ECONOMIC OUTLOOK

REGIONS

April 2018

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The End Is ~~Here~~ ~~Near~~ ~~Close At Hand~~ Coming ~~Soon~~ At Some Point

It is a given that next month the current economic expansion will take its place as the second longest on record, and we expect it will endure at least through mid-2019 and become the longest on record. And, while the expansion has likely secured its legacy as the slowest on record, with average annual real GDP growth of just 2.15 percent, it is widely expected that thanks to a significant dose of fiscal stimulus 2018 will see growth of around 3.0 percent and 2019 will see growth of around 2.5 percent. It is somewhat ironic (if not a tad morbid) then, that we find ourselves spending more and more time thinking about . . . the end.

To be sure, we're not about to don a long, flowing robe and sandals and trudge up and down Main Street carrying our "the end is nigh" sign. Come to think of it, it has been so long since we've needed our trusty sign that we're not even sure where it is, so it would probably be a good idea to at least figure that out. As to when we'll need it, well, as noted above we think not for a while. That of course comes with a huge caveat which we think is best summarized in a timeless quote from Rudi Dornbusch (a giant in our field who left this world far too soon): "in economics, things take longer to happen than you think they will, and then they happen faster than you thought they could."

Timing is only one element, however, and in addition to "when" there is "why," i.e., what would trigger a recession, and "how bad," i.e., what would a recession look like in terms of how severe it is and how long it will last. We don't pretend to be able to answer any, let alone all, of these questions with any degree of precision. After all, one of the really, really annoying things about recessions is that they almost never come when you think they will, almost never happen why you think they will, and almost never play out the way you think they will. That does not, however, mean it isn't a useful exercise to think about the possibilities. This goes well beyond our regular practice of producing a list of the main upside and downside risks to our baseline outlook each month when we update our forecast.

So, in that sense, consider this month's *Outlook* as us more or less thinking out loud about these questions. As to why not just sit back and enjoy the late-cycle acceleration in growth that we, most private sector forecasters, and the FOMC are anticipating and then just see where the dust settles, there are quite a few reasons we're spending increasing amounts of time thinking about the next recession. One reason is that many of you are already thinking about the next recession. "When?" is one of the questions we get most frequently in response to our written materials and when we're out on the road doing presentations. More often than not, however, this question is premised on the age of the expansion; in other words, if this expansion is so old, then surely it can't have that much longer to run, right?

As we often note, however, expansions don't die of old age, they're instead done in by either random shocks, policy mistakes, or the unwinding of imbalances in either the real economy or the financial sector, if not both, that have built up over the life of the expansion. There are, however, reasons other than its age that have some fearing the beginning of the end of the expansion is at hand. For instance, a seemingly more hawkish FOMC has raised fears in some quarters of monetary policy precipitating the untimely demise of the current expansion which, as a glance back at history would show, is not a totally unfounded fear. Others are watching, at least to the extent they can stand to, the wild swings in equity markets of late and are interpreting the swooning stock market as a sign of deteriorating economic fundamentals ahead of a recession. Others interpret a flatter yield curve as a harbinger of recession. Still others are becoming increasingly worried about an increasing volume of tariff talk morphing into an all-out trade war.

Regardless of whether we share any or all of these concerns, the point here is that we are hardly alone in thinking about the next recession, even if we don't think it to be close at hand. If for no other reason, thinking about the next recession can be a useful planning exercise, especially given how long it has been since we've had a recession. After all, it is often the case that too much emphasis is put on the baseline outlook, regardless of what that outlook is, and too little emphasis on the risks to that outlook, both upside and downside. At this juncture, however, the upside risks seem more limited given the acceleration in growth built into our baseline outlook and those of many others. In contrast, given the late-cycle acceleration in growth in our baseline forecast, the downside risks, particularly the potential for policy mistakes, seem more plausible. As such, it is useful to at least think about when the next downturn will come and what it might look like.

That is always the case but seems more so now than it has been at any time during this expansion. While of course aware that a random shocks can come along at any time and put any expansion in peril, we've been notably unconcerned over the prospect of recession for the past several years. An extraordinarily high degree of slack in the labor market and the industrial sector being pared down at a snail-like pace against a backdrop of unprecedented monetary accommodation isn't exactly the recipe for recession, hence our (and others') relative lack of concern in recent years.

But, just as the slowest moving snail eventually gets where it is going, so too does the slowest moving expansion, ultimately bringing an economy back to full employment. That applies to the current expansion; though others argue the U.S. economy is already there, we do not think the economy is at full employment, but neither is it far from it. "Already at" or "close to," however, is a distinction without difference at this point given the significant

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dose of fiscal stimulus set to course through the U.S. economy over coming quarters. That stimulus will propel the economy past anyone's idea of what constitutes full employment, as evidenced by forecasts of the unemployment rate, with many expecting a low of between 3.0 and 3.5 percent in late-2019.

Once an economy passes full employment, inflation pressures become more intense, prompting a more aggressive path of monetary policy. In the current cycle, that threshold is much lower than has been the case in past cycles given the economy's notably low "speed limit," i.e., the rate at which it can grow on a sustained basis without sparking inflation pressures. Though this is often overlooked given the slow pace of growth during this expansion, the reality is that the U.S. economy has been growing at a rate above its speed limit for some time. That this growth has not sparked stronger inflation pressures is simply a reflection of the degree of slack left in the wake of the 2007-09 recession. It is when this slack has been absorbed that inflation becomes a more pressing concern. We are nearing that point in the current cycle, even absent the significant fiscal stimulus.

This is why many expect the FOMC to become more aggressive over coming quarters, with some fearing the FOMC will become so aggressive that higher interest rates will choke off the expansion. Given the considerable lags between changes in monetary policy and when those changes impact the economy, the FOMC tends to act "pre-emptively," on the premise that by time faster inflation is observed, it's too late. It is worth noting that, as of the March 2018 edition of the FOMC's "dot plot," the Committee as a whole expects to raise the Fed funds rate beyond what they themselves consider to be its long-tern "neutral" value. We don't know of an instance over the past few decades in which the funds rate has been raised above neutral without a recession following.

To be sure, to the extent there are "supply side" effects from the fiscal stimulus the economy's speed limit increases, thus giving the FOMC latitude to be more patient in raising the Fed funds rate. For instance, to the extent the tax bill, particularly the provision for the immediate expensing of capital investment, gives firms the incentive to step up capital spending, there should be at least some improvement in labor productivity growth, which is a key determinant of any economy's speed limit.

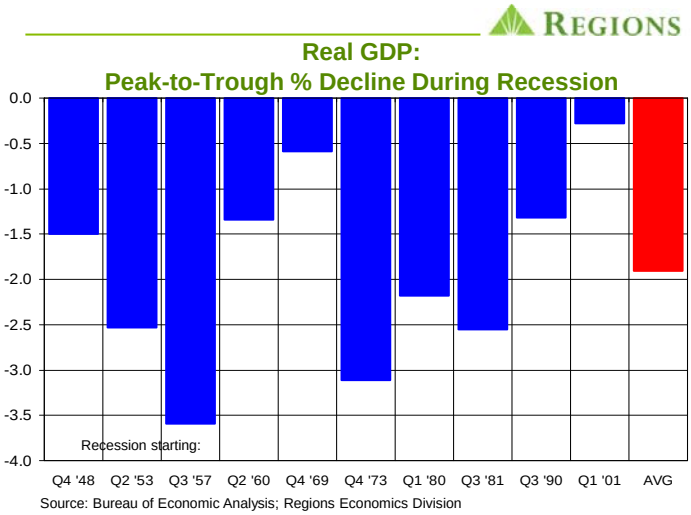
We do anticipate at least some supply side response to the tax bill, and public comments by many FOMC members suggest they will be watching for at least some supply side response. But, even with the stipulation that the timing and magnitude of turns in labor productivity cycles are next to impossible to forecast, virtually no one expects the tax bill to foster supply side effects anywhere near strong enough to offset the demand side effects of not only the tax bill but also the spending bill. Again, this is what leads many to fear that the FOMC will become more, or too, aggressive in pushing interest rates higher over coming quarters.

To the extent faster inflation, or expectations of faster inflation, take hold, this will be a source of upward pressure on longer-term market interest rates over coming quarters. Any such effects would compound upward pressure on longer-term rates stemming from increasingly large federal government budget deficits and the unwinding of the Fed's balance sheet. At the same time, given that most of the boost to growth from the tax bill will be seen this year and the boost from added federal government spending will fade, perhaps sharply, in late-2019, the stage is set for a pronounced slowdown in growth over the latter stages of 2019 and into 2020, with a commensurate increase in the risk of recession.

Indeed, our baseline forecast anticipates real GDP growth of around 1.5 percent in 2020, putting us in line with most other private sector forecasts that we've seen. And, as in our case, most private sector forecasters are focusing on the combination of higher interest rates and the unwinding of fiscal stimulus as primary culprits behind a material slowdown in growth in 2020 with an increasing probability of recession. This of course may be a concern ("if they all think so, we'd better start worrying about it") or a comfort ("if they all think so, we don't need to worry about it because they're all always wrong") to you; we'll leave it for each reader to make that call. We'll also remind you of Fed Chairman Jerome Powell's response when asked, in his press conference following the March FOMC meeting, about the outlook for 2020 – "that's a long way off."

It is indeed, and as noted above, recessions seldom happen when you think they will for the reasons you think they will. Be that as it may, our level of worry increases as we move through Q4 2019 and into 2020, which is the answer we give every time we're asked when we think the next recession will come. Almost invariably, the follow-up question we get pertains to what the recession will look like, in terms of its severity and its duration. Obviously, given that we've yet to see all of the damage done by the 2007-09 recession repaired, even this late into the subsequent expansion, that is for many people the frame of reference. We do not, however, nor do we know of anyone who does, envision the next recession being as deep or as long as the 2007-09 recession, given that we don't expect a repeat of the financial components of that recession.

A term which we frequently hear, though we make it a point to never use this term ourselves, is that the next recession will be a "garden variety" recession. What we think people have in mind when they use this term is that the next recession will be similar in severity and duration to the averages seen in post-WW II recessions, excluding the 2007-09 recession. We know that, on average, those recessions last 3.5 quarters and that, on average, the peak-to-trough decline in real GDP is 1.9 percent.



That seems a reasonable starting point, but, as the above chart shows, even excluding the 2007-09 recession there is a considerable degree of variance around these averages. The chart shows the peak-to-trough decline in real GDP for each recession starting with the recession that began in Q4 1948 and ending with the recession that began in Q1 2001. The average peak-to-trough decline does not include the 2007-09 recession. To our earlier point, we've seen peak-to-trough declines as severe as the 3.59 percent decline in the recession that began in Q3 1957 and as mild as the 0.28 percent decline in the recession that began in Q1 2001.

As a further illustration of our point that there really isn't any such thing as a "garden variety" recession, we've included a series of charts in the last few pages of this month's *Outlook* showing similar comparisons for the various components of GDP. We think this is a useful refresher given that, by time we do get to 2020, it will have been almost 20 years since the last, for lack of a better term, "normal" recession.

How deep and how long are of course somewhat dependent on what actually triggers the next recession. To the extent that higher interest rates are one such trigger, then it is reasonable to assume interest sensitive segments of the economy, such as housing and consumer durables, will slow more than other segments. To the extent that over the next several quarters we do see a continuation of the rapid growth in business investment spending that began over the second half of 2017, it is reasonable to expect that a recession would bring payback in the form of a sharp contraction. And, to the extent that equities are overvalued – as some argue they already are – it is reasonable to expect the next recession to be associated with a correction, perhaps a significant one. To the extent this does happen, it is reasonable to expect this to lead to a pullback, via the wealth effect, in consumer spending.

What worries us, however, is that while each of the potential outcomes listed above is plausible, that is only a partial list of potential outcomes we can point to in advance, or, if you like, some of the known unknowns. It is, after all, the things that you don't know you don't know that get you every time. As such, we frequently find ourselves wondering what we could be missing, something that could potentially turn a relatively brief, relatively mild recession into something worse, even if not on the order of the 2007-09 recession.

For instance, we spend a good deal of time worrying about high levels of debt in the household, corporate, and government sectors of the U.S. economy, and think debt will be a significant wild card heading into the next recession. Given what have been much more stringent underwriting standards for most types of debt since the end of the 2007-09 recession and a far greater preponderance of fixed rate debt than has been the case in past cycles, there is less reason to fear a tsunami of defaults during the next downturn, particularly should that downturn be fairly brief and mild. There are pockets, however, such as high-yield corporate debt, in which there is more floating rate debt concentrated amongst lesser credit quality, where defaults could be a bigger issue.

What we think more likely, however, is that rather than magnifying the effects of the next recession, high levels of debt will act as a drag on the subsequent recovery. At some point the level of debt becomes a binding constraint on further growth in debt, and to the extent debt has fueled overall economic growth, running into this constraint would, in turn, imply a slower pace of recovery from the next recession.

The same would be the case with fiscal policy. That we are getting such a large dose of fiscal stimulus (and commensurate increases in the size of the federal government budget deficit) as the economy is approaching full employment lessens, perhaps significantly, the scope for fiscal policy to bolster the economy either during the next recession or in its immediate aftermath. State governments will also be in a considerably less favorable position to support broader economic activity than has been the case in past cycles. State government revenue growth has been painfully slow over the current expansion, and a steadily increasing share of overall state government spending is being diverted to spending on health care and pension obligations, neither of which will diminish during a recession. So, while the next expansion will likely be no match for the current expansion in terms of duration, it could well give the current expansion a run for its money for the title of slowest on record.

If We Had To Pick One, And Only One, Data Series To Watch . . .

As discussed above, we think the probability of recession increases as we move through 2019 and into 2020, but there is obviously no definitive timeline governing when the next recession begins. When the recession begins is one question, when we will know when the next recession begins, or, we should say, has begun, is quite another question. After all, one of the frequently expressed frustrations with turns in the business cycle is that no one knows we're actually in a recession until we're well into a recession. To which we would answer . . . yes. And no.

It is true that the National Bureau of Economic Research (NBER), which is the unofficial official arbiter of business cycle dating, takes some time to make a call as to when the business cycle has turned. For instance, it wasn't until December 2008 that NBER announced a recession had begun in December 2007. There is a perfectly good reason for this lag, however, as NBER purposely waits long enough so that the existence of a business cycle peak/trough is not in doubt and it can assign an accurate date to the peak/trough. This is in keeping with NBER's role as a research organization.

That does not mean the rest of us are left to the mercy of the NBER in calling turns in the business cycle. For instance, in February 2008 we did an interview with a national publication in which we stated we believed the U.S. economy was in recession and that recession had begun in December 2007. One reason we remember this is that we still recall some of the angry and disbelieving responses we got. In any event, the timing of that call was closely tied to the economic data.

While being deliberate about making their calls, the NBER is nonetheless watching the same data we all watch. Note that the NBER does not adhere to the definition of recession often used in the financial press, i.e., two consecutive quarters of declining real GDP. In keeping with their definition of recession as significantly diminishing economic activity across the economy, NBER focuses on indicators such as nonfarm employment, real business sales,

personal income excluding transfer payments, and industrial production. Our call in February 2008 came after the release of the report on January industrial production, which showed industrial production had begun to decline after peaking in late-2007. This coincided with nonfarm employment and real business sales also having begun to turn lower (we were working with the data as reported at the time, several rounds of revision between now and then may show different timing of the cyclical peaks).

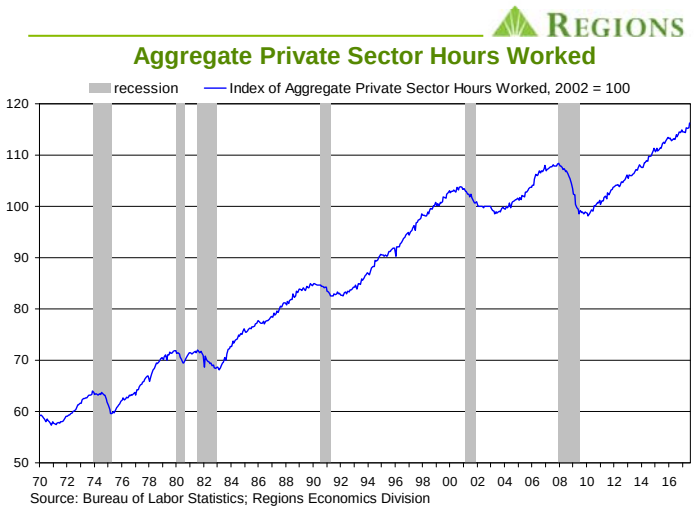
We track these variables each and every month and will continue to do so, and it is on the basis of these variables that we will ultimately make a call as to the timing of the next recession. A call that may or may not ultimately match the NBER's call, but even if the two do not exactly coincide they likely won't be too far off. Those, of course, are not the only variables that bear watching. They simply, as a whole, meet the NBER's need for a gauge of broad based economic activity. While we of course think every economic data series is worthy of attention, for the purposes of this discussion the question is which, if any, variables other than those cited above can shed any light on turns in the business cycle. Keep in mind here that it isn't just a matter of what the variable tells us, it's also a matter of when it tells us what it tells us. In other words, variables can be thought of as leading, coincidental, or lagging, and in terms of being on recession watch, it is the variables with leading properties that are of the most use.

The obvious caveat here is that no data series has a spotless record. One indicator most frequently cited as a harbinger of recession is the yield curve, with an inverted yield curve (i.e., longer-term interest rates lower than shorter-term interest rates) thought by many to be a sure-fire indicator of recession. That the spread between yields on two-year and ten-year Treasury notes has narrowed considerably and is at present hovering at right around 50 basis points, the narrowest spread since 2007, has many followers of this indicator on edge. After all, every recession since the mid-1950s has been preceded by an inverted yield curve.

This was the case with the 2007-09 recession. The problem, of course, is the yield curve first inverted in December 2005 and the 10/2 spread swung back and forth between positive and negative over most of 2006. This raises another point – while an inverted yield curve is a reliable indicator of recession, the timing dimension leaves a lot to be desired; the yield curve has inverted as few as six months and as many as 24 months ahead of recessions.

Other variables share this same trait, i.e., being useful indicators of recession but having no sense of timing. Consumer confidence has been one such variable. Though it has a more limited history, since the mid-1970s the Conference Board's gauge of consumer confidence has peaked ahead of the peak in the business cycle, though the length of the signal has varied. It is also the case that peaks in the stock market, as measured with the S&P 500 Stock Index, have preceded peaks in the business cycle, but again with variable timing. We can say the same of many other series, such as the components for supplier delivery times and new orders from the ISM Manufacturing Index.

In short, there is no, well, no shortage of data series that send useful signals as to turns in the business cycle without necessarily helping pin down the timing. That simply points to the importance of monitoring the trends in the various data series and putting each in the context of the others and then using some judgment in making calls. But, while tracking the universe of economic data series is part of our day job, this doesn't help those with neither the time nor the inclination to do so. In answer to another question we are often asked, then, if we were told we could track one, and only one, data series as an indicator of impending recession, it would be the series shown in the following chart.



We know. Didn't see that one coming, did you? But, as you can see in the chart above, the series on aggregate private sector hours worked has an excellent track record of being no worse than a coincident indicator and often a leading indicator of recession. Keep in mind that aggregate hours worked encompasses both how many people are working (in the private sector) and how many hours per time period they work, and seemingly small – one-tenth of an hour – changes in weekly hours have a powerful effect on the aggregate measure. Think about it this way – when firms begin to see softening business conditions, their first step is not to start cutting back on people, it is instead to cut back on the number of hours their people are working.

Changing the number of employees is a blunt tool and one not quickly, or cheaply, reversed, so before they do so firms need to be sure business conditions warrant such a change. Altering the number of hours worked basically buys firms time to get a better sense of where business conditions are heading, and is something that can be easily reversed. This is important, in the context of us watching this as an indicator of recession, because declines in hours worked will be seen sooner than will declines in employment. Changes in hours worked also have a powerful effect on personal income, another of the NBER's key indicators, as aggregate labor earnings represent the largest single component of total personal income. As such, a seemingly obscure and not all that interesting data series can actually tell us a good deal and do so in a timely manner.

As noted earlier, we do not expect this data series, or any other data series for that matter, to be sending a dire warning any time soon, but we'll be watching just the same. If nothing else, this discussion is hopefully a useful reminder that we are closer to the end of the current expansion than to the beginning. As such, while it may be too soon for the next recession, it's not too soon to at least think about where that recession might come from and what that recession might look like.

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Q3 '17 (a)	Q4 '17 (a)	Q1 '18 (f)	Q2 '18 (f)	Q3 '18 (f)	Q4 '18 (f)	Q1 '19 (f)	Q2 '19 (f)		2016 (a)	2017 (a)	2018 (f)	2019 (f)
3.2	2.9	2.7	3.1	3.0	3.2	2.7	2.1	Real GDP[1]	1.5	2.3	3.0	2.6
2.2	4.0	1.2	2.6	2.6	2.5	2.4	2.2	Real Personal Consumption[1]	2.7	2.8	2.5	2.4
								Business Fixed Investment:				
8.5	7.1	6.6	7.0	6.2	4.5	5.3	4.4	Equipment, Software, & IP[1]	0.3	4.4	6.8	4.9
-7.0	6.3	3.0	4.0	4.7	4.0	3.5	2.4	Structures[1]	-4.1	5.6	3.0	3.3
-4.7	12.8	2.4	4.6	3.6	5.9	6.0	5.2	Residential Fixed Investment[1]	5.5	1.8	3.5	5.0
0.7	3.0	1.0	2.8	3.5	3.3	1.9	0.8	Government Expenditures[1]	0.8	0.1	2.1	1.8
-597.5	-653.9	-671.9	-660.9	-661.0	-663.3	-671.7	-682.0	Net Exports[2]	-586.3	-621.8	-664.3	-687.1
1.172	1.256	1.274	1.292	1.309	1.331	1.355	1.364	Housing Starts, millions of units[3]	1.177	1.208	1.301	1.371
17.1	17.7	17.2	16.9	16.9	16.8	16.7	16.6	Vehicle Sales, millions of units[3]	17.5	17.2	16.9	16.5
4.3	4.1	4.1	4.0	3.9	3.8	3.8	3.7	Unemployment Rate, %[4]	4.9	4.4	3.9	3.7
1.5	1.5	1.5	1.5	1.5	1.4	1.3	1.2	Non-Farm Employment[5]	1.8	1.6	1.5	1.1
0.7	1.1	4.1	3.0	2.8	2.8	2.9	2.1	Real Disposable Personal Income[1]	1.4	1.2	2.6	2.7
1.8	1.9	1.9	2.1	2.1	2.0	2.0	2.0	GDP Price Index[5]	1.3	1.8	2.0	2.0
1.5	1.7	1.9	2.4	2.5	2.2	2.0	1.9	PCE Deflator[5]	1.2	1.7	2.2	2.0
2.0	2.1	2.2	2.8	2.8	2.5	2.2	2.1	Consumer Price Index[5]	1.3	2.1	2.6	2.1
1.4	1.5	1.7	2.0	2.2	2.2	2.1	2.1	Core PCE Deflator[5]	1.8	1.5	2.0	2.1
1.7	1.7	2.0	2.3	2.4	2.5	2.3	2.4	Core Consumer Price Index[5]	2.2	1.8	2.3	2.4
1.13	1.18	1.41	1.67	1.90	2.13	2.17	2.42	Fed Funds Target Rate, %[4]	0.39	0.98	1.78	2.46
2.24	2.37	2.76	2.83	2.93	3.03	3.10	3.15	10-Year Treasury Note Yield, %[4]	1.84	2.33	2.89	3.18
3.88	3.92	4.28	4.43	4.54	4.67	4.76	4.79	30-Year Fixed Mortgage, %[4]	3.65	3.99	4.48	4.83
-2.1	-2.6	-2.5	-2.5	-2.6	-2.8	-2.7	-2.8	Current Account, % of GDP	-2.4	-2.3	-2.6	-2.8

a = actual; f = forecast; p = preliminary

Notes:
1 - annualized percentage change
2 - chained 2009 $ billions
3 - annualized rate
4 - quarterly average
5 - year-over-year percentage change

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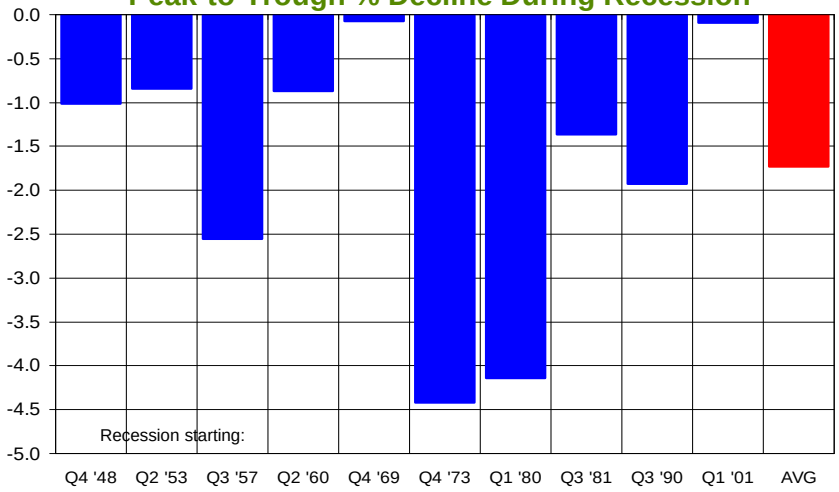
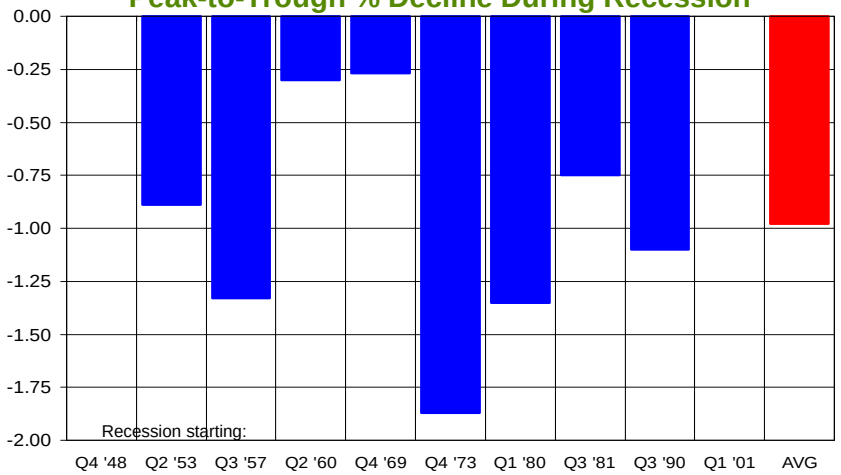
Real Private Domestic Demand: Peak-to-Trough % Decline During Recession



Source: Bureau of Economic Analysis; Regions Economics Division

Real Personal Consumption Expenditures: Peak-to-Trough % Decline During Recession

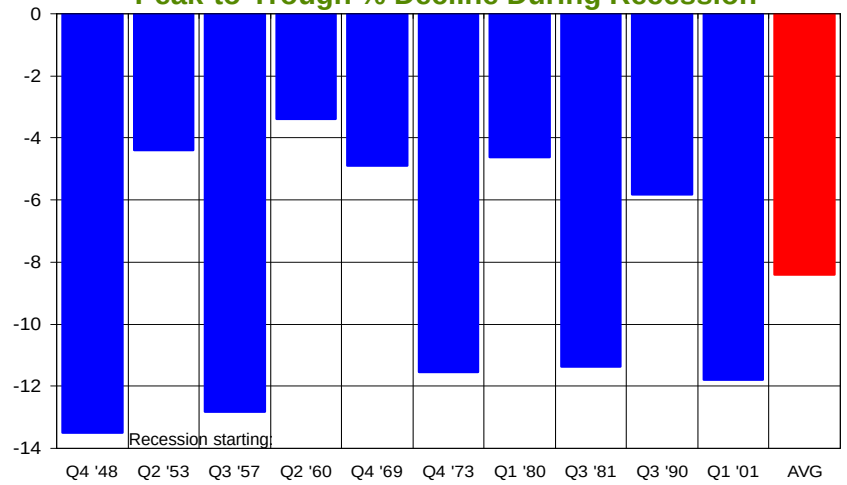


NOTE: Real PCE did not decline in 1948 and 2001 recessions
Source: Bureau of Economic Analysis; Regions Economics Division

Real Disposable Personal Income: Peak-to-Trough % Decline During Recession

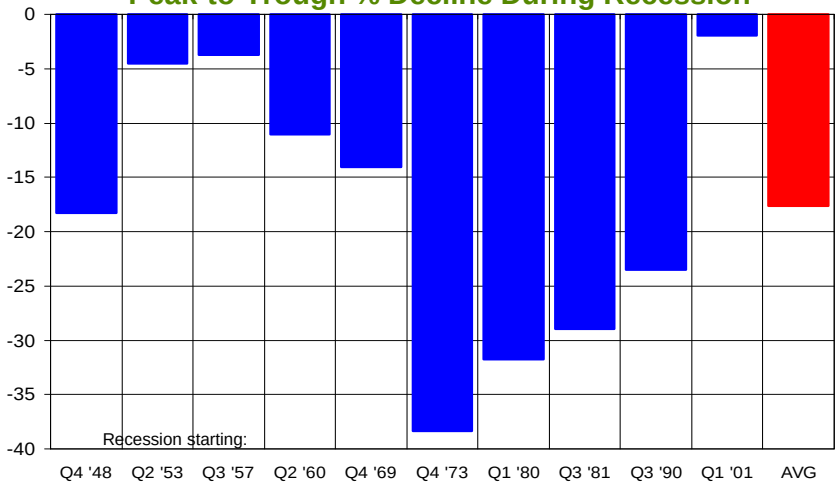
NOTE: Real disposable personal income did not decline during the 1960 recession
Source: Bureau of Economic Analysis; Regions Economics Division

Real Business Fixed Investment: Peak-to-Trough % Decline During Recession



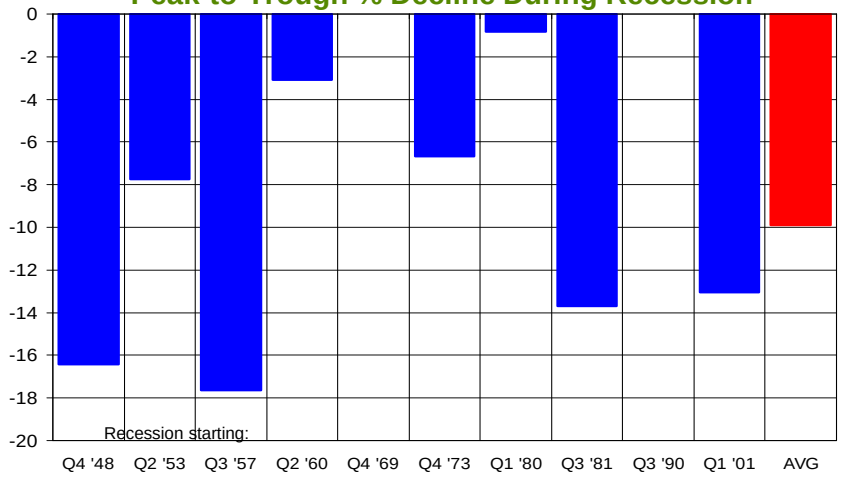
Source: Bureau of Economic Analysis; Regions Economics Division

Real Residential Fixed Investment: Peak-to-Trough % Decline During Recession



Source: Bureau of Economic Analysis; Regions Economics Division

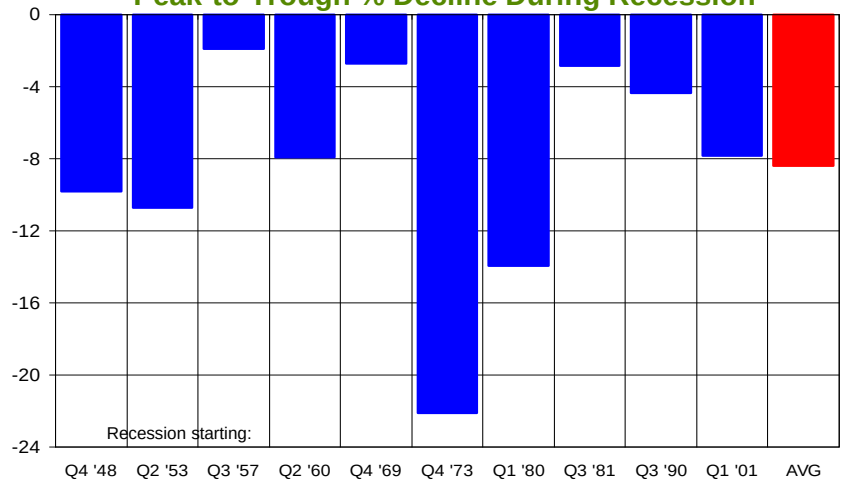
Real U.S. Exports: Peak-to-Trough % Decline During Recession



NOTE: Real exports did not decline during 1969 and 1990 recessions

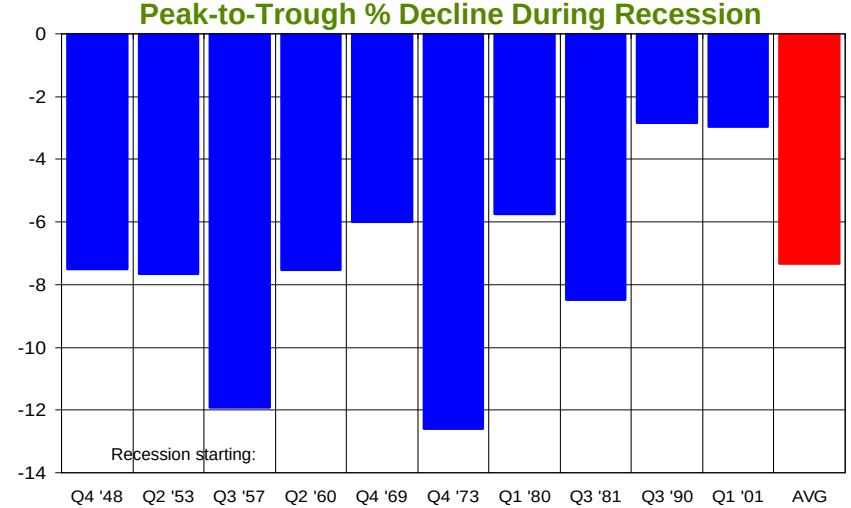
Source: Bureau of Economic Analysis; Regions Economics Division

Real U.S. Imports: Peak-to-Trough % Decline During Recession



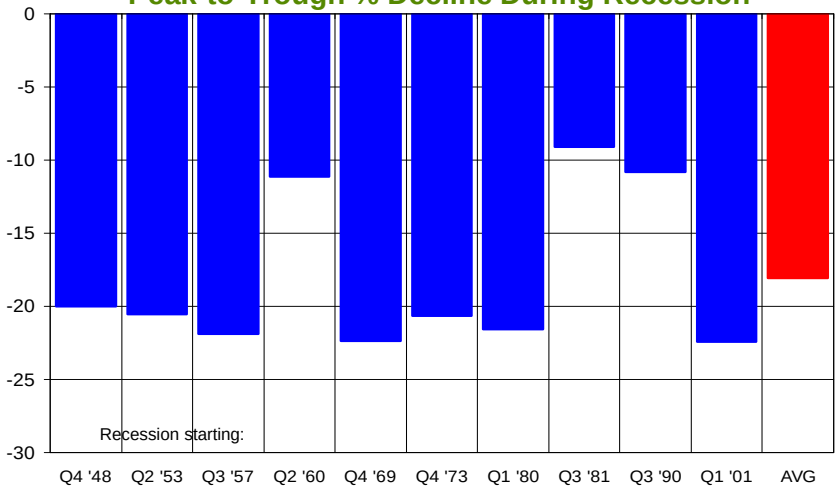
Source: Bureau of Economic Analysis; Regions Economics Division

Industrial Production: Peak-to-Trough % Decline During Recession



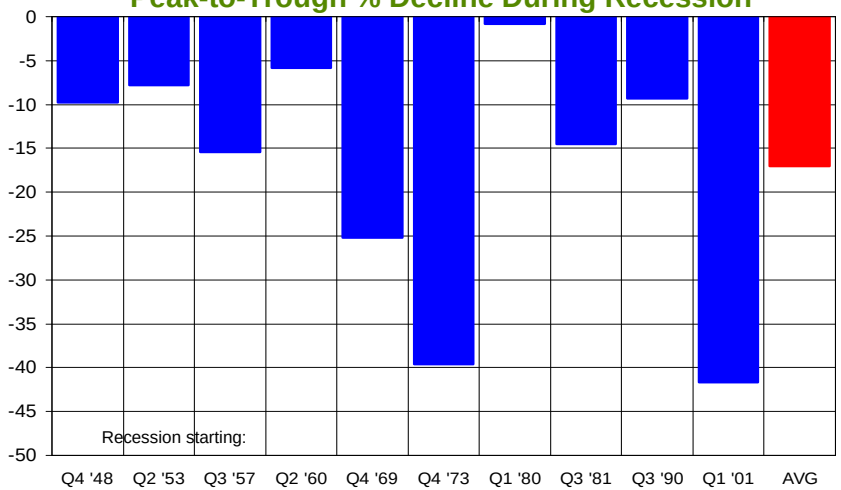
Source: Federal Reserve Board; Regions Economics Division

After-Tax Corporate Profits: Peak-to-Trough % Decline During Recession



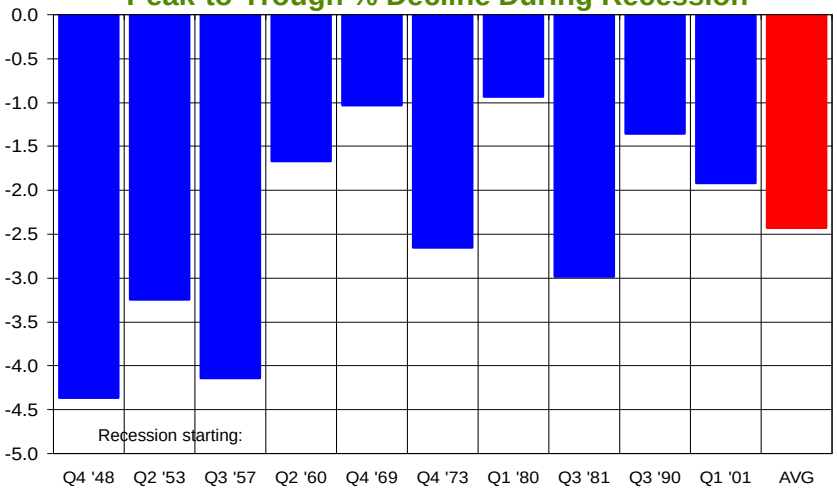
Source: Bureau of Economic Analysis; Regions Economics Division

S&P 500 Stock Index: Peak-to-Trough % Decline During Recession



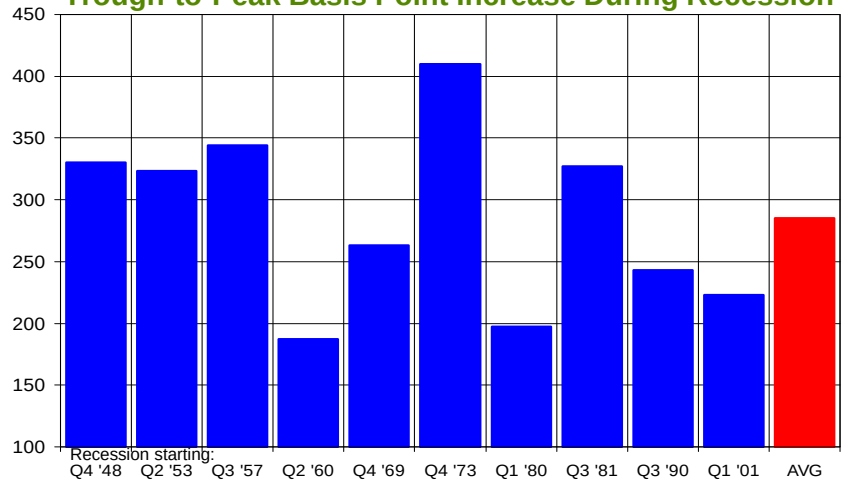
Source: Standard & Poor's; Regions Economics Division

Total Nonfarm Employment: Peak-to-Trough % Decline During Recession



Source: Bureau of Labor Statistics; Regions Economics Division

Unemployment Rate: Trough-to-Peak Basis Point Increase During Recession



Source: Bureau of Labor Statistics; Regions Economics Division