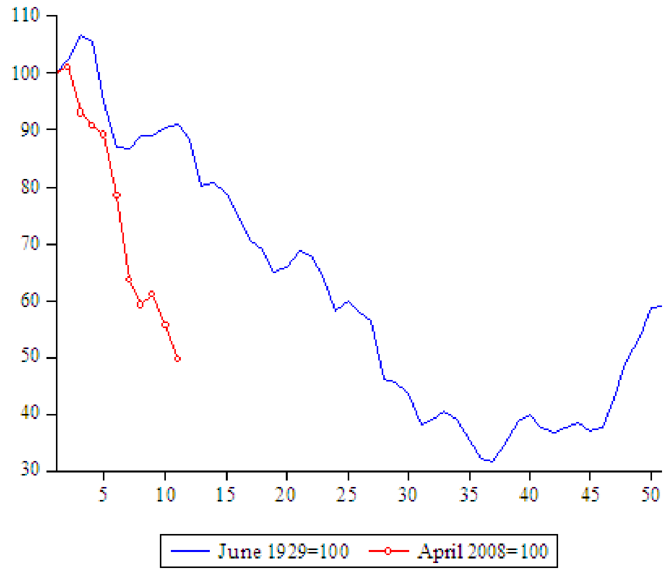
Figure 1. World Industrial Output, Now vs Then



Source: Eichengreen and O'Rourke (2009) and IMF.

Similarly, while the fall in US stock market has tracked 1929, global stock markets are falling even faster now than in the Great Depression (Figure 2). Again this is contrary to the impression left by those who, basing their comparison on the US market alone, suggest that the current crash is no more serious than that of 1929-30.

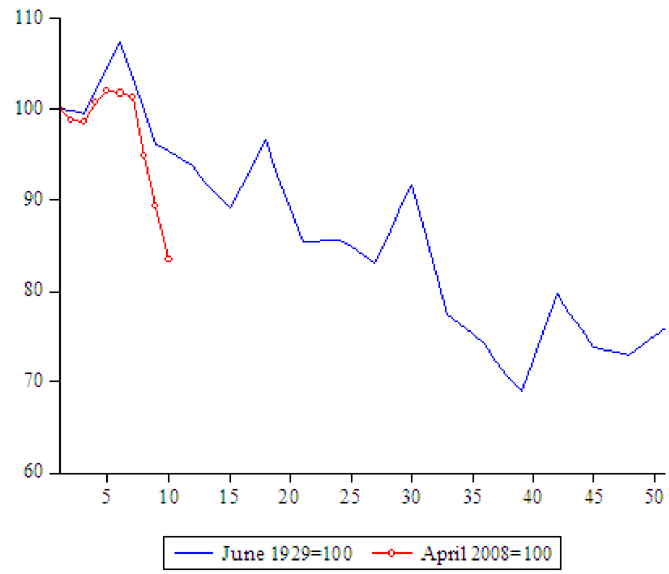
Figure 2. World Stock Markets, Now vs Then



Source: Global Financial Database.

Another area where we are "surpassing" our forbearers is in destroying trade. World trade is falling much faster now than in 1929-30 (Figure 3). This is highly alarming given the prominence attached in the historical literature to trade destruction as a factor compounding the Great Depression.

Figure 3. The Volume of World Trade, Now vs Then



Sources: League of Nations Monthly Bulletin of Statistics, http://www.cpb.nl/eng/research/sector2/data/trademonitor.html

It's a Depression alright

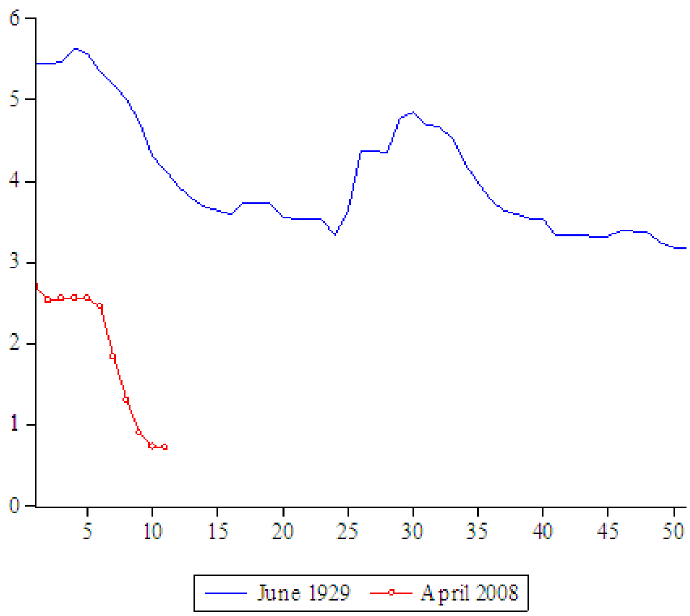
To sum up, globally we are tracking or doing even worse than the Great Depression, whether the metric is industrial production, exports or equity valuations. Focusing on the US causes one to minimise this alarming fact. The "Great Recession" label may turn out to be too optimistic. This is a Depression-sized event.

That said, we are only one year into the current crisis, whereas after 1929 the world economy continued to shrink for three successive years. What matters now is that policy makers arrest the decline. We therefore turn to the policy response.

Policy responses: Then and now

Figure 4 shows a GDP-weighted average of central bank discount rates for 7 countries. As can be seen, in both crises there was a lag of five or six months before discount rates responded to the passing of the peak, although in the present crisis rates have been cut more rapidly and from a lower level. There is more at work here than simply the difference between George Harrison and Ben Bernanke. The central bank response has differed globally.

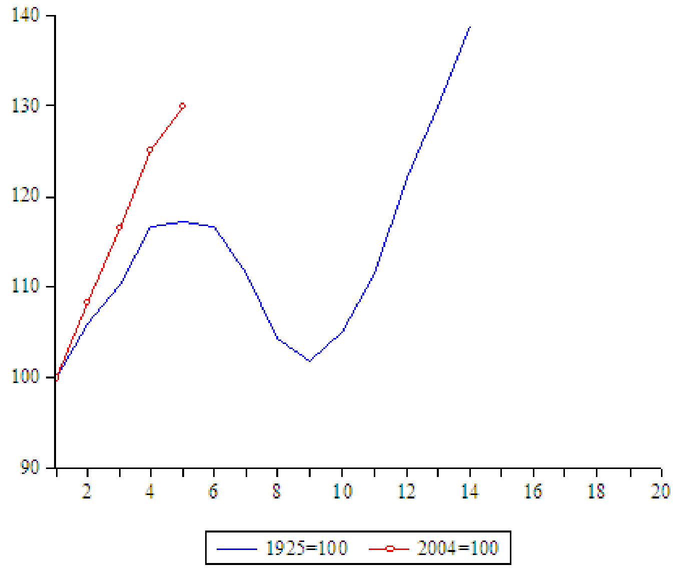
Figure 4. Central Bank Discount Rates, Now vs Then (7 country average)



Source: Bernanke and Mihov (2000); Bank of England, ECB, Bank of Japan, St. Louis Fed, National Bank of Poland, Sveriges Riksbank.

Figure 5 shows money supply for a GDP-weighted average of 19 countries accounting for more than half of world GDP in 2004. Clearly, monetary expansion was more rapid in the run-up to the 2008 crisis than during 1925-29, which is a reminder that the stage-setting events were not the same in the two cases. Moreover, the global money supply continued to grow rapidly in 2008, unlike in 1929 when it levelled off and then underwent a catastrophic decline.

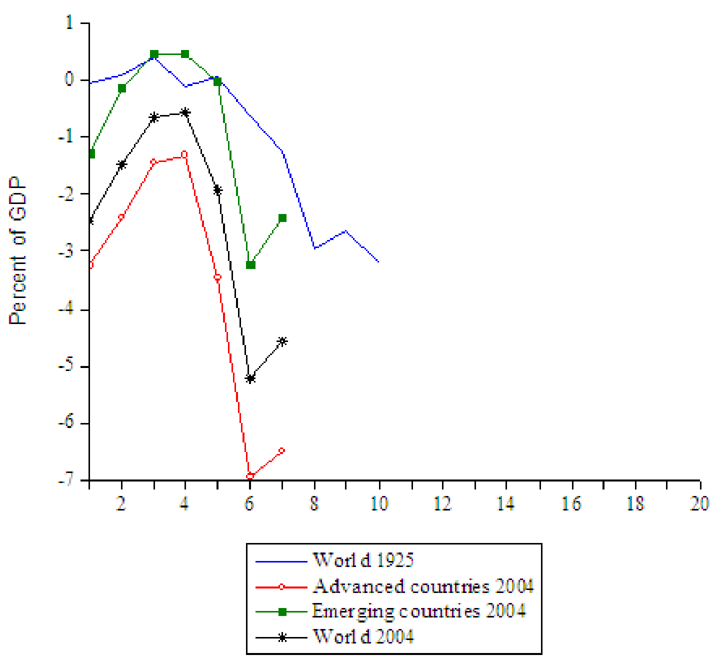
Figure 5. Money Supplies, 19 Countries, Now vs Then



Source: Bordo et al. (2001), IMF International Financial Statistics, OECD Monthly Economic Indicators.

Figure 6 is the analogous picture for fiscal policy, in this case for 24 countries. The interwar measure is the fiscal surplus as a percentage of GDP. The current data include the IMF's World Economic Outlook Update forecasts for 2009 and 2010. As can be seen, fiscal deficits expanded after 1929 but only modestly. Clearly, willingness to run deficits today is considerably greater.

Figure 6. Government Budget Surpluses, Now vs Then



Source: Bordo et al. (2001), IMF World Economic Outlook, January 2009.

Conclusion

To summarise: the world is currently undergoing an economic shock every bit as big as the Great

Depression shock of 1929-30. Looking just at the US leads one to overlook how alarming the current situation is even in comparison with 1929-30.

The good news, of course, is that the policy response is very different. The question now is whether that policy response will work. For the answer, stay tuned for our next column.

References

Eichengreen, B. and K.H. O'Rourke. 2009. "A Tale of Two Depressions." In progress.

Bernanke, B.S. 2000. Bernanke, B.S. and I. Mihov. 2000. "Deflation and Monetary Contraction in the Great Depression: An Analysis by Simple Ratios." In B.S. Bernanke, *Essays on the Great Depression*. Princeton: Princeton University Press.

Bordo, M.D., B. Eichengreen, D. Klingebiel and M.S. Martinez-Peria. 2001. "Is the Crisis Problem Growing More Severe?" *Economic Policy*32: 51-82.

Paul Krugman, "The Great Recession versus the Great Depression," Conscience of a Liberal (20 March 2009).

Doug Short, "Four Bad Bears," DShort: Financial Lifecycle Planning" (20 March 2009).

Topics: Global crisis
Tags: Great Depression, global crisis debate, tale of two depressions, Depression

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Comments

Very insightful, but

On July 6th, 2009 jkbrophy says:

Very much enjoyed this Tale of Two Depressions and am looking foward to future updates.

One large difference in the two depressions is the effect of the BRIC countries on our current situation.
Of course they were not a factor in 1929, but may be an engine for recovery in the current depression.

Your thoughts?

John Brophy

missing variables

On July 1st, 2009 matteo.gomellini says:

It could be intersting to track also unemployment, consumption, wealth, debt
this variables can mark the deifference between the two crisis.
I guess that unomplyment has not risen at 1929 level also because pubblic employment;
Personal income has not fallen because of welfare programmes (in some countires)
henceforth, consumption could not have fallen.

The question is not anymore about the severity of the crisis but is: who is paying the bill?

The State, I would say, is taking on his shoulder the burden of the crisis. Public nets are at work. National debt is the result.
regrds,
m. gomellini

Compare to Great Depression

On June 25th, 2009 Pat.Olson says:

springspat, Why did you start the charts in April 2008 when the actual market peak occurred in Oct 07--even though a recession was not declared until later? Using Oct 07 = 100, I believe your charts would show we are much farther along the path in comparison to the 'Great Depression' and might cause you to draw different conclusions as to the depth, etc. Your article is much appreciated either way however.

Industrial output as a % of GDP?

On June 25th, 2009 mhljones says:

The conclusion above (i.e. "the world is currently undergoing an economic shock every bit as big as the Great Depression shock of 1929-30 ") may be true or it may not be true. One thing is sure, figures based purely above may be that industrial output industrial output alone won't support it: in all the countries named above, industrial output is a much smaller percentage of GDP (both in each country and for the world as a whole) now than it was in the 1930s.

timing

On June 24th, 2009 vinharold says:

This "depression" especially with respect to the US stock market, started in 10 of 2007 the charts given start in 4 2008.
That puts us 6 months farther along than these charts would have one think.
The data here makes me think we are closer to a US stock market bottom than I did before I read the article.

Policy response is similar not different

On June 23rd, 2009 Brian.Macker says:

You state: "The good news, of course, is that the policy response is very different. "

On this you are incorrect. The policy response is very similar.

The policy response to the 1920 downturn (which was as severe if not more severe than 1929) was truly "very different". In that case taxes and government spending were lowered, and no bailouts were done. The recovery was swift.

The response to the 1929 crash was similar to this one in that within a month Hoover had all sorts of bailout and spending programs going. There were also attempts to prop industry sectors up. Protectionism rose (more than today but still similar to today). Government stimulus was also won the day in the followup to 1929 just like today.

I'd prefer it if the policy response was more like 1920-21 than what's happening today. This is going to be a very long "recession" the way the US responding now. Low interest rates, government intrusion into markets, and vast government spending got us here and more of the same is not going to get us out.

This slump and the great depression

On June 17th, 2009 Harold Chorney says:

This is a very good piece. It was necessary to draw these parallels which are real between the two events in order to pressure stubborn misguided politicians who were obsessed with balancing budgets despite circumstances . But it is premature to conclude that the fiscal stimulus and loose monetary policy is not effective. Most of the stimulus money in Canada and the U.S. has not yet been spent. (TARP monies , by the way do not count . So far some 68 billion of the TARP funds is being repaid with dividends and interest.) Once the bulk of the stimulus is spent and provided that interest rates are kept low we should start to see positive results in the coming two quarters.

The arguments of those who warn about inflation has also got to be countered. In Canada we have had a 14 % growth in M2 yet inflation and output continue to fall. This strongly suggests a large demand for holding cash.

Contrary to widespread belief quantitative easing in the current circumstances is not likely to result in inflation.In the 1980s and 1990s I did studies of the relationship between the ratio of government debt held by the central bank as a proportion of M2(that is, monetized debt) and the rate of inflation. I found no correlation over 40 years of evidence from 1940 to 1989. There were years when the ratio of monetized debt to M2 was over 20 % and inflation quite low during the 1950s except for 1951 and years when the ratio was below 12 % yet inflation quite high above 6 %. I suspect the same results are true of the U.S. and other countries.So in the current circumstances there is little risk of inflation.

Industrial or Global Output?

On June 15th, 2009 Enrique.Fleischmann says:

Was industrial output share out of TOTAL output simalar in both events? (Cannot find the data for the 30´) ?
The relative importance of services in modern economies is higher than it was 80 years ago but also agriculture share was higher , so the net effect is not clear.
Can industrial output considered as a good approximation?

Analysis vis-a-vis other recessions

On June 12th, 2009 murali.thoota says:

I appreciate the analysis done so far. It would be much useful if the current downturn was also compared to other recessions. The current comparison to the great depression may not be significant if other recessions have similar curves on the down-direction that trended upward relatively in a short span of time. I'd be interested in that comparison.

Other downturns?

On June 8th, 2009 Lucky Luke says:

Fantastic graphs, of course, but I wish there was a parallel exploration of other downturns. For each of the indicators depicted, were there any periods that resembled the Great Depression, or the current period, but did not last as the Great Depression did? Or else, are the Great Depression and the current period clearly different from every other downturn? The answer is likely 'yes', but it would be nice to see it.

Excellent presentation.

On June 8th, 2009 Gregman2 says:

Excellent presentation. "...we are only one year into the current crisis, whereas after 1929 the world economy continued to shrink for three successive years. What matters now is that policy makers arrest the decline." It does not seem that money supply is having much of a mitigating impact yet (although it's still early to say). It would be interesting to see China and Argentina considered in this analysis.

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On April 26th, 2009 E.Tijerina says:

An analysis is missing of the institutional changes (in laws, organizations, ideology and political leadership, for example) and their interaction with changes in income distribution and wealth, co-determining the effects of the policy variables you analize.
Also, it is convenient to analyze US economic behavior and long term trends after 1933 in order to test the hypothesis of the Second World War and its corresponding post-war changes as the main causes of the "glorious 30 years", in contrast to conventional aggregate demand policies.

Tracking worse than the great depression

On April 7th, 2009 kathryn.fialkowski says:

I would suggest that we're tracking faster than the Great Depression. The outcome might be worse but perhaps the revelation is that the prcess is faster. Surely this shouldnt be a surprise ... isn't this another factor that the rate of change is not linear but exponential -- as Kurzweil would have pointed out? In addition to the exponential rate of change, we have a greater interconnectedness -- which produces a global accelerator. Connected consumption.

My hope would be that these same factors would produce a faster recovery curve. My belief is that we could if we could harness the connectedness then the individuals could help us progress forward. There are millions of individuals watching from the sideliness looking for guidance to get involved. "Buy a car" from GM is not the answer. We have no stomach for spending our way out of this. But there would be a desire to help others out of this. Like earthquakes or other disasters, Americans in particular are fast to build a coalition to attack the cause. It just needs a center. Washington is not that center.