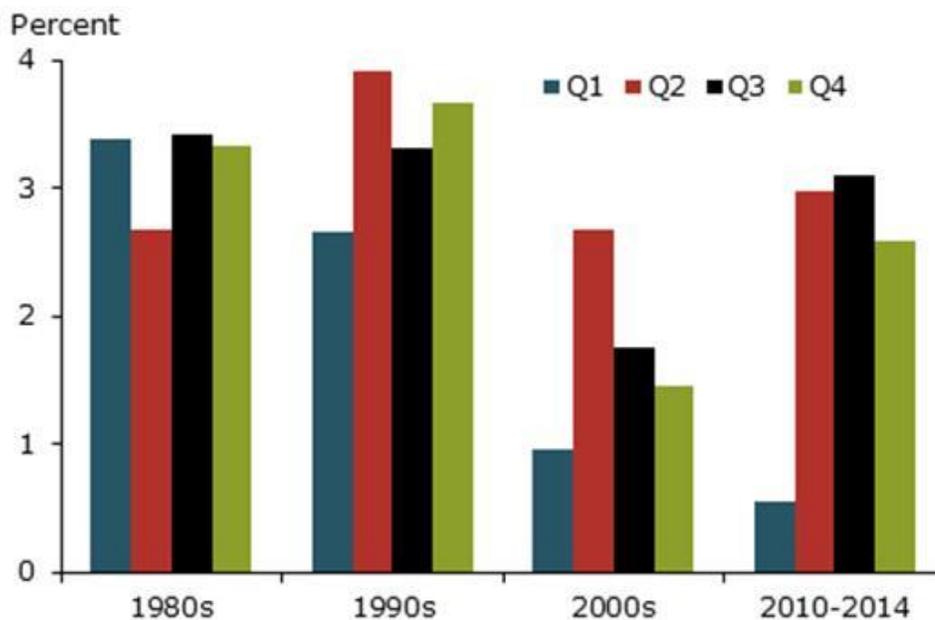


### 1Q15 Real GDP: Positive, Negative or Wrong?

According to the latest estimate by the Bureau of Economic Analysis, real GDP in the first quarter of 2015 contracted 0.7%. This was down from its initial estimate of growth of 0.2%. Not surprising, following these reports there has been a lot of discussion about the overall health of the U.S. economy.

Some commentators suggested the first quarter weakness was another sign of a broader overall slowing trend and that it suggests the economy will remain sluggish. Others have pointed out various transitory factors that likely caused first quarter weakness and suggest overall growth is much better than the first quarter indicated. They point to the severe weather conditions in the upper northeast, the west coast port strike, falling oil prices, and the surge in the value of the U.S. dollar as temporary influences that will not likely have the same negative impact for the rest of the year.

Even Federal Reserve economists are questioning the validity of the first quarter real GDP report. According to a recent study by the San Francisco Federal Reserve\*, the seasonal adjustments used in calculating the first quarter real GDP figure may be creating a misleading estimate.



Source: BEA; seasonally adjusted quarterly growth at annual rate.

\* Rudebusch, Wilson and Mahedy, “[The Puzzle of Weak First-Quarter GDP Growth](#)” in FRBSF Economic Letter, May 18, 2015

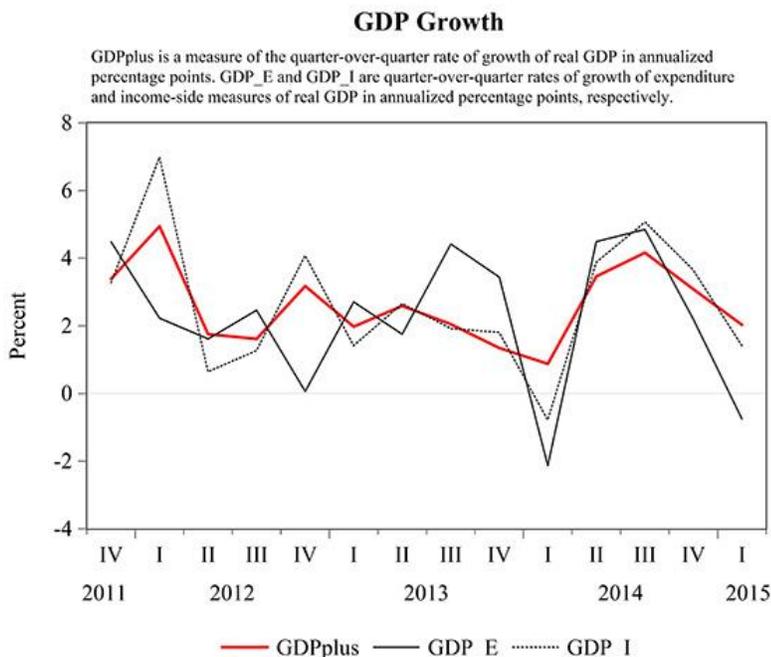
In the chart above, the study presents the average real GDP growth by quarter for each decade since 1980. It notes that during the 1990s and the 2000s, the average first quarter growth estimate has been 1 percentage lower than the average during the rest of the year. However, between 2010 and 2014 the first quarter difference jumped to 2.3% on average. This is more than twice the previous difference. It is suggested in the study this change might reflect "... small seasonal patterns that were not significant in a variety of individual components may accumulate when added together to produce noticeable seasonal patterns in the aggregate GDP estimates." In addition, it suggests that the frequency of seasonally adjusted inputs could also be having a negative impact.

Recently, the Bureau of Economic Analysis acknowledged the seasonal adjustments made in calculating the first quarter GDP estimate need to be changed and will release a revision in July. At present, the consensus of economists is that first quarter real GDP will be revised to about 1.5% growth.

If that is not confusing enough, a very persuasive argument has been made that the method used to estimate GDP is not the best method\*\*. Currently there are actually two methods used to estimate GDP. The widely reported method is the expenditure-side version (GDP\_E) and the less known method is the income-side version (GDP\_I).

The main difference in the two methods is the primary data sources used to calculate the estimates. The income-side version uses wage and salary income as the largest component and corporate profits and proprietors' income as two other very important components. The widely used expenditure-side version uses business surveys where responses can be voluntary and the auditing of non-respondents is less rigorous. For example, personal consumption expenditures for services comprises between 25% and 50% of the nominal value of GDP\_E, yet the government statistical agencies have collected annual source data on less than half of the total survey and on a quarterly frequency even less source data is collected.

A reasonable answer, in our opinion, as to which method should be used has been offered by economists at the Philadelphia Federal Reserve. They have comprised a GDP estimate that combines both the expenditure-side and the income-side which they have named GDPplus.



\*\* Aruoba, Diebold, Nalewaik, Schorfheide and Song, "Improving GDP Measurement: A Forecast Combination Perspective" FRB Philadelphia Working Paper 13-16

The chart above presents the Philadelphia Fed's GDPplus (red line) versus the widely reported expenditure-side estimate (solid line) and the income-side estimate (dotted line). By combining the two different methods, the GDPplus estimate is much less volatile and, therefore, offers a more consistent indicator of underlying economic growth.

It is important to point out that in all of this discussion about which GDP estimate is the best, they are all only estimates. Once initially reported, the GDP data is continually revised and often times tells a much different story later than when it was initially reported.

Since the GDP estimates offer the broadest view of overall economic conditions, they will likely continue to draw a lot of attention from economists. The methods used to make these estimates may be improved upon but should always be considered in the context of many other indicators.

We remain focused on understanding the current trends in fundamentals because it gives us the best probability for investment success.

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