Third Quarter GDP Will Paint Misleading Picture of Recovery

Tomorrow at 8:30 a.m., the Bureau of Economic Analysis will release its preliminary estimate of third quarter real GDP growth, the last major economic indicator before Election Day.\(^1\) Forecasters predict that the headline number may reach 30% or higher, at a seasonally adjusted annualized rate,\(^2\) by far the largest increase on record.\(^3\) The president’s campaign already has launched Facebook ads claiming that the United States is experiencing the “fastest GDP growth in history.”\(^4\)

However, the main reason that the third quarter will appear to be the best on record is that the second quarter was the worst on record, with GDP falling 31.4% on an annualized basis – over three times worse than the previous post-WWII record 10% drop in the first quarter of 1958.\(^5\)

Unfortunately, the economy cannot simply recover from a 31.4% drop in Q2 by posting a 31.4% gain in Q3 because the percent gain is based on a much smaller level of economic output. As a result, real GDP growth would have to soar to 45.8% in the third quarter just to make up the ground lost in the second quarter.\(^6\) Moreover, that would not compensate for the 5% decline in the first quarter. To bring economic output back to its pre-pandemic level, real GDP growth in Q3 would need to skyrocket to 53.4%.\(^7\)

There is an additional challenge in interpreting the GDP numbers. Although the percent growth in real GDP is measured and reported quarterly, the published figured is annualized, adjusted for seasonal variations and extended as if the increase or decrease in one quarter were to extend across the entire year.\(^8\) A large percentage increase or decrease in real GDP seems massive when annualized, even if the results are anomalous.
There is another reason why even 30%-35% growth in the third quarter would be underwhelming – the Blue Chip consensus forecast for the full calendar year 2020 is a 4% decline in real GDP. If the estimate proves accurate, this year would be the worst since 1946. In comparison, average GDP growth over the past 10 years was six percentage points higher.

Current forecasts estimate that GDP will be substantially smaller than would have been the case if growth had continued at pre-pandemic rates. Extrapolating from Q4 2019 using the real growth rates experienced in 2019 would result in a total GDP of $22.2 trillion at the end of 2020, while the current Blue Chip consensus forecast calls for GDP of $21 trillion – a loss of over $1 trillion in economic output, or over $8,000 per household.

It is exceptionally difficult to quantify the long-run impact of America’s failure to contain the coronavirus on U.S. economic growth; the second and third quarter GDP results demonstrate why. The massive nosedive in Q2 was largely the result of the coronavirus and public health measures to control it; a partial rebound in Q3 was inevitable when social distancing guidelines were relaxed or ignored. The subsequent explosion of COVID-19 cases, hospitalizations and deaths will weigh down GDP growth in Q4 and in 2021.

Thursday’s report on third quarter GDP will not fully reflect the worsening public health crisis. Instead, on the surface, it will appear to suggest a dramatic economic turnaround. However, even record-breaking third quarter real GDP growth of 30%-35% will leave the U.S. economy substantially smaller than when the year began.
Suggested reading

Economists and reporters from top publications have written about the Third Quarter GDP release this week, largely along the lines of the arguments presented in this issue brief but including additional interesting points.

“Don’t let flashy 3rd quarter GDP growth fool you, the economy is still in a big hole,” Jay Shambaugh, Brookings Institution, Oct. 26, 2020


“What the next GDP figure will — and won’t — mean,” David Wilcox, Vox, Oct. 24, 2020


@JasonFurman (Jason Furman). "On Thursday the government will release its estimate of GDP growth in the third quarter. The number is expected to be something like 35%. Three bits of arithmetic context followed by some advance interpretation." Twitter, 26 Oct. 2020, 3:52 p.m., twitter.com/jasonfurman/status/1320815660549591040.

@EconJared (Jared Bernstein). "Many excellent scholars framing up the Q3 GDP report out Thurs, including David Wilcox, @jasonfurman, @JayCShambaugh. Read their takes, but here's the elevator pitch. (pls add your link if I've left you out!)" Twitter, 27 Oct. 2020, 12:03 p.m., twitter.com/econjared/status/1321120383337156608.

2 The BEA reports the headline GDP growth series for each quarter at an “annualized” rate, which is the amount by which real GDP would grow if the growth rate from that quarter were sustained for an entire year.
3 Haver Analytics series PGDPH from their USECON database.
4 @JesseLehrich (Jesse Lehrich). "since @Facebook won't allow new political ads after tomorrow, team Trump went ahead & ran a bunch of ads today about record-setting GDP growth from the Q3 report that won't be released until 10/29." Twitter, 26 Oct., 2020, 4:34 p.m., https://twitter.com/JesseLehrich/status/1320826155134558209?s=20.
5 Haver Analytics series PGDPH from their USECON database.
6 To recover from losing 31.4%, the economy has to grow by 1/(1-.314) = 1.458 or 45.8%.
7 As above, 1/((1-.05)*(1-.314)) = 1.534 or 53.4%.
8 As mentioned above, see for example https://www.bea.gov/help/faq/122
9 Blue Chip consensus forecasts available from Haver Analytics series AAAN, AAAP, AAAQ, AAAT and AAAD in their Blue Chip database.
10 Author’s calculations based on a geometric mean of BEA quarterly real growth rates available at https://fred.stlouisfed.org/series/A191RP1Q027SBEA
11 Author’s GDP calculations from BEA and Blue Chip data available from Haver Analytics. Households rounded to 120 million based on Census bureau estimates for Jan. 1, 2019: https://www.census.gov/quickfacts/fact/table/US/HSD410218
12 For the tight link between disease incidence and economic disruption, see for example https://www.wsj.com/articles/south-korean-economy-returns-to-growth-11603800971