

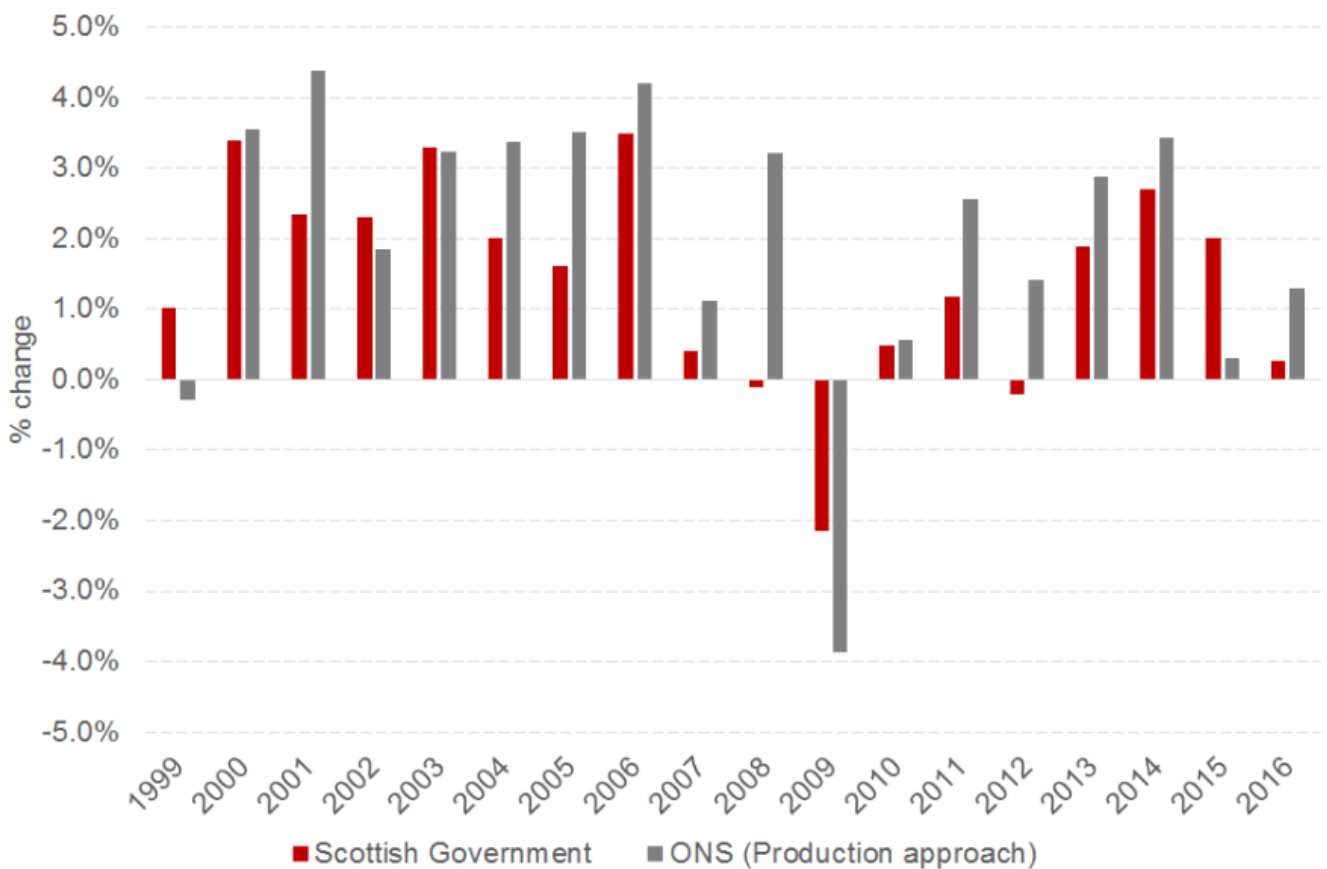
One of the interesting features of the Scottish economic data landscape is that both the Scottish Government and the ONS produce their own separate measures of economic growth for Scotland.

Recently we got some new [National Accounts data from the Scottish Government](#) as well as new data from the ONS for GVA growth across the [devolved nations and English regions](#).

With two different datasets on economic growth in Scotland being released relatively close to one another, it's possible to see whether or not they tell the same story, and if not, why not?

The following chart shows the estimates of Scottish GVA growth according to both the Scottish Government and the headline real-terms measure of regional GVA from the ONS.

Chart 1: Annual Growth rates for Scotland, Scottish Government vs. ONS



For the most part, the series follow similar patterns. However, there are a number of

important differences.

Firstly, the ONS estimate a much greater downturn in Scotland during the financial crisis than the Scottish Government. But as a consequence, it is no surprise that the ONS are much more positive about the recovery (with Scotland bouncing back from a lower base).

Secondly, what is particularly interesting at the current time, is that the ONS put economic growth in Scotland higher in 2016 than the Scottish Government do (and growth in 2015 lower than the Scottish Government estimate).

The scale of the difference for both years is relatively large. Did the Scottish economy grow by 0.3% in 2016 or 1.3%? It's not hard to see why people get confused and frustrated by different statistics.

So what explains the differences?

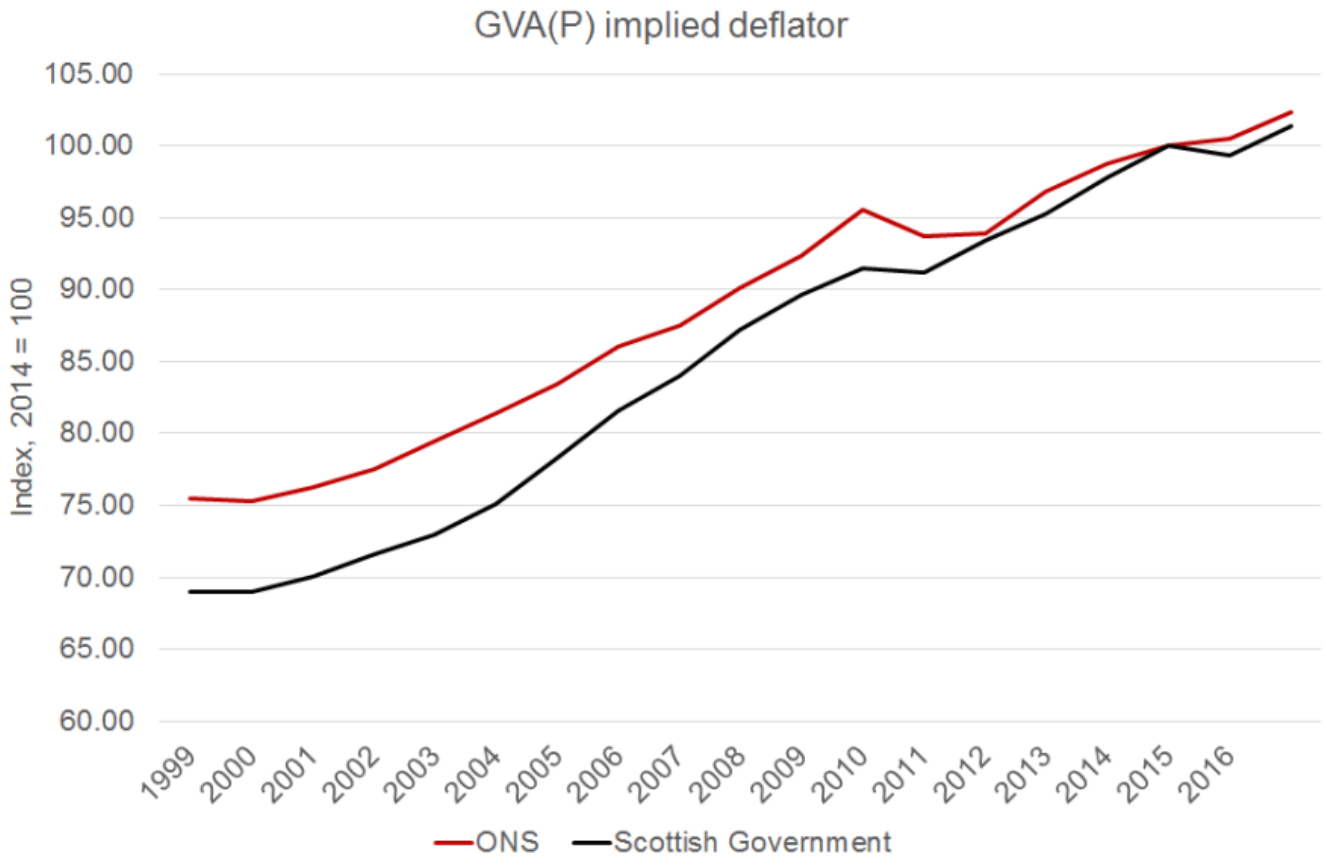
The key reason is differences in methodology. The headline ONS approach is more top-down in nature, with UK nominal GVA apportioned between English regions and devolved nations. In contrast, the Scottish Government use a more bottom-up approach which aims to replicate the methods used by the ONS for the headline UK GDP figures.

Another difference is in the methods used to deflate the series (i.e. to convert from nominal GDP to real-terms GDP). As Chart 2 highlights, the ONS have the Scottish GVA deflator increasing at a slower rate than the Scottish Government through most of the period.

Because of this, we see any *real* GVA series being quicker using the ONS deflator rather than the Scottish Government deflator.

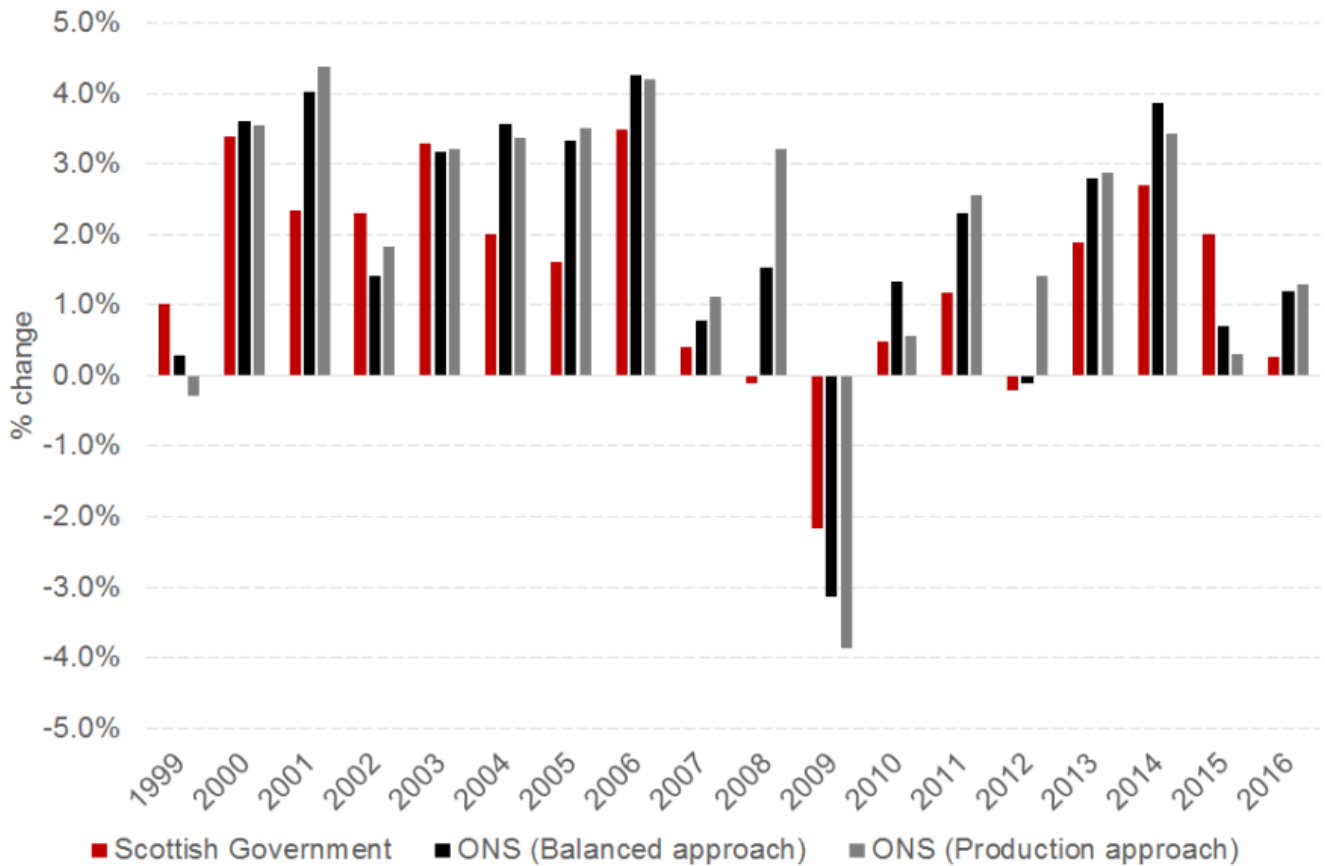
Chart 2: Implied deflators: Scottish Government vs. ONS

Data on Scotland's economic growth- what's the difference?



The differences are also smaller when comparing the Scottish Government figures with a new experimental 'balanced approach' from the ONS (although the gap still remains).

Chart 3: ONS headline & 'balanced' estimates relative to Scottish Government estimates



Why are these differences important?

Such differences may seem academic (particularly given the methodological differences involved), but when growth rates are low, small differences can have a significant impact on the economic & political narrative and subsequent policy responses.

Any differences also have important implications for wider measures of economic performance.

Take productivity for example.

Productivity is measured as GVA per worker or GVA per hour worked. If we have measures of GVA which suggest different patterns of activity, this will influence our assessment of the productivity challenge, and the effect of policy measures to improve productivity.

Both the Scottish Government and the ONS estimates of regional productivity rely upon the same measures of hours worked and jobs. So this means that whichever data series shows

stronger GVA growth will also show stronger estimates of productivity growth. So, with the ONS data, [Scotland's productivity performance last year is not as bad](#) as the [Scottish Government's own data is telling it](#).

According to the latest ONS figures, labour productivity in Scotland is 99.4% of the UK's (and increased marginally between 2015 and 2016). But in contrast, the Scottish Government's own estimates have labour productivity slipping back from 98.0% of the UK level in 2015 to 96.2% in 2016.

These two data series are telling different stories about the short-run direction of travel. On one measure we're improving (marginally!) relative to the UK in our productivity performance, on the other we're falling further behind.

Conclusions

The ONS and Scottish Government are doing a lot of work in the area of economic statistics . But there remains a significant programme of work required to improve their accuracy, consistency and coverage.

The Scottish Parliament's Economy, Jobs and Fair Work Committee has recently published a report into economic statistics in Scotland and the improvements that they wish to see. There is much hope that the use of new data, in particular administrative data, will help improve the accuracy of economic statistics.

The key point to take from this however, is that the differences between the Scottish Government and ONS measures of Scotland's recent economic performance highlight once again the importance of not putting too much weight on small variations in point-estimates of macroeconomic statistics.

Ultimately, it is trends that are more important. In this regard, both the series tell similar stories. The Scottish economy has been relatively fragile over the last couple of years and productivity - whilst broadly in line with the UK as a whole - remains well behind the best performing countries.