## An economics perspective on hard times: a 5% drop in GDP would be a small price to pay for 1.7 million lives.

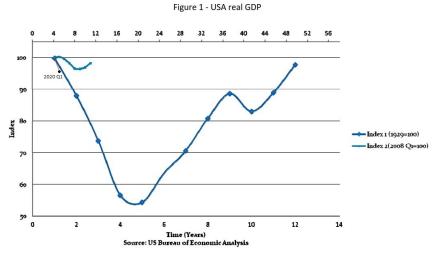
Economics news today: US GDP fell 4.8% in the first quarter of 2020, a reflection of the economic slowdown associated with social distancing and other policy measures to flatten the curve (slow the pandemic). As we discuss below, that is a dramatic drop (especially considering that the Covid-related policies only started in March). But as economists, we ask about benefits resulting from the policies are slowing both the economy and the pandemic. For example, University of Chicago economists estimate that the social distancing and shelter-in-place measures will save 1.7 million lives in the US in the period March to October. Assigning a monetary value to the lives saved, they find the economic benefit of social distancing to be about \$8 trillion, or 37% of US GDP in 2019.

Even very pessimistic views of the rest of the year suggest GDP declines well short of 10%, suggesting that the mortality-benefit (37%) of the slow-down will be many times its cost (<10%). Indeed, our the main economic worry should be that we re-open society and economy too quickly, causing the pandemic to spiral out of control, and pushing us into a new cycle of contraction.

In discussions of what lies ahead for Michigan and the US, you'll probably hear comparisons to the "Great Recession" of 2007-2009 and the "Great Depression" of the 1930s. For our last call of online learning, we'll have a quick look at how those two "Great" events compare (using Figures from Bordo 2012, and the St Louis Fed). We'll use the shorthand of GR and GD.

We'll start with the punchline (a good joke features the punchline at the end, but for learning it's better to lead with the punchline). The Great Recession is called "Great" because it threatened to become another Great Depression. But lessons learned from the GD allowed policy-makers (especially, monetary authorities) to prevent a repeat of the GD, by aggressively providing liquidity (credit) to prevent a collapse of international monetary and financial systems. In the 1930s, both fiscal and monetary policy was more concerned with avoiding government debt than with avoiding economic collapse, and the results were catastrophic. To wrap up our online learning, we'll flesh sketch out the notion of "catastrophic" by looking at production and unemployment during the two "Greats" of short-run macroeconomics

Production is our starting point for talking about the performance of the economy, as measured by GDP. Figure 1 overlays indexes of quarterly (real) GDPs from the GR and GR. In both cases, GDP is compared to its value at the start of the event, which is given the value 100 (just like a price index, the GDP index expresses the value of GDP as a percentage of it baseperiod value).



The constrast between the two events is pretty huge. Based on GDP, the "Great" recession lasted about 2 years (8 quarters), while the Great Depression lasted over 12 years. <sup>3</sup> Officially, the GR lasted 18 months while the GD lasted 106 months. In any case, the key point is that the Depression was so much longer -- over 5 times as long. In terms of duration, the GR simply was not "great."

The GR was also not "great" in terms of the contraction in economic activity. In Figure 1, the drop in GDP during 2007-2009 is almost a blip compared to the collapse of production during the 1930s. Simply looking at the figure makes the point, but a comparison clarifies: the drop in the GDP index was about 9 times greater in the GD than in the GR (-45% vs -5%).

So in terms of our basic indicator of an economy's performance -- production of goods for current or future welfare -- the Great Depression was an economic catastrophe and the GR was not.

- And we should remember that GDP fails to meaure our household production -- that has probably surged during our stays at home! (Draw that on a PPF).
- 2 Bordo, Michael D. "The Great Depression and The Great Recession: What have we learned." eSocialSciences Working Papers 4924 (2012); <a href="https://fred.stlouisfed.org/series/GDPC1">https://fred.stlouisfed.org/series/GDPC1</a>.
- As officially dated by the NBER (in charge of identifying recessions), the GR lasted 18 months, from December 2007 to June 2009. The NBER identifies two recessions within the GD, the first was Aug 1929 to March 1933 (43 months) and the second was May 1937 to June 1938 (13 months).

The other famous indicator of economic bad times is the unemployment rate, and when we compare the two events, we get a similar story to the one above. Figure 2 (from Bordo 2012) shows the civilian unemployment rates during the two events.

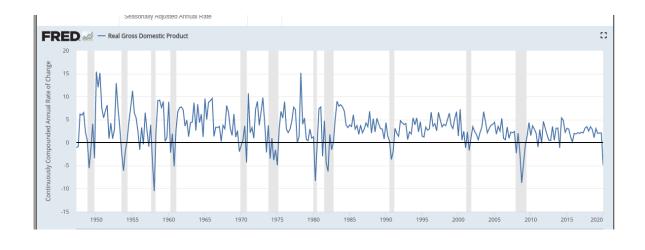
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Fig 2 - USA unemployment

In the great recession, unemployment climbed from about 5% to 11% in a 3-year span, then slowly fell back to 5% over the subsequent 5 years (well after the end of the GR -- a very slow recovery in terms of unemployment). The Great Depression saw the unemployment climb to just over 25% in about a 4-year span, and 7 years later it was still over 15%. And the severity of the unemployment problem in the GD was even worse than the figure suggests, because there was no unemployment insurance at this time, and very little in terms of any social safety net. If lucky, people were able to tap into extended family networks to share housing, food, and income. But many simply suffered.

In conclusion: looking at GDP and Unemployment (two key indicators for macroeconomics), we get a sense for the unique economic disaster that was the Great Depression. The fact that the 2007-2009 recession threatened to become something like the Great Depression is why it is called the "Great Recession." (You'll have to take other courses, or pursue other avenues of learning, to explore how and why the GR posed a catastrophic economic threat).

PS Another simple way to see that the GR was not "Great" in terms of duration or severity, is to look at it in comparison to other recessions since World War Two. The graph below shows GDP growth rates by quarter for 1947 to 2020Q1, with recessions indicated by grey shading. We see the GR has a thicker band of grey than most of the others, but the width is a similar magnitude (the GD's band would be 5 times wider!). Similarly, the depth of the drop in GDP growth in the GR is the second biggest in the graph below, but the spike shown fits comfortably in the graph (the GD's GDP drop would be way off



Good health to all.

the chart). <a href="https://fred.stlouisfed.org/series/GDPC1">https://fred.stlouisfed.org/series/GDPC1</a>.

