

March 24, 2016

The Price of Independence

- An Objective Analysis -

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Summary

This report uses the 2014-15 Government Expenditure & Revenue Scotland (GERS) report as its primary source. These figures are used to explain Scotland's *past* economic performance (as an integral part of the UK) so as to inform our understanding of the *future* choices a possible independent Scotland would face.

During the Independence Referendum the Scottish Government proposed March 24th 2016 as "Independence Day". This context is highly significant. Had there been a Yes vote, the GERS figures analysed within this report would have been the "actuals" used for negotiations around EU membership and currency sharing.

The GERS figures show that Scotland's total net fiscal deficit in 2014-15 was £14.9bn or 9.7% of GDP.

Scotland's deficit/GDP was bigger than any EU country in 2014. Only Greece and Ireland (at the peak of the financial crash) and more recently Slovenia have shown worse deficits over the last 14 years. In 2014-15 the UK as a whole ran a deficit of 4.9%; on a comparable basis Scotland's deficit was twice as bad.

In the Independence White Paper ("Scotland's Future: your guide to an independent Scotland") the Scottish Government asserted: "*On independence in 2016, Scotland's estimated financial position will continue to be healthier than the UK as a whole. We will set out on a firm financial footing*"¹. Those who suggested at the time that this was at best an extremely optimistic assertion were accused of "talking Scotland down". The actual figures now show that those people were guilty of nothing more than understanding the tenuous nature of the case presented.

The EU's Stability and Growth Pact Excessive Deficit Procedure (EDP) defines an excessive deficit as 3% of GDP. It's inconceivable that a prospective independent Scotland could be negotiating EU membership terms today without having a clear and aggressive deficit reduction programme in place.

Scotland has had an onshore deficit gap to the UK of £8bn – £10bn over the last decade. This onshore deficit gap has been disguised in the past by North Sea revenues. In 3 of the last 16 years these revenues have been sufficient to more than eliminate that gap and make Scotland a net contributor to the UK. Declining North Sea revenues fully explain why Scotland's deficit has diverged from the UK's. This onshore deficit gap is not just a snapshot view, it's a long-term structural reality.

The outlook for North Sea revenues is bleak, with the OBR now forecasting *negative* revenues for the foreseeable future. Even a significant recovery in the oil price is unlikely to lead to them returning to anything like their historic levels. An independent Scotland would need to be fiscally sustainable without income from the North Sea, would need to be fiscally sustainable based on its onshore economy alone.

In this context the crude economic case presented in the Scottish Government's Independence White Paper is, frankly, discredited. The North Sea oil revenue forecasts used were clearly optimistic at the time, and subsequent claims that "oil is a bonus" simply cannot be reconciled with the harsh economic reality described in the Scottish Government's own GERS report.

Arguments that the onshore deficit gap between Scotland and the rest of the UK represents evidence of Westminster mismanagement are difficult to substantiate. As a region of the UK, in absolute terms Scotland's onshore revenue generation per capita is relatively healthy and Scottish onshore revenues have been growing in line with the UK as a whole. The deficit gap is primarily a result of higher expenditure per capita in Scotland due to structural issues that would not go away were Scotland to

¹ Scotland's Future, page 4: www.gov.scot/resource/0043/00439021.pdf

become independent. It seems perverse to blame “Westminster mismanagement” for allowing Scotland to continue to receive £1,500 higher spend per capita than the rest of the UK.

Had Scotland voted Yes, EU and currency negotiations would place Scotland under pressure to rapidly find in the region of £9bn pa through increased taxes or reduced spend. That’s equivalent to £1,700 annually for every man woman and child in Scotland.

For context: £9bn pa represents 13% of total Scottish public spending and is greater than Scotland’s entire education & training budget; it’s 17% of total Scottish onshore revenue and 77% of the total amount Scotland raises in income tax.

The White Paper proposed just £0.6bn of net savings, primarily through defence cuts². These saving were not to be used to reduce the deficit but to pay for childcare reforms, end the bedroom tax and introducing “competitive business taxation”³. Not only is it clear that in fact a newly independent Scotland couldn’t afford these reforms, there would need to be net savings 18 times as large as anything identified in the White Paper. There can be no reasonable doubt that had Scotland voted Yes we would be required to pile austerity on top of austerity, we would be subject to austerity squared.

Because Scotland voted No it is possible to take a more considered long-term view of how to close this deficit gap; we have time to try and address the deficit gap through economic growth while benefitting from support from the rest of the UK.

That the rest of the UK provides fiscal support to Scotland can be seen as simply the quid pro quo for Scotland’s North Sea tax revenue contributions since 1980. If we had “started the clock” in 1980 then Scotland would still be in credit as a result of the large contribution made during the oil boom years (and seems likely to remain so for the next 7 years). Of course starting this calculation in 1980 paints the most favourable picture for Scotland, but it clearly illustrate the benefits of pooling and sharing over time.

To close the deficit gap with the UK – to be in a situation where becoming independent wouldn’t make Scots immediately worse off – would require Scotland to out-grow the rest of the UK by 17%. That’s quite a challenge. If Scotland were to achieve the rates of superior growth that the White Paper suggested as illustrative of the “bonus of being independent” it would take over 90 years.

None of this is to suggest that Scotland couldn’t be an independent country or that raw economics should be the only consideration. But if we’re to be honest about the economic implications, it now seems clear that independence will only happen within our lifetimes if the majority of Scots are willing to vote to become considerably worse off, quite possibly for generations to come.

² Scotland’s Future, page 78: www.gov.scot/resource/0043/00439021.pdf

³ Scotland’s Future, page 4: www.gov.scot/resource/0043/00439021.pdf

Context

This report has been commissioned by the Scottish Conservative and Unionist Party who have asked for an objective assessment of the economic facts surrounding the ongoing devolution debate. The author recently sat on Scottish Labour's Low Pay Commission and has no party affiliation. He is motivated simply by a desire to help improve the quality of economic understanding in political debate and to inform rational policy development.

Methodology

Objectivity & Presentation

This report focuses on analysis and presentation of the economic data produced by the Scottish Government. To minimise the risk of selective interpretation, the time series data presented covers the full periods for which consistent data is available and the analysis covers all public expenditure and revenue categories so as to fully explain the Net Fiscal Balance.

Economic figures and their analysis can be a somewhat dry topic. As far as possible this report uses graphs rather than data tables on the basis that this makes the data easier to digest (particular with respect to relative scale and trends over time).

Whilst the aim is to avoid political bias, the author happily admits to being a sentient human being with opinions. As far as this practical constraint allows, the interpretations of the data offered are intended to aid understanding of the data rather than pass political judgement.

GERS Figures

The definitive source for fiscal comparisons between Scotland and the rest of the UK is the Government Expenditure and Revenue Scotland (GERS) report⁴.

The responsibility for GERS lies with the Scottish Government's Chief Statistician and as the report itself states: *"the United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics"*.

With each publication of GERS there are methodological improvements and where necessary historical figures are restated. This report uses the most recent published figures and supporting tables⁵ to present the full time period for which the GERS data is available in this consistent form.

A separate brief analysis is included showing a longer time-series view using Scottish Government Historical Fiscal Balance data⁶. These figures cover the period 1980-81 to 2012-13 and are consistent with the GERS 2012-13 publication (but are illustrative only).

Wherever oil revenues are quoted, the Scottish Government's preferred "geographic share" figures are used. In layman's terms, the figures include 100% of "our oil".

There are some widely held misconceptions about the accuracy of the GERS figures relating to simple misunderstandings about how the figures are compiled. These include such myths as "missing whisky duty"⁷, "corporate taxes being reported at head office"⁸ and "Scotland paying for London infrastructure spending"⁹. It's frankly ridiculous to think the Scottish Government's statisticians would allow such obvious errors to occur.

⁴ GERS 2014-15: www.gov.scot/Resource/0049/00495386.pdf

⁵ Supporting Excel Tables: www.gov.scot/Publications/2016/03/3692/downloads

⁶ www.gov.scot/Topics/Statistics/Browse/Economy/GERS/RelatedAreas/LRfiscalbalances2014

⁷ There's no such thing: see Appendix A

⁸ That's not how they're handled in GERS: see Appendix A

⁹ Not in the GERS figures we don't: see Appendix A

Whilst the data are accurate enough to be designated as National Statistics, in some cases GERS apportions revenues based on survey data. The GERS report includes confidence interval analysis¹⁰ that shows we can have 95% certainty that those figures are accurate to within +/- £0.5bn.

Manipulation of GERS Figures

All GERS figures used in this report audit-trail directly to the supporting Excel tables, with just two adjustments applied

1. Historical figures have been adjusted using the UK GDP deflator¹¹ so that we are comparing absolute figures over time in real terms.
2. When looking at the question of independence from the perspective of Scottish citizens, the appropriate comparison is between being “in Scotland on its own” or “in the UK including Scotland”. In this context it’s appropriate to compare Scotland with total UK, as the GERS figures do. However, much of the rhetoric in the on-going devolution debate is about “us and them” and when the option of Full Fiscal Autonomy (FFA) is discussed the principle of Scotland fiscally matching the rest of the UK (so as not to be a burden on the shared currency) is important. In this context we want to see how Scotland’s fiscal balance compares with that of the rest of the UK excluding Scotland (rUK). Figures for rUK are simply calculated by subtracting the figures for Scotland from those of the UK. This report will make use of both comparisons and be clear which it is using and why.

Pro-Forma Accounts

We should be very clear about what this analysis of historical fiscal data can and cannot tell us.

The figures only tell us how an independent Scotland’s finances would have looked if we had already been independent but were still raising taxes and incurring public spending (including reserved expenditure) as we have been as an integral part of the UK. We are looking at what in financial accounting terms would be considered pro-forma accounts.

The figures do not tell us what the future accounts of an independent Scotland would look like. They do however describe the starting point (the “run-rate”) from where we can start to consider the possible impact and fiscal implications of independence.

Precisely how independence would change Scotland’s economy is of course a hugely complicated subject that would require us to consider, amongst other factors;

- The outcomes of uncertain negotiations around issues such as currency, inherited share of debt and EU membership
- The explicit tax and spend choices that the government of an independent Scotland might make. Although inevitably constrained by the result of the negotiations above, these would include decisions around wealth redistribution, defence, industrial and economic policy, international affairs, debt and deficit management, social policy priorities and much more
- The impact of factors outside the Scottish Government’s direct control such as how businesses and the labour force would respond, international energy prices, international credit ratings and Scotland’s cost of debt
- The cumulative effect of all of the above on Scotland’s economic growth

¹⁰ GERS 2014-15 page 36, Table A.12

¹¹ www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-december-2015-quarterly-national-accounts

The potential upsides and downsides of all of these and more was the subject of much debate during the independence referendum. This report does not attempt to re-run those arguments.

With all of these caveats given, it is worth noting that those commentators who suggest that *“the GERS figures tells us almost nothing that can be related to the finances of an independent Scotland”*¹² are insulting not only the intelligence of their readers but the also the Scottish Government’s statisticians and the authors of the Independence White paper (which cites GERS figures on no less than 15 occasions and used them as the basis for the economic case presented). To deny the validity of the GERS data would be to deny the source of the data that gave rise to such observations as:

- *“Scotland is the 14th richest nation in the world”*¹³
- *“Scotland’s GDP per head is £2,300 higher than the UK as a whole”*¹⁴
- *“[Scots have] paid more tax per head of population every year for the past 34 years”*¹⁵
- *“Scotland more than pays her way in the UK”*¹⁶

Objectives

This report aims to answer three questions

1. **How does Scotland’s fiscal position compare with the UK’s and other EU countries’?**
2. **What causes the fiscal gap between Scotland and the rest of the UK?**
3. **What does this mean for the case for Independence?**

¹² Gordon MacIntyre-Kemp in [The National](#), 11/03/2016

¹³ www.heraldscotland.com/news/13150012.Scotland_is_14th_richest_country_in_the_world_say_SNP/

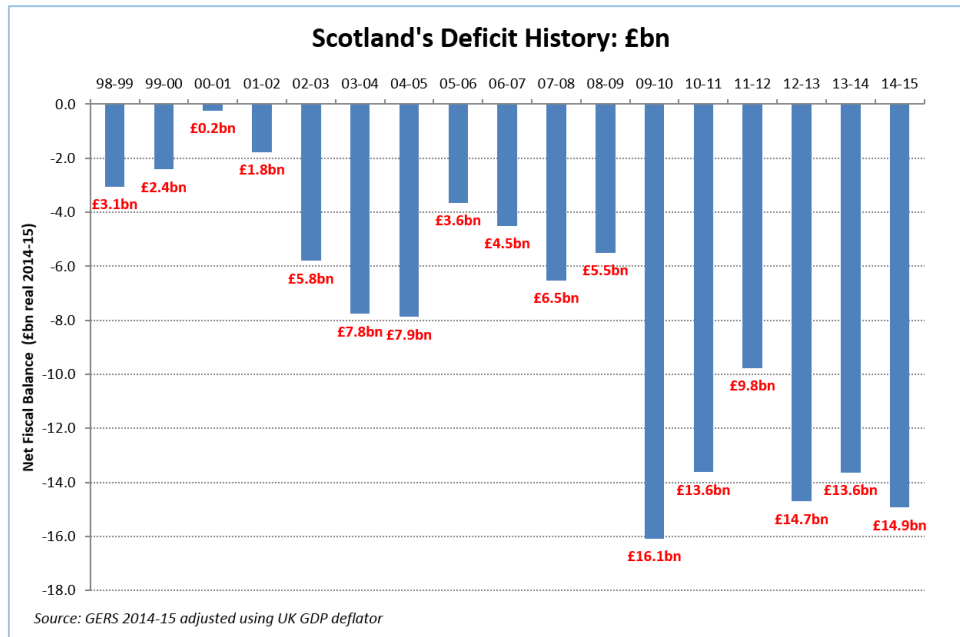
¹⁴ www.theguardian.com/politics/2014/jul/27/scottish-independence-scotland

¹⁵ www.bbc.com/news/election-2015-scotland-32171887

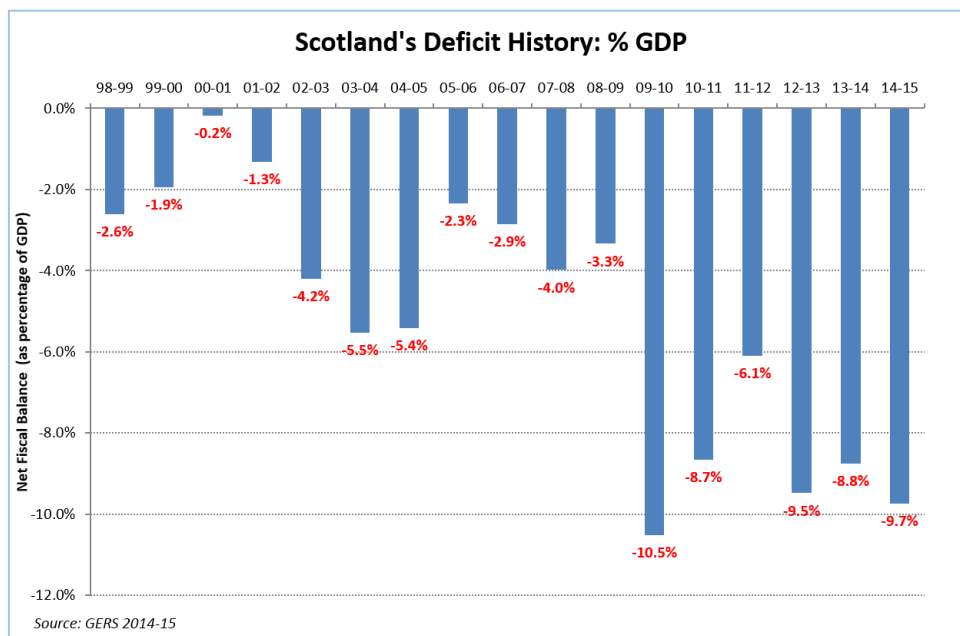
¹⁶ www.publicfinance.co.uk/news/2013/03/annual-finance-figures-show-scotland-pays-its-way-says-swinney

1. How does Scotland's fiscal position compare with the UK's and other EU countries'?

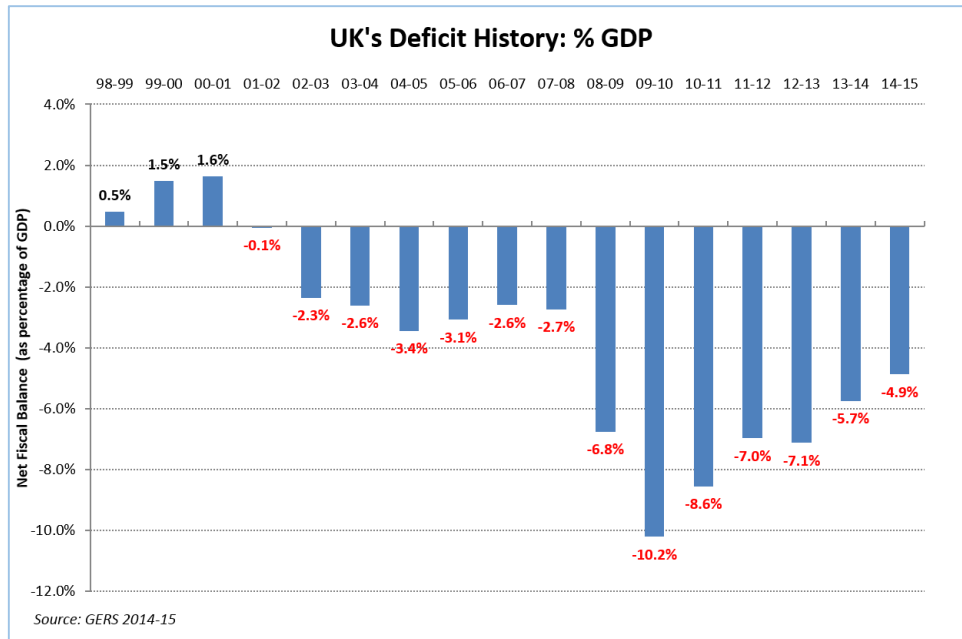
In absolute terms the GERS figures show that Scotland's deficit in 2014-15 was £14.9bn. The deficit has deteriorated significantly since 2011-12 (the base year used for the Scottish Government's independence White Paper).



The international standard for comparing deficits between countries is to look at deficit as a percentage of Gross Domestic Product (GDP). On this basis Scotland's deficit in 2014-15 was 9.7% and has exceeded 8.0% in 5 of the last 6 years.

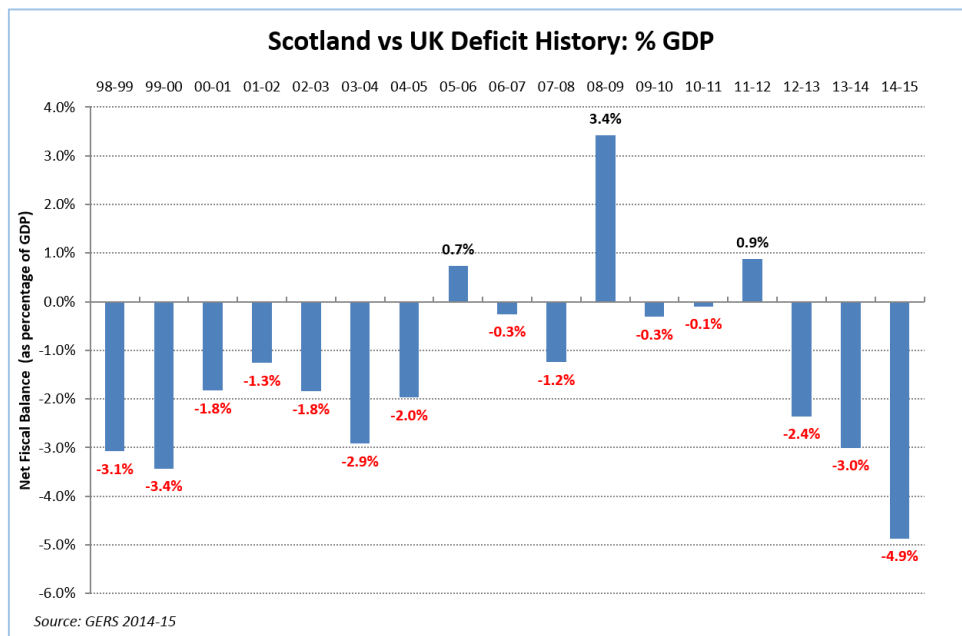


On the same basis, the UK's total deficit was 4.9% in 2014-15 and has been improving steadily since it peaked at 10.2% in 2009-10, immediately after the financial crisis.

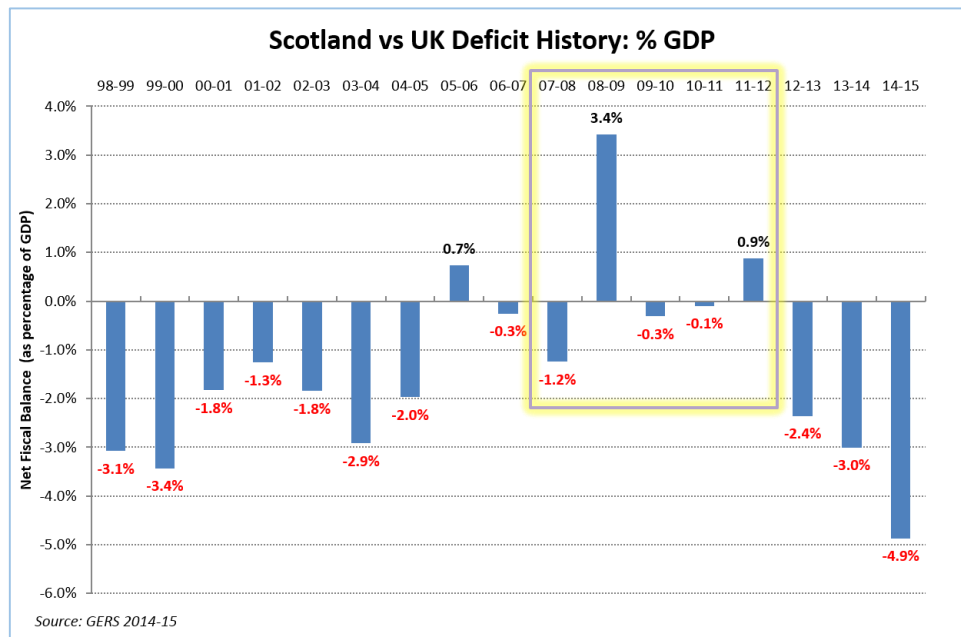


During the independence debate, the Scottish people were making the choice between independence or remaining as part of the UK as a whole. It's therefore appropriate to compare the relative scale of Scotland's (notional stand-alone) deficit with the UK's by looking at how much bigger or smaller Scotland's deficit would have been historically compared to the UK's.

To look at the relative deficit between Scotland and the UK we need to simply chart the difference between the two graphs above. In layman's terms: when the bars are above the axis Scotland is "better off", when below the axis "worse off"



This is a helpful graph for placing some of the independence referendum rhetoric in context. Although the numbers have been restated slightly since, the highlighted area below shows the figures used to support the many “in the last 5 years” claims made by Alex Salmond during independence referendum debates¹⁷ and the (at the time correct) assertion that “Scotland more than pays her way in the UK”¹⁸



The figures for 2012-13 were published 6 months before the actual referendum but, for perhaps understandable reasons, the Yes campaign continued to focus on the 2011-12 figures.

So to summarise: we can observe that Scotland’s relative position versus the UK has deteriorated in the last three years and that Scotland’s deficit is now twice as large as the UK’s.

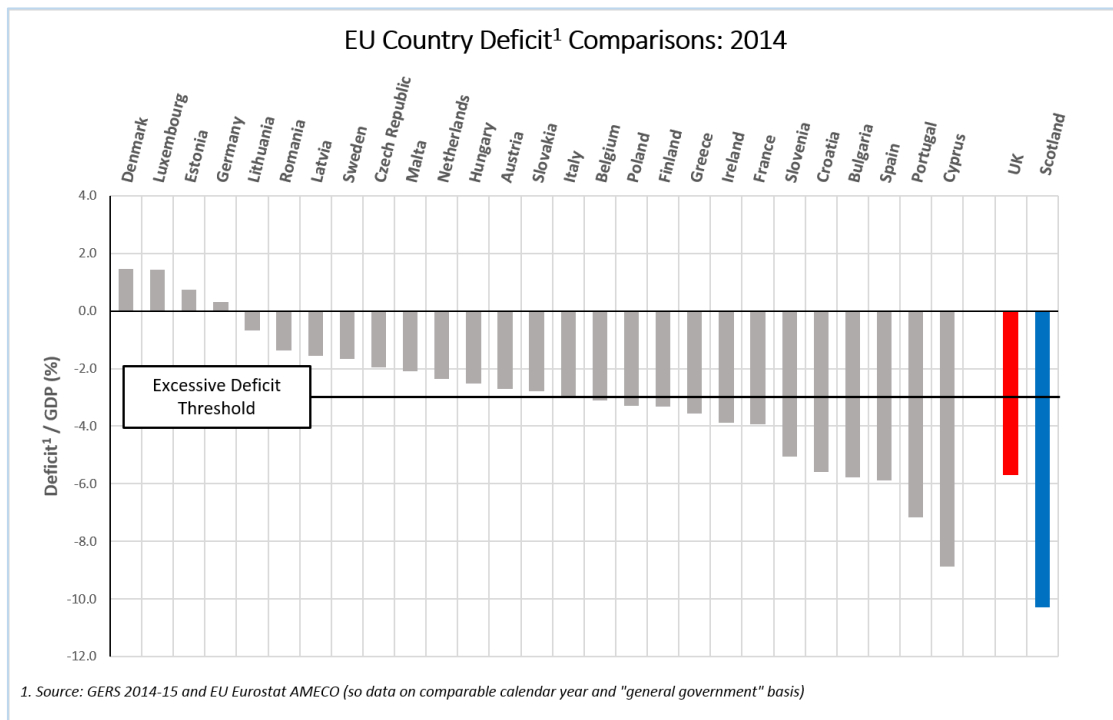
To put that into absolute terms we just multiply this 4.9% difference by Scotland’s 2014-15 GDP of £153bn to get to a figure of £7.5bn. This is simply a corollary of the observation that Scotland’s deficit of £14.9bn is twice as large as the UK’s on a comparable basis. This £7.5bn figure deficit *gap* figure is often referred to as the independence “black-hole”. This is an unhelpful term as it’s often confused with the total deficit figure which, as we’ve seen, is £14.9bn.

In the next section we will explore this deficit *gap* in more detail (and in particular seek to understand the *onshore* deficit *gap*), but before we do it’s informative to place the UK and Scottish deficit figures in a wider EU context.

¹⁷ “Over the Last five years” figures quoted by Alex Salmond: Today Programme May 2013 as reported in the [New Statesman](#); FMQs March 2014 as reported by the [BBC](#); STV Leaders’ debate as reported in the [Evening Times](#); BBC Leaders’ debate as hosted on [YouTube](#)

¹⁸ www.publicfinance.co.uk/news/2013/03/annual-finance-figures-show-scotland-pays-its-way-says-swinney

The "corrective arm" of the EU Stability and Growth Pact "ensures that Member States adopt appropriate policy responses to correct excessive deficits by implementing the Excessive Deficit Procedure (EDP)" and defines an excessive deficit as 3% of GDP¹⁹. On a comparable basis²⁰, Scotland's actual deficit in 2014 was 10.3%, worse than any EU country.



This context is extremely significant. The White Paper proposed 24th March 2016 for Scotland's "independence day". This means that these 2014-15 GERS figures would be the "actuals" which would have been used to underpin any negotiations around Scotland's membership of the EU as an independent country (and indeed negotiations with the UK about any currency sharing agreement).

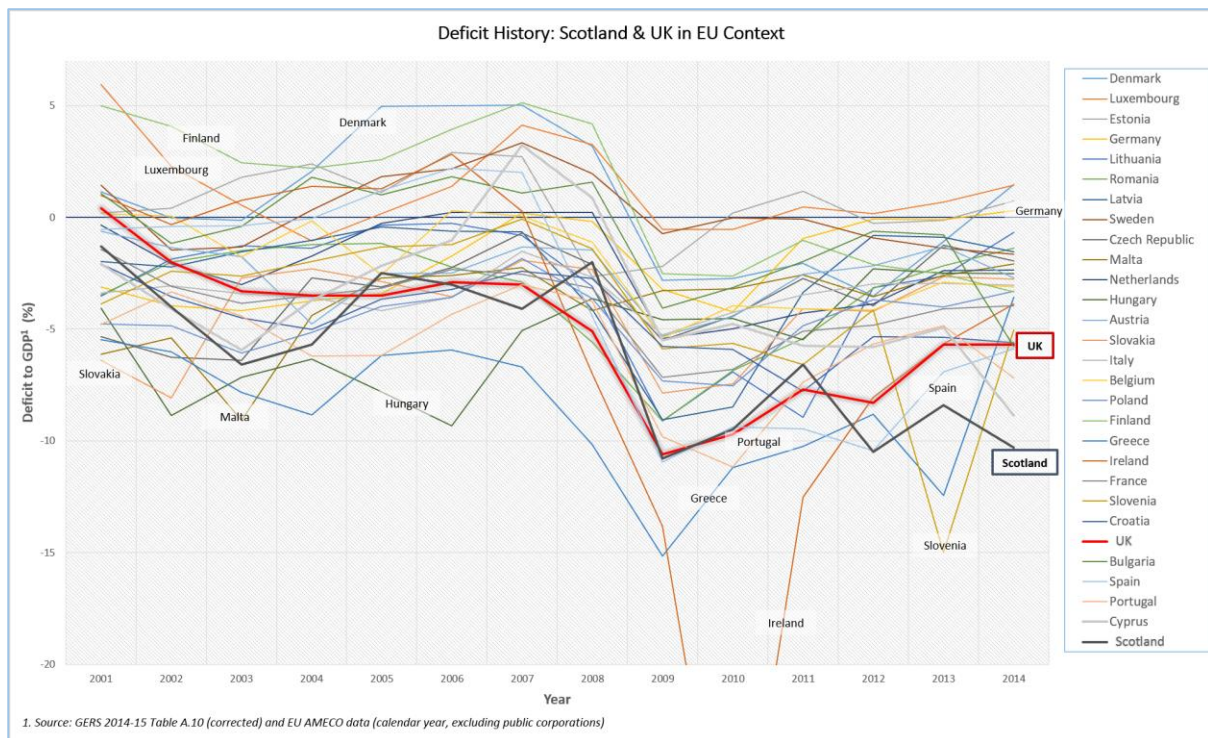
The gap between Scotland's deficit of 9.7% in 2014-15²¹ and the 3.0% EU threshold is £10bn in absolute terms.

¹⁹ ec.europa.eu/economy_finance/economic_governance/sgp/corrective_arm/index_en.htm

²⁰ This analysis uses GERS table A.10 which reports calendar year figures for "general government" (i.e. excluding public corporations) so as to be comparable with EU/Eurostat data

²¹ GERS financial year basis

Nobody would suggest that Scotland's future should be judged on a single bad year, so we should place Scotland's deficit figures in a longer term historical EU context



This graph shows reasonably clearly that since 2011 Scotland's worsening deficit has seen it not only diverge from the UK but from most EU countries. In 2012 Scotland's deficit was very similar to Spain's. Only Greece and Ireland (at the peak of the financial crash) and more recently Slovenia have shown worse deficits over this time period.

We will address the question of whether or not this could credibly be argued as evidence of Westminster's mismanagement of the Scottish economy in the next section of this report.

This graph also highlights that while the UK's deficit has been improving since 2009, it is still (on this specific measure) a relatively poor performer within the EU. Some have rightly observed that Scotland's deficit is no worse than the UK's was in 2009 at the peak of the financial crisis. It is equally valid to observe that this is true *after* Scotland has shared in UK wide austerity measures. Were Scotland to address its current deficit position in the same way as the UK did in 2009 (as Nicola Sturgeon recently appeared to suggest would be the case²²), any new austerity measures would need to be in addition to those already in place.

Given the significance of and outlook for oil & gas revenues (as we will come on to explore), it is inconceivable that an independent Scotland would be able to negotiate EU membership (or indeed a workable currency solution) without having a clear and credible plan in place to dramatically reduce the scale of its deficit.

While most Scots would surely wish for Scotland's economic performance to improve whether or not we remain an integral part of the UK, it is undeniable that the UK's fiscal framework offers a level of economic security (and financial support) that allows such improvements to be sought through measured long-term policies. If Scotland were facing independence today, on the evidence of these figures, harsh short-term austerity well beyond that currently being experienced would surely be unavoidable.

²² BBC Sunday Politics Show, 13/03/2016: www.bbc.co.uk/iplayer/episode/b072nr9f/sunday-politics-east-13032016

2. What causes the fiscal gap between Scotland and the rest of the UK?

In this section of the report we will focus on per capita comparisons. We do this for three reasons;

1. GERS allocates fully shared costs (such as defence and foreign affairs) and debt interest on a per capita basis (the generally accepted starting point for negotiating debt share during the referendum was on a per capita basis)
2. When seeking to separately show the importance of offshore and onshore revenues, it greatly simplifies matters to work on a per capita basis. If the analysis is carried out using percentage GDP comparisons then both the numerator and denominator change when we show figures with and without offshore revenues (because offshore activities also contribute to GDP), which makes it harder to build an easy to follow picture.
3. People can relate to per capita figures. It's hard to understand what "4.9% of GDP" means in practical terms, whereas "£1,400 per person per year" is somewhat more tangible

We also focus here on differences between Scotland and the rest of the UK (rUK). Much of the rhetoric in the on-going devolution debate is about "us and them" and when the option of Full Fiscal Autonomy (FFA) is discussed, the principle of Scotland matching the rest of the UK (so as not to be a burden on the shared currency) is an important one.

Because onshore GDP/capita is similar between Scotland and the UK and Scotland accounts for <10% of the UK economy, these methodological choices makes little different to our conclusions. For completeness, the final analysis of onshore fiscal gap is repeated using percentage of GDP and versus total UK comparisons to show how little difference this in fact makes.

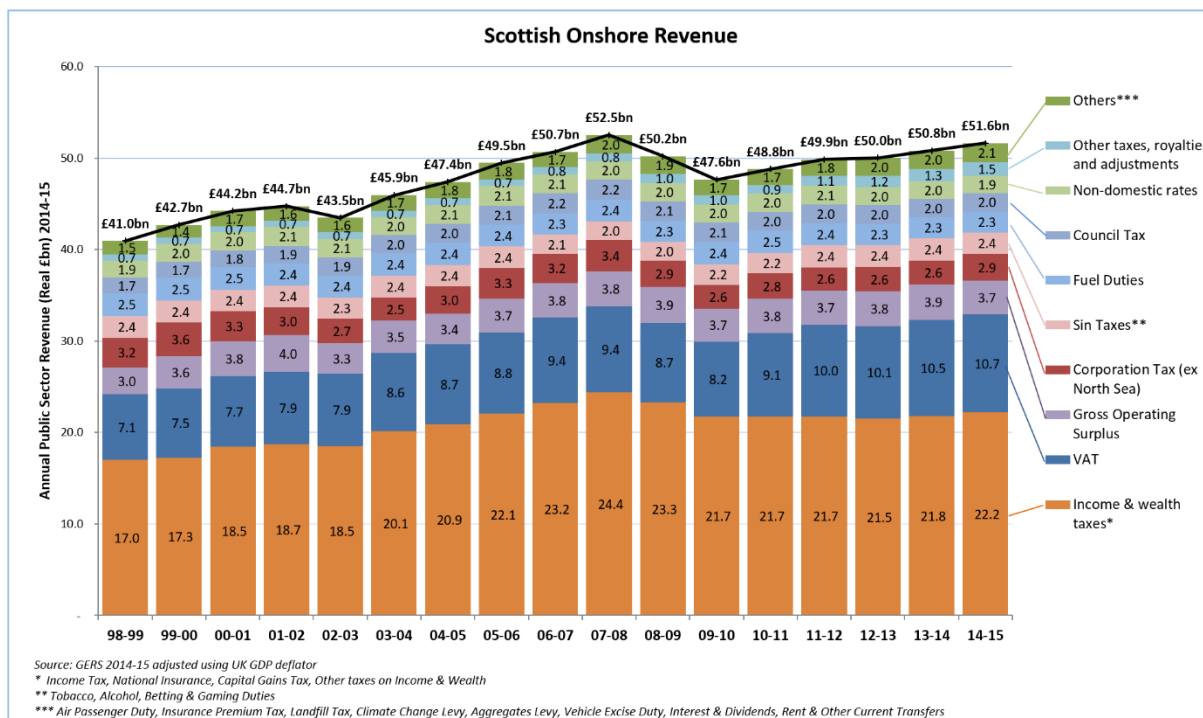
As this often causes confusion it's worth repeating what this particular analysis shows. It shows how much better or worse off Scotland is than the rest of UK *based on the taxes Scots are used to paying and the public spending (including reserved spending) Scots are used to receiving*. It helps us better understand the past so that we can make informed judgements about the future.

We'll build the picture up through four steps:

- I. How much revenue we raise onshore
- II. How much revenue we raise offshore
- III. How much public spending we receive
- IV. The resultant net fiscal deficit gap

I. How much revenue we raise onshore

The following chart shows absolute total Scottish public sector revenue in real terms over the last 17 years, broken down into main categories.



The scale of the economic shock between 2007/08 and 2009/10 is clear. Over those two years Scotland experienced a real-terms drop in onshore revenues of £4.9bn (9.2%).

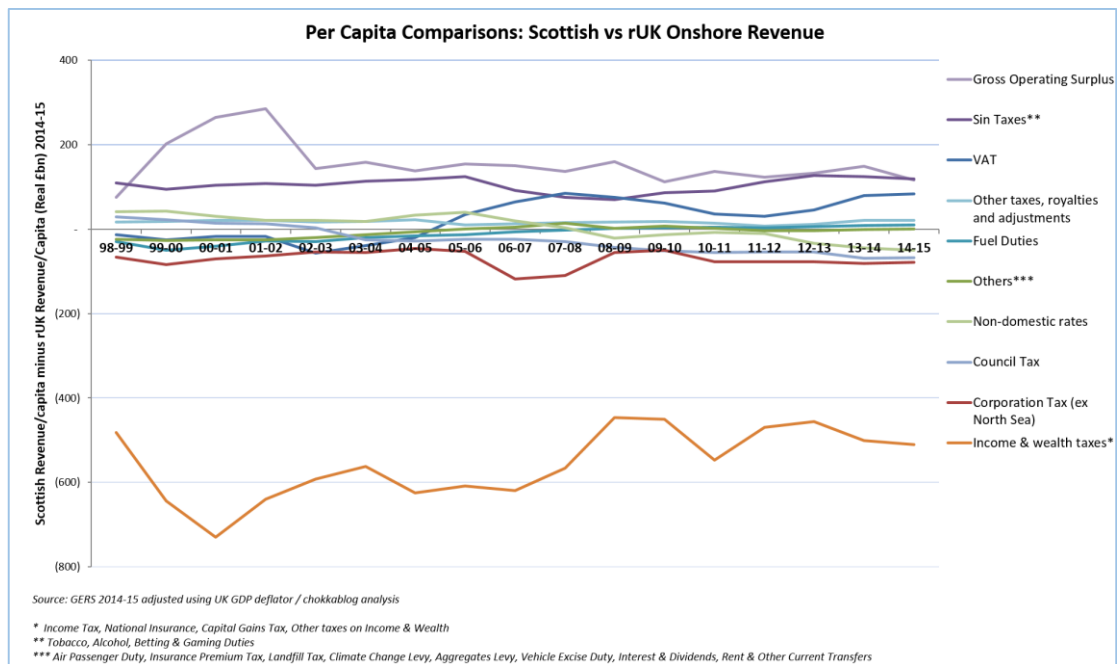
It's encouraging to note that since then onshore revenues have grown in each of the last five years, a cumulative £4.0bn (8.4%) of real-terms revenue growth²³. It's striking that £2.6bn²⁴ of that growth has come from VAT alone: the impacts of the VAT rate increases from 15% in 2009 to 17.5% in 2010 and 20% in 2011 are clear (and illustrate the power of VAT as a fiscal lever).

Depending on the perspective of the reader, this trend of improving onshore revenues is either proof of the resilience of Scotland's economy *despite* Westminster policies or proof that those policies are working (at least insofar as real onshore revenue growth is being delivered). What is objectively undeniable is that onshore revenues have consistently grown in Scotland over the last five years and this must surely be welcomed by all sides of the political debate.

²³ over that same period Scotland's population grew just 2.2%

²⁴ Rounding differences explain why the graph implies £2.5bn

To understand Scotland’s performance versus the rest of the UK we can look at how these figures compare (Scotland minus rUK) on a per capita basis over time. The following chart illustrates this by major revenue category.



The big difference is clearly that Scotland generates about £500 less per head from Income & Wealth taxes. Given that these figures reflect taxes raised through common tax policies, it’s unsurprising that the differences are relatively consistent and reflect lower average per capita income and wealth in Scotland than the rest of the UK as a whole. There is some encouraging evidence that the Income and Wealth tax gap is closing, albeit very slightly - presumably this is as a result of a relative improvement in Scottish income and wealth.

The fact that we appear to spend more on VAT-able goods is less easy to intuitively explain. This figure is one of the least certain survey based figures in GERS, but the difference is still statistically significant. In 2014-15 the difference is £84/capita or £447m²⁵ in Scottish revenue terms. This is significantly greater than the 95% confidence interval²⁶ given for this figure in GERS of +/- £231m.

A figure that - depressingly - is intuitively far easier to explain is the fact that Scotland raises more in “Sin Taxes” per head than the rest of the UK. As the GERS report explains: *“This reflects the greater incidence of smoking in Scotland and also reflects the fact that Scotland has a higher consumption of spirits than the rest of the UK”*²⁷.

Gross Operating Surplus (GOS) is a special case. This is where the impact of Scottish Water still being in public ownership (unlike equivalent English and Welsh water companies) shows. As the GERS report explains: *“Scotland’s relatively large share of UK GOS is primarily due to Scottish Water, which is a large contributor to UK public corporation’s GOS”*²⁸. There is, as we will see, a netting effect on the cost side.

²⁵ Methodological revisions made in 2014-15 GERS figures restate prior year upwards (e.g. by £309m in 33-14) so the apparent scale of this apparent difference is a newly observed phenomenon.

²⁶ GERS 2014-15 page 36, Table A.12

²⁷ GERS 2014-15, page 13

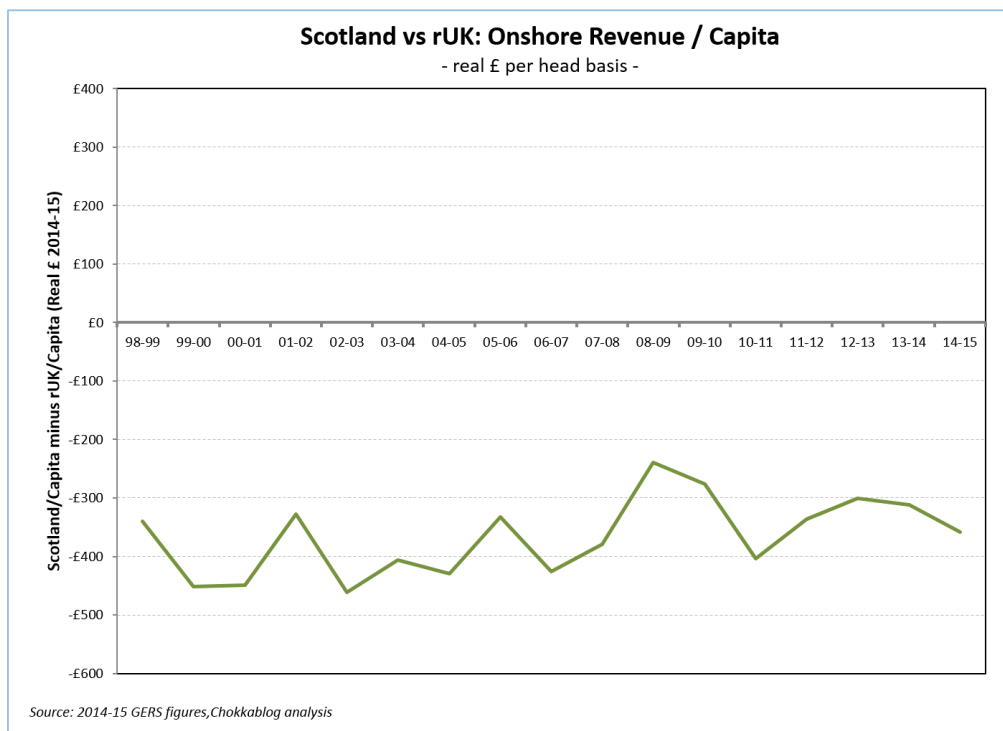
²⁸ GERS 2014-15, page 12

The Corporation Tax figure merits some discussion despite the fact that differences are relatively small (£37/capita in 2014-15) and there is no obvious trend either way. There is a widespread misperception that head-office location somehow governs how Corporation Tax figures are allocated in GERS. This misunderstanding (along with similar misinformation about VAT and whisky duty) has been reinforced by some less scrupulous pro-independence commentators²⁹. The GERS Detailed Revenue Methodology paper³⁰ states very clearly: “GERS apportions a share of UK corporation tax revenues based on the economic activity undertaken in Scotland and **not the location of companies’ headquarters**”³¹.

In previous years’ GERS figures the Scottish Government applied a different methodology to HMRC when calculating this figure. GERS estimates have now been aligned with HMRC’s and historical figures restated leading to (for example) a £251m (8%) reduction in the reported figure for 2013-14³².

An important caveat must be applied here: companies are not currently required to report profits separately between Scotland and the rest of the UK and – as high-profile examples like Facebook, Google and Amazon show – there is a large degree of accounting flexibility available for companies to choose where to report profit on an international basis. Of all the figures presented in GERS this is one of the most uncertain and most prone to behavioural change (depending on future Scottish corporation tax policies and companies’ decisions about where to undertake value-added activities). At least from the narrow perspective of explaining the currently observed fiscal gap, corporation tax is not a material issue.

The chart below simply adds up all the lines from the graph above to show that, in aggregate, Scotland’s onshore economic activity (i.e. before factoring in the impact of North Sea oil) consistently generates £300 - £400³³ per capita less than the rest of the UK.



²⁹ Example: wingoverscotland.com/the-great-gingerbread-robbery/,

³⁰ www.gov.scot/Topics/Statistics/Browse/Economy/GERS/Methodology/detrev2016

³¹ See appendix A for more detail

³² GERS 2014-15 page 41, Table B.2

³³ The GERS report chooses to round the revenue per capita figures to the nearest £100 before calculating the difference, uses nominal (not inflation adjusted) figures and compares to total UK. This is why on page 3 this difference is described as £200 to £400

This difference is quite stable over time. Although the gap has closed by about £100 over the 12 years since 2002/03, this “closing of the gap” accounts for only 0.2% of real-terms growth. Over that same period Scotland’s total onshore revenues grew by 18.8% in real terms³⁴. So Scotland’s onshore revenue growth can be said to be growing in-line with the rest of the UK.

As well as tracking the performance of the UK as a whole, the GERS report also highlights³⁵ that Scotland fares relatively well in terms of onshore revenue generated per capita on a regional basis (clearly out-performing the North East, North West, York & Humber, East Midlands, West Midlands, Wales and Northern Ireland).

This observation rather undermines those pro-independence commentators who suggest the GERS figures show Scotland has somehow been the victim of “*Westminster economic mismanagement*”³⁶. As a region Scotland fares relatively well in terms of absolute onshore revenue per capita and on this measure it is improving in line with the rest of the UK. This would suggest that “Westminster policies” are having a broadly similar affect North and South of the border when it comes driving public sector onshore revenue growth.

This is not to say that different policies couldn’t lead to superior results, merely that there is no evidence in these figures to suggest that policies are being pursued that favour onshore revenue growth in the rest of the UK over Scotland.

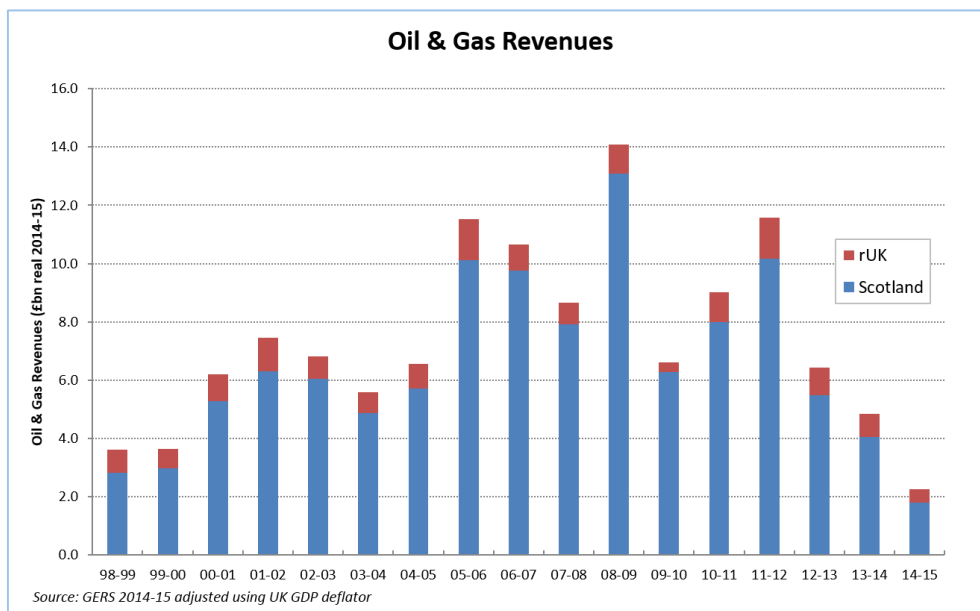
³⁴ Scotland’s population grew by 5.6% over the same period

³⁵ GERS 2014-15 page 17

³⁶ www.businessforscotland.co.uk/westminster-economic-mismanagement-highlighted-by-gers-figures/

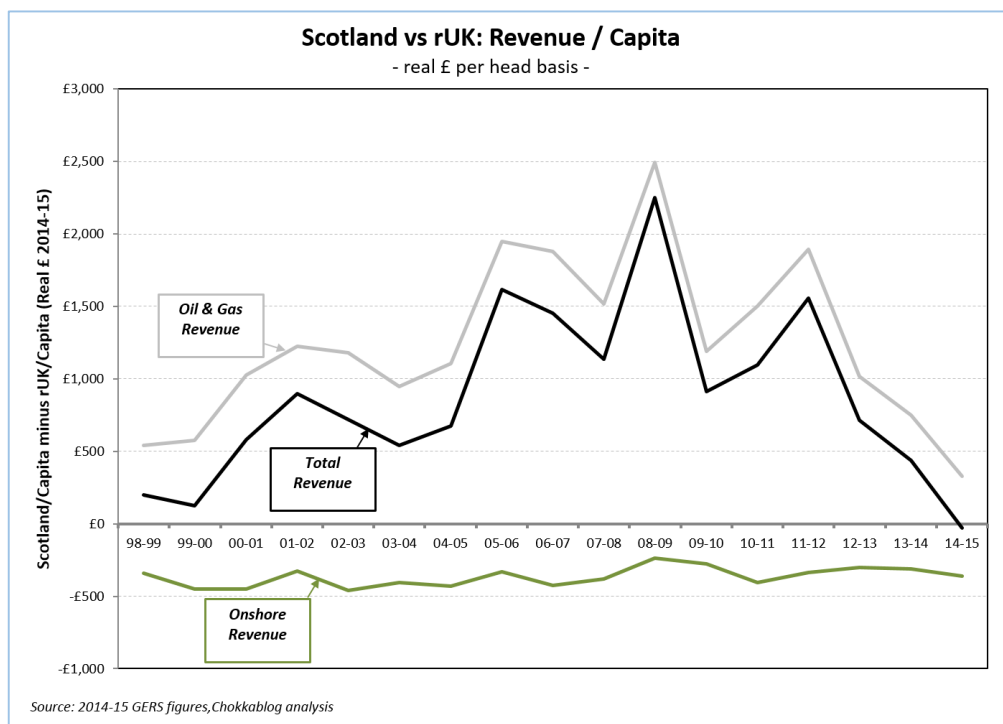
II. How much revenue we raise offshore

The chart below shows the actual total oil & gas revenues over our analysis period, as split in GERS using the Scottish Government's preferred geographic share definition.



Clearly this revenue stream is volatile and generates significantly more revenue per capita for Scotland than it does for the rest of the UK.

The following chart shows the implications of this in terms of per capita revenue difference (the grey line). Adding this to the onshore revenue per capita difference (the green line) show Scotland's total public sector revenue per capita difference to the rest of the UK (the black line).

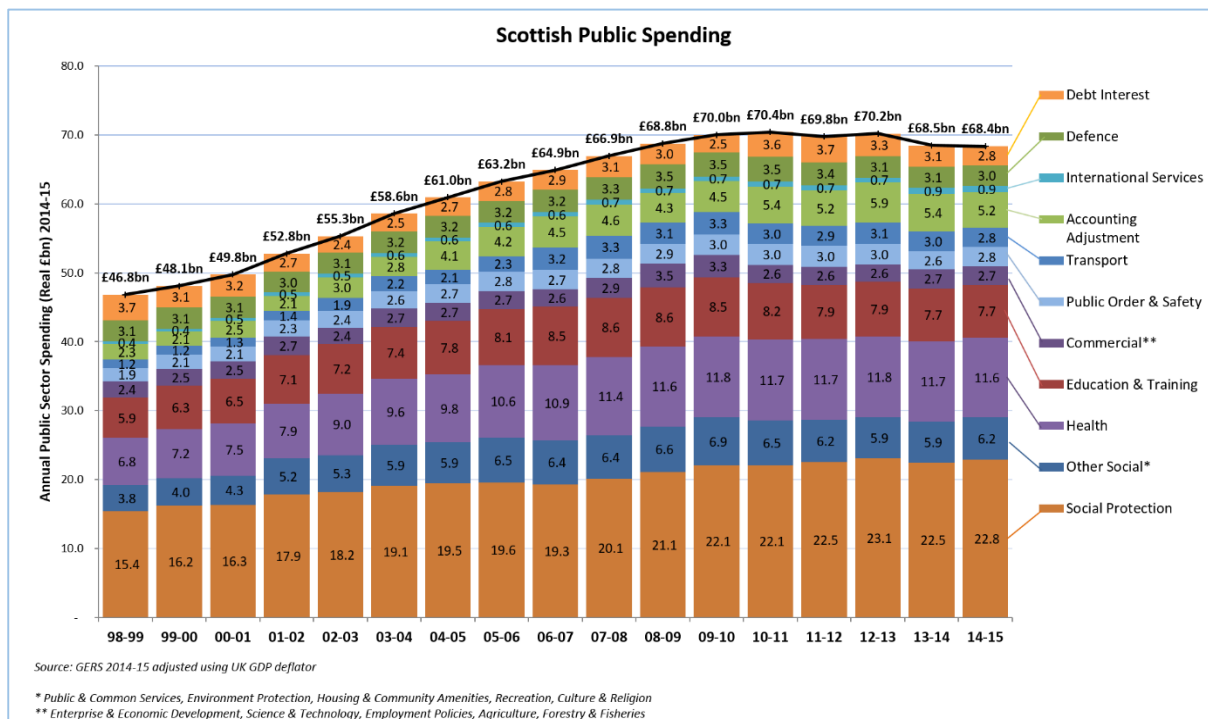


Scotland's proud record of contributing more revenue per capita than the rest of the UK has come to an end. In 2014-15 Scotland's contributed was materially the same³⁷.

We will come on to discuss further the *absolute* importance of oil to Scotland's economic future (whether oil can reasonably be considered "just a bonus"), but its significance in terms of *relative* performance versus the rest of the UK is clear.

III. How much public spending we receive

The following chart shows absolute total Scottish public sector spending in real terms over the last 17 years, broken down into main categories.



This chart clearly illustrates the long term historical growth in public spending³⁸ and how this has plateaued/declined in recent years. The absolute size of the different categories is helpful when we come on to discuss how Scottish public spending could be further reduced if this became a necessity.

Social Protection is the largest category and includes (in order of significance): State Pensions, Other DWP benefits, HMRC Child benefit & tax credits, social care for the elderly, housing benefit and "other".

The category which has seen the biggest real term decline since 2009-10 is Education & Training which has reduced by £0.8bn (10%).

The scale and relative growth of the Accounting Adjustment figure means that this merits some explanation. As the name suggests this is a series of technical adjustments, the biggest of which are central and local government capital consumption and VAT refunds (which net off against VAT figures on the revenue side). The good news for this report is that this rather cumbersome catch-all category

³⁷ in fact £29 per capita less, but that's well within the error bounds of the analysis

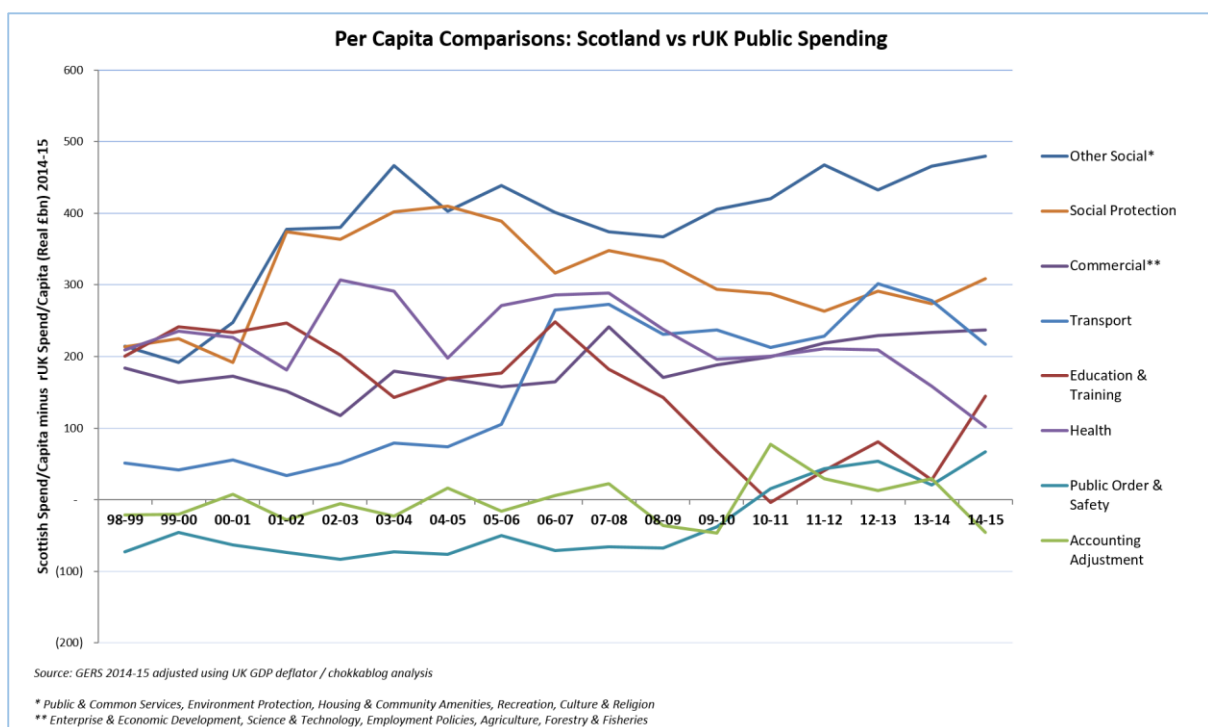
³⁸ Between 98-99 and 10-11 real terms spending grew 50.4% while population grew just 3.9%

doesn't have a material impact when it comes to understanding the relative difference between Scotland and the rest of the UK.

The top three categories (Debt Interest, Defence and International Services) are the only ones allocated solely on a per capita basis, as these are categories which are considered to be spending on behalf of the UK as a whole.

Other categories include spending allocated where possible based on the benefit of that spend to Scotland. This means – to take some widely misunderstood examples – infrastructure investments that benefit only London are *not* allocated to Scotland, capital costs associated with the Olympic Games are *not* allocated to Scotland and only 2% of HS2 costs are allocated to Scotland in the GERS figures (2% being the assessment of Scotland's share of the value of the HS2 project)³⁹.

To understand Scotland's performance versus the rest of the UK we can look at how these figures compare on a per capita basis over time. The following chart illustrates this by major spending category.



Note that because Defence, Debt Interest and Foreign Affairs are allocated on a per capita basis they're excluded from this chart (as they would simply show zero in every year).

What is perhaps most striking about this chart is that Scotland incurs higher public spending per capita in every category of spending other than the Accounting Adjustment. The one area where Scotland used to spend less per capita than the rest of the UK was Public Order and Safety; although in real terms this spend has remained broadly static in Scotland, UK spending has reduced by 13% in real terms over the last six years, causing an observable increase in *relative* spend levels in Scotland.

³⁹ See Appendix A and GERS 2013-14 page 77: www.gov.scot/Resource/0047/00472877.pdf

The 2013-14 GERS report⁴⁰ offered the following explanations for the generally higher per capita public spending figures in Scotland

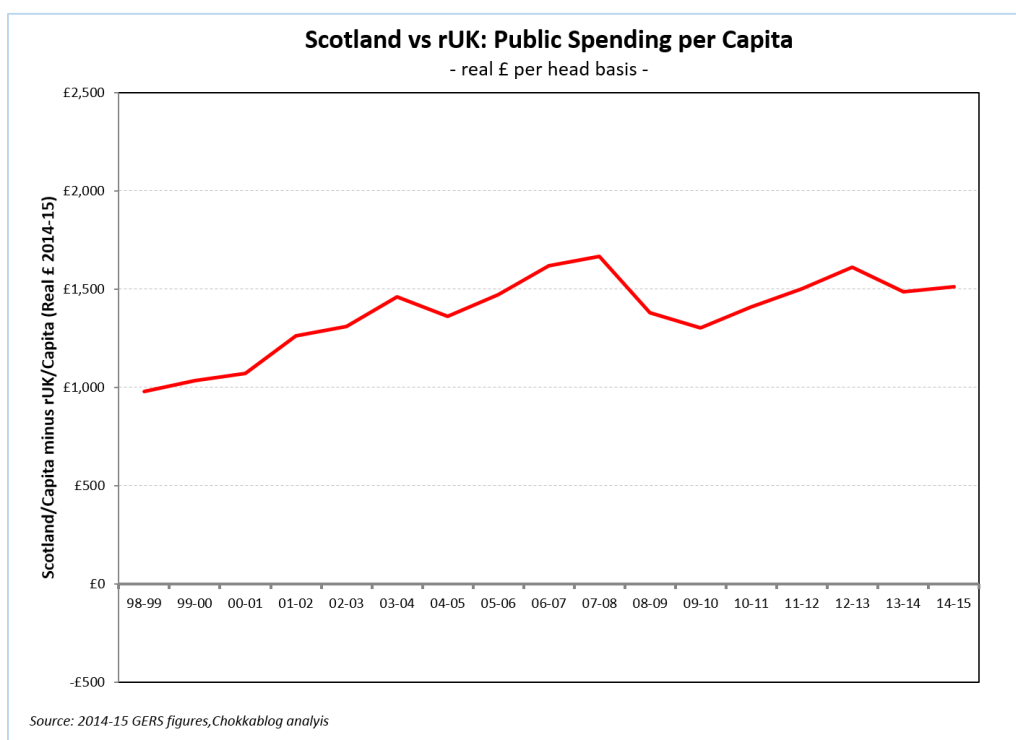
“There are a number of reasons why public expenditure per person for Scotland is above the UK average. In some cases, it reflects the lower population density in Scotland relative to the UK which increases the cost of providing the same level of public service activity, particularly in areas such as education, health, and transport.

The scope and remit of the public sector also differs in Scotland compared to the UK. For example, water and sewerage services are a public sector responsibility in Scotland, and are therefore included in Scottish public expenditure, whilst in England they are operated by the private sector.

Finally, higher public expenditure also reflects Scotland’s greater need for some public services such as in health and housing relative to the rest of the UK”

The impact of water and sewerage services being in public ownership is the off-setting affect for the £100 - £150 higher Gross Operating Surplus we witnessed on the revenue side. If it’s not too obvious a point to make: the other factors here which relate to Scotland’s structurally higher “cost-to-serve” wouldn’t go away were Scotland to become independent (or be fiscally autonomous).

As with the revenue categories, the chart below simply adds up all the lines from the graph above to show that, in aggregate, Scotland receives public spending (including shared UK costs) of around £1,500⁴¹ per capita more than the rest of the UK. This gap has increased in real terms by £500 per person since 1998-99⁴².



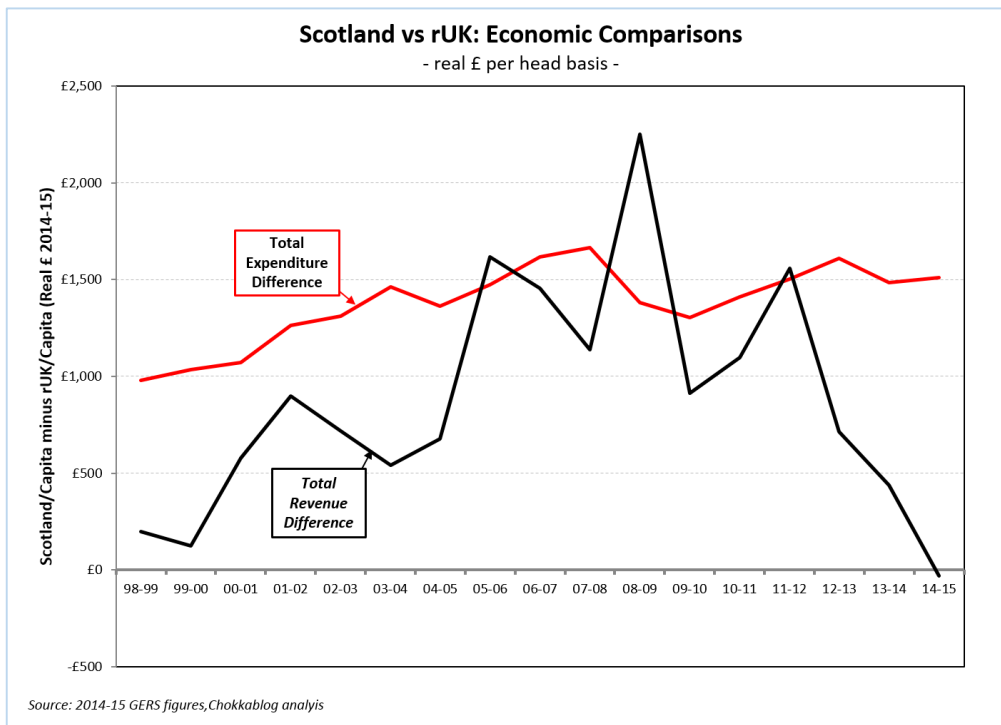
⁴⁰ 2013-14 GERS page 58: www.gov.scot/Resource/0047/00472877.pdf

⁴¹ The GERS report chooses to round the spend per capita figures to the nearest £100 before calculating the difference, uses nominal (not inflation adjusted) figures and compares to total UK. This is why on page 4 this difference is described as £1,400 in recent years

⁴² This is presumably at least in part due to the vagaries of the Barnett formula and differential population growth rates

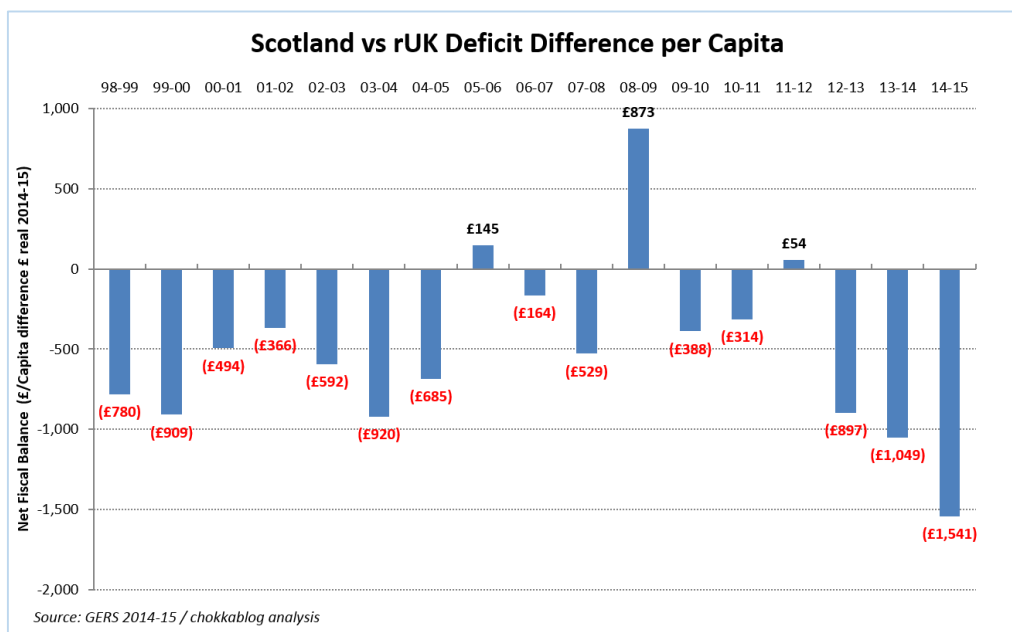
IV. The net fiscal deficit gap

To understand how these figures create a fiscal gap we simply need to combine the per capita figures we've already shown for revenue and spending.

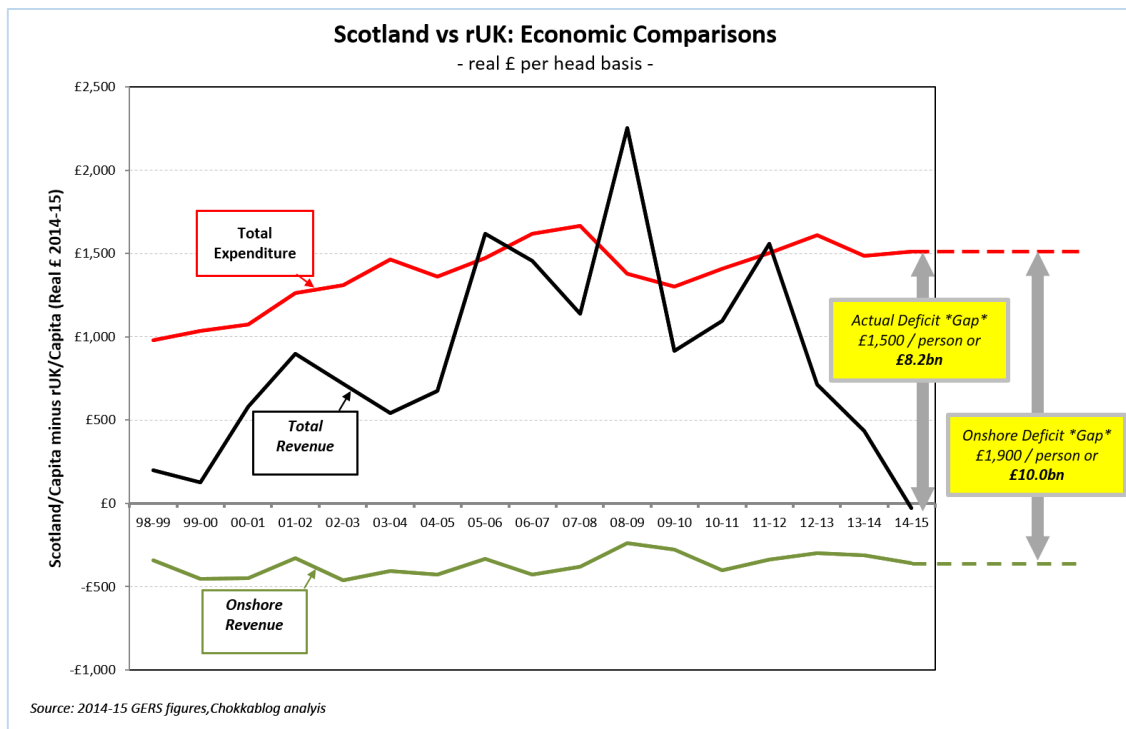


When Scotland's relatively higher revenue raised exceeds the relatively higher expenditure received (when the black line is above the red line) then Scotland has a lower deficit per capita than the rest of the UK.

Simply plotting that gap between the red and blue lines shows us the difference between Scotland's per capita deficit performance and the rest of the UK.



Given we know the split of the revenue difference between onshore and offshore revenue sources, we can now summarise on one chart the scale and historical trend in both the total deficit gap and the onshore deficit gap.

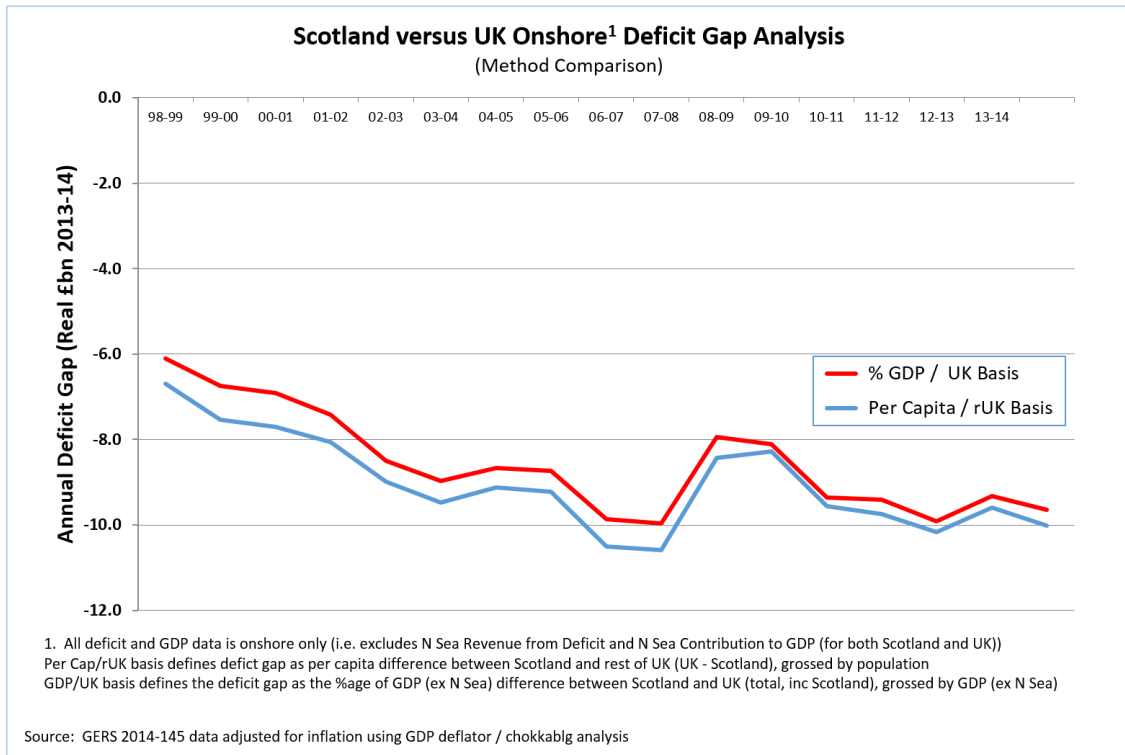


The fact that the Actual Deficit Gap here of £8.2bn is greater than the £7.5bn we saw earlier is simply because we are comparing to rUK instead of the UK as a whole⁴³.

The onshore deficit gap (the gap between the red and the green lines) is the most important figure to understand here. Whilst the actual deficit gap has been volatile as a result of fluctuations in oil & gas revenues, the onshore deficit gap has been fairly consistent. In the most recent year this gap is £10bn (or £1,900 for every man woman and child in Scotland).

⁴³ In 2014-15 the GDP/capita of Scotland and the UK were very similar (£28,651 vs £28,281, Scotland being just 1.3% higher) so the choice of per capita or per GDP for calculation makes very little difference

We can plot this onshore deficit gap over time and compare it to the figures we would get if we had instead used GDP (excluding oil & gas) and total UK as our comparison basis.



It's clear that over this time period the onshore deficit gap has worsened and in recent years is running at £9bn - £10bn. Whether we compare based on GDP or per capita, versus UK or versus rUK we get similar results.

Given that the GERS figures are methodologically sound and the statistical uncertainties involved can be measured in hundreds of millions not billions, we can make the following statements (erring on the side of generosity to Scotland's position) with reasonable confidence;

- The onshore deficit gap between Scotland and the UK is over £9bn and has consistently been over £8bn for more than a decade
- This annual more than £1,700 per capita (for every man woman and child in Scotland) difference is more than 80% explained by the higher public spending (including shared UK spending) that Scotland receives
- The reason why Scotland's deficit has diverged from the UK's in recent years is simply the fact that declining oil revenues have exposed this underlying onshore deficit gap

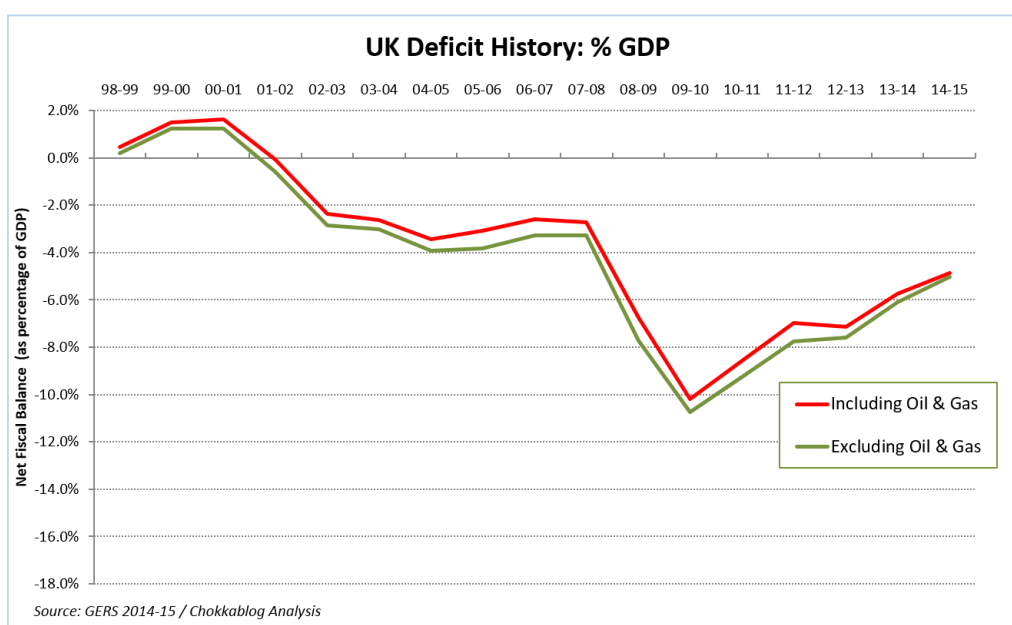
3. What does this mean for the case for Independence?

Reliance on North Sea Oil

It's clear that oil & gas revenues have been critical to Scotland's historic public sector finances. Without these revenues public sector revenue generated by the Scottish economy would historically have fallen far short of the public sector spending (including shared UK costs) received. The result would have been what would generally be accepted as being an unsustainable 10%+ net fiscal deficit.

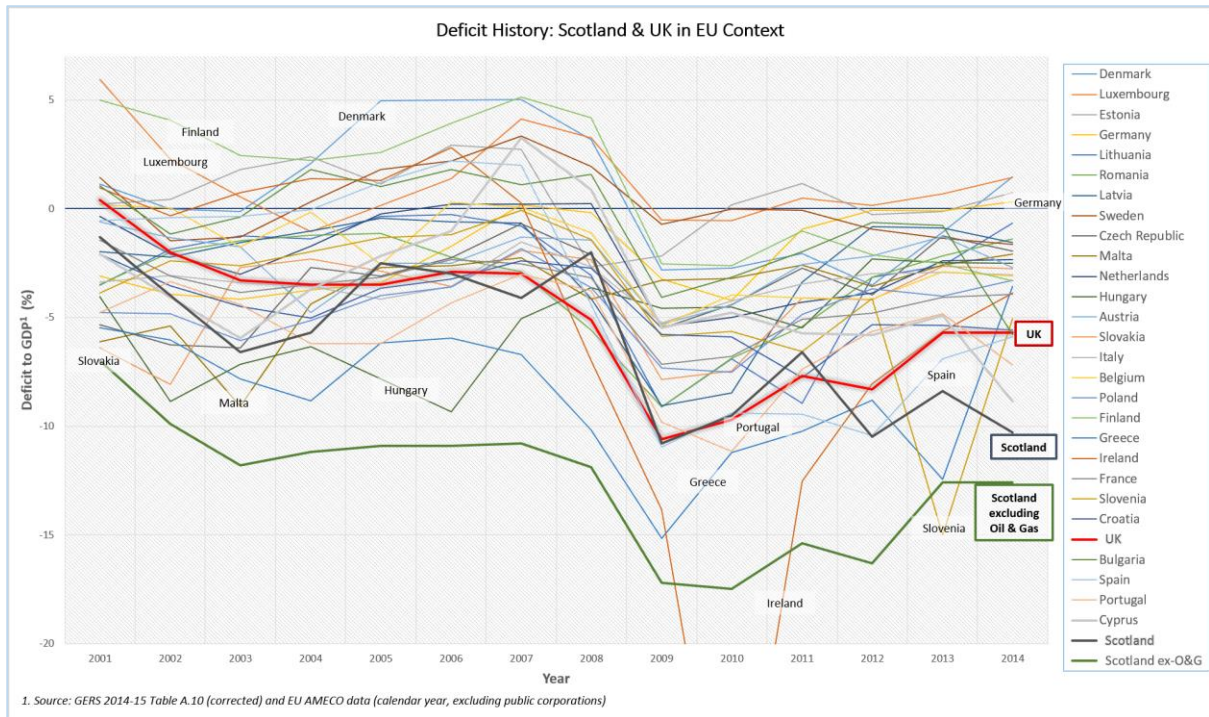


Presenting the total UK figures on the same scale and same basis⁴⁴ shows how much less significant oil & gas revenues are to the UK economy. This is a compelling illustration of the UK's ability to more readily weather oil revenue volatility (without the need for an "Energy Fund", on which more later).



⁴⁴ The GERS figures do not provide a total UK GDP figure for oil & gas. For the purposes of this analysis this figure has been imputed assuming the same ratio of revenue/GDP for Scotland and UK total oil & gas

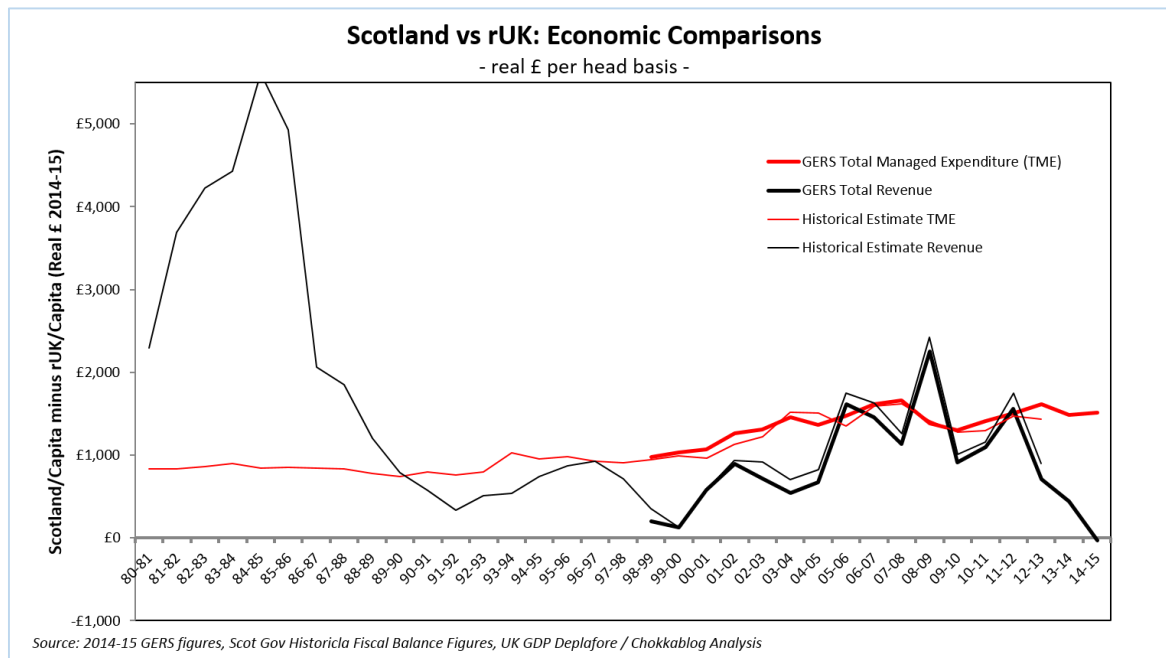
The importance of oil & gas to the Scottish economy is perhaps most starkly illustrated if we place a notional independent Scotland without oil & gas revenues in an historical EU context.



This is surely compelling evidence of the absurdity of Alex Salmond’s assertion that, within the context of Scotland’s economic performance, oil is merely “a bonus”⁴⁵.

⁴⁵ Alex Salmond: “The benefit we get from oil and gas will be a huge bonus.” www.bbc.com/news/uk-scotland-scotland-politics-23389830

Of course historically oil & gas *has* generated significant revenues for the UK economy and Scotland can lay claim to most of that based on the geographic location of the main oil fields. The Scottish Government have produced illustrative figures that go back to 1980⁴⁶ which, although not as robust as the GERS figures, allows us to place these oil & gas revenues in a more complete historical context.



The difference between the historical estimates (published in May 2014) and the up-to-date GERS figures where they overlap is indicative of the scale of prior-years' restatements included in GERS⁴⁷.

More importantly, this graph shows us the massive contribution that "Scotland's Oil" made to the UK economy in the 1980's. Given that when the black "higher per capita revenue" line is above the red "higher per capita spend" line, Scotland can be judged a net contributor to the UK (and vice-versa) we can work out Scotland's real terms net contribution since the oil boom began.

These numbers are relatively crude, but Scotland's cumulative net contribution from 1980-81 to 2014-15 on this basis works out at £12,600 per capita (or £67bn). With Scotland's run-rate onshore deficit gap being £1,900 per capita, assuming no oil recovery it will take about 7 years before Scotland becomes a net recipient of funds since 1980. Of course 1980 is the starting date that most favours Scotland; were we to start at an earlier date we'd see a different picture.

This is a rather narrow transactional view of Scotland's relationship with the rest of the UK and based on an arbitrary date that favours Scotland - but this analysis does show that within the context of the last 35 years Scotland can be said to still be "in credit" with the rest of the UK. Some would argue this is all the more reason for Scotland to remain within the UK: Scotland made a massive net contribution to the UK during the 1980's and the current ongoing fiscal support the rest of the UK offers is simply the quid pro quo for that. It could be said that we're experiencing pooling and sharing in action.

Some argue that had Scotland been independent in 1980 we *might* have chosen to build an Energy Fund which we would have expected to generate better than inflationary returns. Frankly - unless another oil boom occurs or a time-machine becomes available - this argument is of only academic interest. The Independence referendum didn't offer the choice of going back and starting independence in 1980.

⁴⁶ www.gov.scot/Topics/Statistics/Browse/Economy/GERS/RelatedAreas/LRfiscalbalances2014

⁴⁷ The most significant being ESA10 (European Accounting Standards) adjustments made in 2014-15

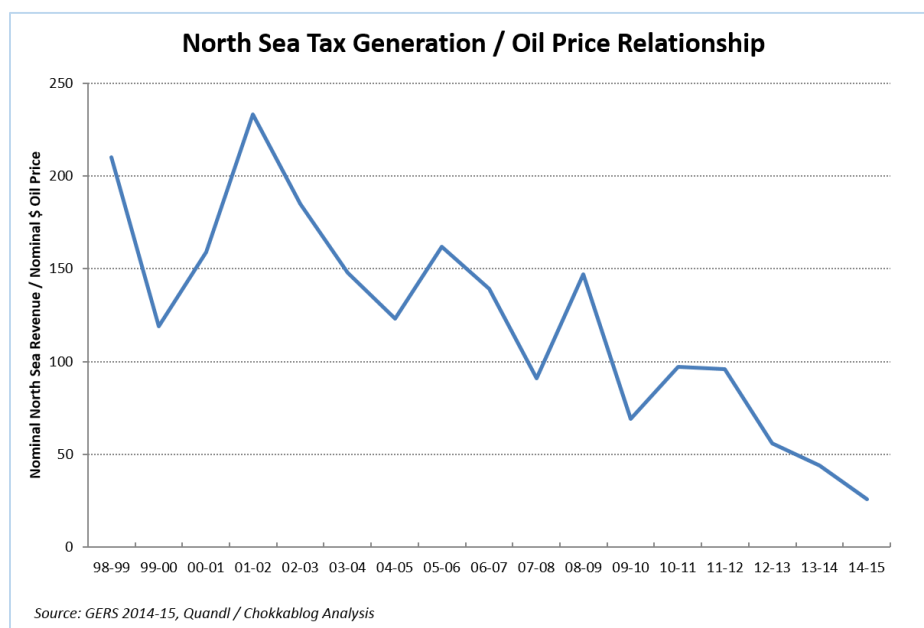
Outlook for North Sea Oil

Forecasting oil & gas revenues is a tricky business and – despite much of the rhetoric used - is about a lot more than just forecasting the oil price.

As the GERS report says⁴⁸:

“North Sea tax receipts are subject to annual fluctuations and are driven by a number of factors, including the oil price, the sterling dollar exchange rate, production, operating expenditure, capital investment, and the prevailing fiscal regime.”

The key point here is that oil & gas tax revenues are a function of a lot more than just the oil price because they are a tax on total production profit⁴⁹. We can illustrate this very simply by plotting the ratio between actual oil & gas revenues and the dollar oil price. If there was a direct correlation between \$ oil price and North Sea Tax generated then this would be a horizontal line.



The trend of reducing North Sea tax revenue yield is clear. This shouldn't come as a surprise given increasing production costs in the North Sea and maturing reserves. It's worth noting that the average oil price⁵⁰ in 2014-15 was \$85 and the North Sea only generated £2.2bn of tax revenue (of which Scotland's geographical share was £1.8bn). The effective Corporation Tax rate was reduced from 60% to 50% in January 2015 and costs continue to rise, so this trend of reducing yield looks set to continue. There is little doubt that even if the oil price recovered to \$100/barrel we would be extremely unlikely to see anything like the £9.6bn of Scottish oil revenue that was achieved as recently as 2011-12.

⁴⁸ GERS 2014-15 page 46

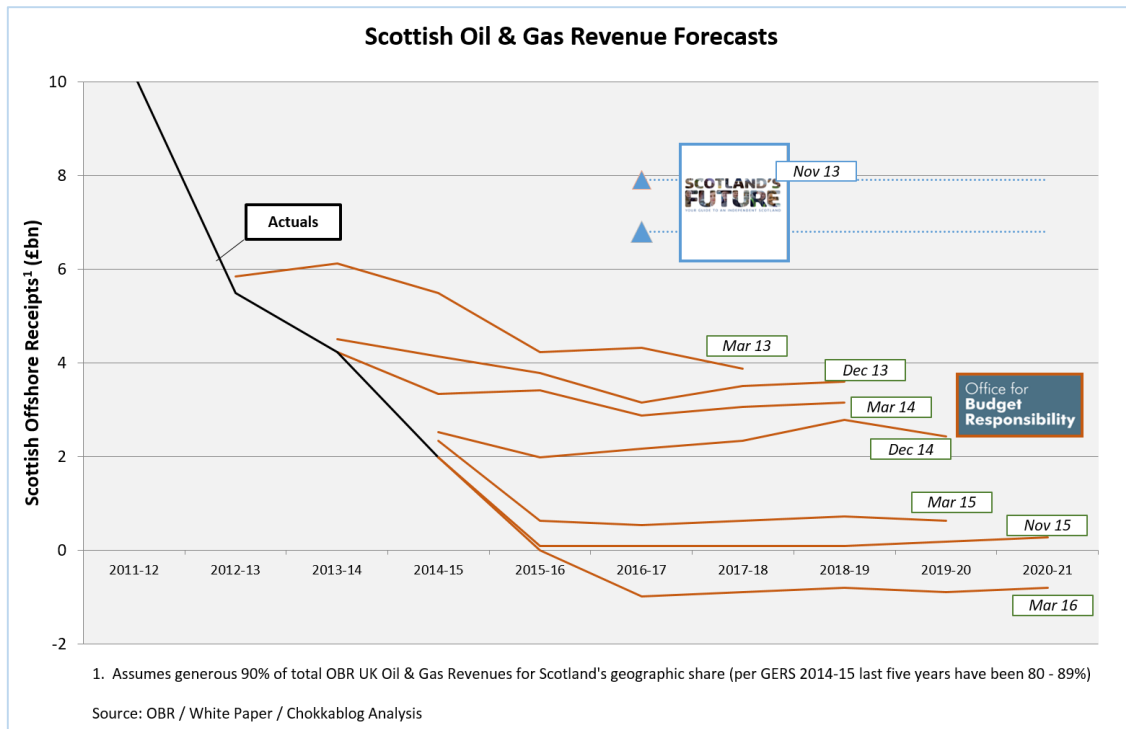
⁴⁹ GERS Revenue Methodology page 46 www.gov.scot/Resource/0049/00495355.pdf & GERS 2014-15 page 19

⁵⁰ Euro Brent Spot Price FOB (Dollars per Barrel) average of monthly data:

www.quandl.com/data/ODA/POILBRE_USD-Brent-Crude-Oil-Price

Whilst we can make these observations, when it comes to oil & gas *revenue* forecasts we have two main sources: the Scottish Government (via the Oil and Gas Analytical Bulletins) and the Office for Budget Responsibility.

The optimism of the White Paper oil and gas revenue scenarios is clear to see when we look at how they compared with contemporaneous OBR forecasts, actuals and more recent OBR forecasts.



At the time of writing the White Paper, the Scottish Government chose scenarios (£6.8bn and 7.9bn) which were about twice as optimistic as the OBR were forecasting *at that time*. The OBR had always been shown to be optimistic prior to this date, a record which it continues to maintain. The effect of decommissioning costs and tax credits from the carry back of trading losses means that the OBR is now forecasting a *negative* contribution from the North Sea for the foreseeable future⁵¹.

It's clear that oil & gas revenues would not come to an independent Scotland's rescue any time soon, if ever.

⁵¹ OBR "Economic & Fiscal Outlook", March 2016: budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/

Scotland's Choices

In this context and assuming we'd voted Yes, Scotland would have to find roughly £9bn⁵² a year through some combination of higher onshore revenues or lower public spending (than that allocated to Scotland in GERS). This would be required simply to close the gap with the UK (to avoid independence making Scots poorer) or, within an EU context, to be seen to be addressing the excessive deficit.

For both EU membership negotiations and UK currency sharing arrangements a plan to *rapidly* reduce the deficit (to close the deficit gap with the UK) would clearly be required. It is simply not credible that in this context an independent Scotland would be able to simply borrow more to fund what would be considered by most observers to be an excessive deficit.

There are really only three ways this £9bn pa could be achieved;

1. Reducing public spending (compared to that allocated to Scotland in GERS)
2. Increasing public revenue through raising tax rates
3. Increasing public spending through real economic growth

Reducing Public Spending

We've seen that GERS shows Scotland receiving £68.4bn of public spending in 2014-15, so in overall terms a £9bn saving would represent a 13% real terms spending reduction. To put that figure in context, in the five years from 2009-10 to 2014-15, Scotland has seen real terms spending reduced by just 2.3%.

The White Paper suggested that "savings or increases in revenues"⁵³ could have generated £0.6bn a year, primarily from a £0.5bn reduction in defence spending (i.e. effectively including "scrapping Trident"). This figure also includes £0.05bn savings related to "contributions to the costs of the House of Commons and the House of Lords"⁵⁴. This money was then to be used to pay for childcare reforms, end the bedroom tax and introducing "competitive business taxation"⁵⁵.

If there were other easy wins we can be confident that the SNP would have included them in their outline economic case. That there aren't is testament to the quality of the GERS cost allocations and gives a lie to the often repeated (but simply wrong) claims that Scotland is unfairly burdened with costs in the GERS figures.

Debt interest is sometimes cited as a possible saving on the basis that Scotland might negotiate to not take on its per capita share of debt. Given that this would be seen by capital markets as an effective debt default and that the "Plan A" for currency was to share Sterling with the UK, this seems a somewhat unlikely scenario. Scotland's total per capita allocated debt cost in 2014-15 was just £2.8bn, so even if this figure could be wished away, it doesn't come close to solving the £9bn deficit gap we've identified.

Considering the fact that the notoriously optimistic White Paper could only come up with £0.6bn of savings helps us appreciate the scale of this challenge. Scotland's draft budget for 2015-16⁵⁶ shows just a £0.5bn saving to Fiscal Departmental Expenditure Limits (DEL). £9bn is more than 3 times Scotland's total annual Public Order & Safety spend, greater than total Education & Training costs, is 80% of Scotland's total Health costs.

⁵² The analysis in this report suggests the required figure to close the deficit gap is £10bn. We use £9bn as a conservative estimate reflecting longer term averages.

⁵³ Scotland's Future, page 78: www.gov.scot/resource/0043/00439021.pdf

⁵⁴ Scotland's Future, page 45

⁵⁵ Scotland's Future, page 4

⁵⁶ Scottish Draft Budget 2015-15: www.gov.scot/Resource/0046/00462296.pdf

It would be no exaggeration to say that were Scotland to be in a position of having to rapidly tackle its stand-alone deficit – had the Yes campaign prevailed – the level of austerity required would have put existing austerity measures in the shade. This would be austerity on austerity: austerity squared.

Increase Public Revenue through raising taxes

Raising revenues through raising tax rates is of course fraught with difficulty, not least because the act of raising tax rates can adversely affect the level of economic activity available to be taxed.

We've seen that GERS shows Scotland generated £51.6bn of onshore revenue in 2014-15, so in overall terms generating an additional £9bn would require a 17% real terms increase.

£9bn is 77% of Scotland's income tax generation, it's 84% of total VAT raised in Scotland, it's 4.5 times the total amount raised through council tax.

It seems pretty clear that to have a material impact on Scotland's deficit, a combination of higher taxes and dramatically reduced public spending would be unavoidable.

Increase Public Revenues through real economic growth

In the five years from 2009-10 to 2014-15 Scotland has seen real terms onshore revenue increase by 8%. So even if spending was frozen in real terms, at this rate it would take a decade to deliver the £9bn required from onshore revenue growth alone. This is time that Scotland would be unlikely to be given by the EU or indeed the UK as a currency partner had we voted Yes.

But reducing the deficit through revenue growth while freezing public spending for a decade doesn't close the *gap* versus the UK. This would only get us to where the UK is today (a 4.9% deficit) in ten years' time - by which time of course the UK itself would have grown. Growing in line with the UK doesn't help close the deficit *gap*, it doesn't address the issue of Independence making Scots poorer. To address that issue Scotland needs to deliver *superior* growth to the rest of the UK.

It's very hard to find any evidence or indeed any tangible policy ideas (other than reducing Air Passenger Duty, which frankly simply isn't that significant) that might explain how an independent Scotland could use policy levers to out-perform the UK. In fact the White Paper itself had a go at scaling the likely superior revenue growth that the "bonus of being independent" might deliver;

"Similar countries to Scotland have seen higher levels of economic growth over the past generation. That is because they have the bonus of being independent and are able to make the right choices for their nation and economy. If Scotland had matched the levels of growth of these other independent nations between 1977 and 2007, GDP per head in Scotland would now be 3.8 per cent higher"⁵⁷

Putting aside the arbitrary nature of the time period chosen and countries used for the illustration, the suggested figure was 3.8% cumulatively over a 30 year period. At that rate it would take over 90 years to close the fiscal gap with the UK through superior GDP growth alone⁵⁸.

It is worth noting that while Independence would undoubtedly give Scotland the freedom to pursue different economic policies from the UK, there is little evidence (particularly given the decline in North Sea revenues) that the Scottish economy has significantly different needs from the rest of the UK. In this case the pro-independence argument collapses down to little more than a belief that Scottish politicians serving Scottish people would simply make better decisions.

⁵⁷ White Paper page 23 (repeated in different forms on pages 43, 88, 375, 619)

⁵⁸ i.e. assuming revenue/GDP would remain constant

One doesn't need to believe that the case for independence is just about the economics to wish for the economic implications to be understood. None of this analysis suggests that Scotland *couldn't* be independent, it merely highlights the likely price that we would have to pay.

What the GERS numbers show us is that the likely price we would have paid for independence had there been a Yes vote would have been of the order of £9bn a year; that's about £1,700 a year for every man, woman and child in Scotland.

About The Author

Kevin Hague was educated at Islay High School and went on to study at Strathclyde University where he gained a medalled first class honours degree in Mechanical Engineering.

He spent a decade as a strategy consultant, becoming a partner and UK finance director at OC&C Strategy Consultants. During this time he worked on an international basis at board level with many blue-chip companies and developed a sound understanding of practical economics (as well as learning a thing or two about how to analyse, present and interpret data).

He has spent the last 15 years pursuing entrepreneurial activities back home in Scotland. He has co-founded, invested in and acted as an executive Director of two businesses which have been featured as Sunday Times Fast Track 100 companies and created well over 200 Scottish jobs. He is currently Managing Director of M8 Group Limited and a Non-Executive Director of Endura Ltd.

Keen to understand the pros and cons of independence during the referendum (from both a personal and a business perspective) he was frustrated by the superficial nature of the case presented in the Scottish Government's White Paper and the lack of well-presented objective analysis around Scotland's economy. As a result he started a blog – "Chokkablog⁵⁹" – through which he shared his own analysis and invited comment and discussion (and offered to correct any material errors if any were highlighted). Nearly two years, 135 blogs posts and over 1,700 reader comments later, Chokkablog has become a trusted source of objective analysis around Scotland's economy.

As a result of this work, Kevin appears regularly as a commentator on broadcast media and in the press. He believes an honest assessment of the economic issues involved should be a prerequisite for any rational debate on constitutional issues.

⁵⁹ chokkablog.blogspot.com/

Appendix A

GERS Myths, Misunderstandings & Misinformation

There are some widely held misconceptions about the Scottish Government's GERS figures which echo around social media and are occasionally reinforced by misinformation spread by ill-informed or disingenuous commentators. This appendix aims to debunk some of the more persistent examples.

"The GERS numbers can't be trusted"

This catch-all statement is often offered by those who (now) don't like what the GERS numbers show. It's worth reminding these people that

- The Scottish Government's Independence White Paper (page 67) states: *"GERS is the authoritative publication on Scotland's public finances"*
- They are the responsibility of the Scottish Government's Chief Statistician
- As the GERS report itself explains: *"The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics"*
- The Independence White paper cites GERS figures on no less than 15 occasions and used them as the basis for the economic case presented
- To deny the validity of the GERS data would be to deny the source of the data that gave rise to such observations as:
 - *"Scotland is the 14th richest nation in the world"*⁶⁰
 - *"Scotland's GDP per head is £2,300 higher than the UK as a whole"*⁶¹
 - *"[Scots have] paid more tax per head of population every year for the past 34 years"*⁶²
 - *"Scotland more than pays her way in the UK"*⁶³

Sometimes people cite quotes from the "renowned economists Jim and Margaret Cuthbert" that date from 2005 and 2007 and refer back to issues from 1992⁶⁴. These quotes are irrelevant because the methodology has been continually changed and improved and historical figures restated since then. In 2008 the Cuthberts themselves said⁶⁵:

"This GERS follows a major review, which has been carried out by officials after consulting widely with users of GERS, (including economists and statisticians like ourselves). It is also the first GERS that has been produced with an SNP government in power at Holyrood, though it should be stressed that GERS is produced independently by officials with no input from Ministers [...] For example, the Treasury data, which is the basic source for the expenditure figures in GERS, (and which until recently was a black box to all outside the Treasury), has been vetted thoroughly by statisticians in Scotland, and they have shown themselves willing to override the Treasury's figures where these are clearly wrong. Specific mistakes have been corrected, including the treatment of Scottish Water, nuclear decommissioning, and the depreciation of public assets,

⁶⁰ www.heraldscotland.com/news/13150012.Scotland_is_14th_richest_country_in_the_world_say_SNP/

⁶¹ www.theguardian.com/politics/2014/jul/27/scottish-independence-scotland

⁶² www.bbc.com/news/election-2015-scotland-32171887

⁶³ www.publicfinance.co.uk/news/2013/03/annual-finance-figures-show-scotland-pays-its-way-says-swinney

⁶⁴ wingsoverscotland.com/the-limitations-of-gers/

⁶⁵ www.cuthbert1.pwp.blueyonder.co.uk/new_page_3.htm

such as roads. [...] In presentational terms, the report is now supported by very much more detail: this not only gives it increased credibility, but also makes it a very much more useful document."

By 2012 "the Cuthberts" went even further: economic data for Scotland was "now clear" by reference to GERS (in a year that they could find favourable stats to cherry-pick):

*"This gets no further than the usual Government Expenditure and Revenues Scotland, (GERS) analysis of the balance of government revenues and expenditures attributed to Scotland. It is now clear, as even the Unionists have to concede, that Scotland's basic fiscal position, including Scotland's share of North Sea revenues, is considerably better than the corresponding balance for the whole of the UK. As a percentage of GDP, Scotland has had a healthier balance than the UK as a whole on its current budget for each of the past six years. In fact, for three of these six years, Scotland was in surplus on its current budget, while the UK was in deficit throughout."*⁶⁶

Impact of Companies' Head Office Locations

This myth is summed up by a document written by pro-independence group Business for Scotland. This document has since been deleted but can still be found on the web⁶⁷ and some of the assertions made within it are regularly repeated as fact on social media. Take this direct quote

"For many companies, VAT and Corporation tax for the whole of UK operations are paid at company headquarters which is most often in London or the South East of England. It doesn't count as Scottish revenue, despite the fact it's a tax paid on sales / profit generated in Scotland."

As we've already seen, the GERS Detailed Revenue Methodology paper⁶⁸ states very clearly: "GERS apportions a share of UK corporation tax revenues based on the economic activity undertaken in Scotland and **not the location of companies' headquarters**" (page 13).

Similarly for VAT, page 19 of the same document makes it clear that VAT is allocated based on consumption survey data and has nothing to do with where companies report figures.

This isn't something that's changed recently. The same statements exist on the same pages of the 2011-12 GERS Methodology Statement⁶⁹.

The Business for Scotland document goes on to say:

"Put simply, if you buy a packet of Walkers shortbread in Tesco in Edinburgh, the VAT you pay is taken to be generated at Tesco's head office in Hertfordshire."

Apart from being fundamentally wrong about how VAT is allocated in GERS, they're also amusingly wrong about which products incur VAT. Shortbread is zero-rated for VAT purposes (unless it's chocolate coated).

⁶⁶ www.cuthbert1.pwp.blueyonder.co.uk/papers%201/SI%20Skintland%20140512.doc

⁶⁷ www.yumpu.com/en/document/view/39291858/bfscaseforindy-nov13

⁶⁸ www.gov.scot/Resource/0049/00495355.pdf

⁶⁹ www.gov.scot/Resource/0041/00415867.pdf

Missing Whisky Export Duty

This myth appears in many forms. Take this example from the crowd-funded Nationalist campaigning website "Wings Over Scotland":

"There are other ways in which Scottish revenues are invisible in GERS. Much of the alcohol duty paid by the whisky industry is not counted as revenue from Scotland. Alcohol produced in the UK which is exported abroad becomes subject to UK alcohol duty at the point of export, and a large proportion of Scotland's multibillion whisky exports gets shipped out from ports in England. The UK Treasury counts the duty levied on this whisky as income from the tax region in which the port is situated.

Billions of pounds of Scottish revenue is magicked away in the official statistics, and doesn't count as Scottish revenue. It masquerades as revenue from other parts of the UK, most commonly as revenue from London. In total, the extra revenues which don't currently figure in the GERS stats, but would accrue to an independent Scottish Treasury, would likely be larger than the entire annual income from the North Sea"⁷⁰

That article states: "The original version of this piece appeared on the splendid 'Wee Ginger Dug'." and the first paragraph appears in precisely the same form on the Business for Scotland article⁷¹ we've already referenced. This is how myths spread.

To be absolutely clear: the statement is quite simply, unequivocally, demonstrably nonsense. We can go all the way back to GERS 2006-07⁷² to get an explanation on this one

"In GERS, VAT and excise duty estimates for Scotland are based on the consumption approach.

*This is appropriate as the burden of the duty is borne by the final consumer rather than the producer. This is considered best practice as within a system of regional fiscal accounts, the VAT liability 'sticks' when the item is purchased by the final consumer. **The location of production is of no relevance.***

*Tobacco and alcohol duties are only collected if the product is consumed in the UK. If the product is exported, **the producer receives export relief. For example, while duty is levied on Scotch Whisky when it leaves a bonded warehouse, in reality it is only collected if the whisky is consumed in the UK.** Consequently, the ultimate payer of the duty is the UK consumer of the product.*

Therefore, GERS estimates duty collected from Scotch Whisky based upon the level of whisky consumption in Scotland, even though Scotch Whisky is only produced in Scotland. Similarly, the estimate of tobacco duty collected in Scotland is based upon the level of consumption of tobacco products in Scotland, even though most tobacco goods are produced outside Scotland."

⁷⁰ wingsoverscotland.com/the-great-gingerbread-robbery/

⁷¹ www.yumpu.com/en/document/view/39291858/bfscaseforindy-nov13

⁷² www.gov.scot/Publications/2008/06/18170334/6

A senior industry insider with decades of experience working at the highest level in the industry offered the following quote for Chokkablog⁷³:

"No alcohol duty is levied on Scotch Whisky exported from the UK to the EU or third countries, whether from Scottish ports or from ports elsewhere in the UK. UK alcohol duty (excise duty) is only levied on Scotch Whisky when released from bond for consumption in the UK. Under EU law, the rate of excise duty has to be consistent across the territory of a member state. If Scotland were an independent country, the rate of excise duty on Scotch Whisky would be set by a Scottish Government within the parameters for excise duty on alcoholic drinks set by the European Union. The excise duty revenue accruing to a Scottish exchequer would only be the amount raised on the release from bond of Scotch Whisky for consumption in Scotland."

This has also been confirmed by the Scotch Whisky Association and – quite frankly - common sense. Does anybody seriously believe the Scottish Government would miss an enormous chunk of revenue that would boost the case for independence?

This myth gained so much traction that the Scottish Government posted the following “response to GERS query” relating to whisky Export duty:

“Exports, including exports of whisky, do not attract UK duty. Therefore, no 'whisky export duty' revenue is allocated to Scotland in GERS.”⁷⁴

Defence assumptions are wrong because not all of that money is spent here

To answer this one simply has to read what the GERS report itself says:

“Public sector expenditure is estimated on the basis of spending incurred for the benefit of residents of Scotland. That is, a particular public sector expenditure is apportioned to a region if the benefit of the expenditure is thought to accrue to residents of that region.

This is a different measure from total public expenditure in Scotland. For most expenditure, spending for or in Scotland will be similar. For example, the vast majority of health expenditure by NHS Scotland occurs in Scotland and is for patients resident in Scotland. Therefore, the in and for approaches should yield virtually identical assessments of expenditure. However, for expenditure where the final impact is more widespread, such as defence, an assessment of 'who benefits' depends upon the nature of the benefit being assessed. Where there are differences between the for and in approaches, GERS estimates Scottish expenditure using a set of apportionment methodologies, refined over a number of years following consultation with and feedback from users.

The for approach considers the location of the recipients of services or transfers that government expenditure finances, irrespective of where the expenditure takes place. For example, with respect to defence expenditure, as the service provided is a national 'public good', the for methodology operates on the premise that the entire UK population benefits from the provision of a national defence service. Accordingly, under the for methodology, national defence expenditure is apportioned across the UK on a population basis.”⁷⁵

⁷³ chokkablog.blogspot.com.es/2015/05/sowing-seeds.html (that he requested to remain anonymous demonstrates the very real fear that cybernats engender)

⁷⁴ www.gov.scot/Topics/Statistics/Browse/Economy/GERS/queries/008

⁷⁵ www.gov.scot/Publications/2016/03/3692/2

We Pay For London's Infrastructure

This comes up a lot from people who haven't bothered to understand how the GERS figures work. At its simplest, the GERS methodology works to include only expenditure *in* Scotland or Scotland's share of *value* from expenditure outside Scotland.

Let's take Olympic Games costs as an example. To quote the current GERS detailed expenditure methodology paper⁷⁶:

"as discussed in previous editions of GERS, all capital expenditure associated with the Olympics has been assigned to the rest of the UK, primarily London and surrounding area, on the basis that Scotland will not receive a lasting benefit from the infrastructure and regeneration associated with the games. Current expenditure on the Olympics has been assigned across the countries and regions of the UK using the estimated regional distribution of the associated increase in tourism expenditure."

Another widely quoted example is HS2. Because Scotland's share of the economic value of HS2 is assessed to be 2%, this is the figure used in GERS.

*"Within GERS, the expenditure has been apportioned to Scotland in line with the regional breakdown of the benefits of High Speed 2 reported within The Economic Case for HS2, published by the Department for Transport. This assigns Scotland 2% of the total expenditure."*⁷⁷

Here's a recent example from Joan McAlpine (SNP MSP) in the Daily Record⁷⁸

"It refers to an annual accountancy exercise called GERS – Government Expenditure and Revenue Scotland. This is a set of figures that are calculated by government economists and published annually [...] Major infrastructure projects in England, including the £14.5billion London Crossrail, are partly charged to Scotland as investments of "national importance"."

This statement appears to directly conflict with this from the GERS report

*"As discussed in previous editions of GERS, railways expenditure, alongside expenditure on roads, is apportioned to Scotland on an 'in' basis. This means that expenditure 'in' Scotland on railways is apportioned to Scottish public sector expenditure while, where possible, a zero share is allocated to Scotland for all expenditure on rail across the rest of the UK. This required a number of modifications to the underlying CRA data which affected the expenditure by London and Continental Railways, the Channel Tunnel Rail link, and Network Rail."*⁷⁹

If there *is* an assessment of the share of the Crossrail project's value to Scotland and a subsequent cost allocation, the author of this report has been unable to find any mention of it in the GERS documentation.

⁷⁶ GERS Expenditure Methodology, page 3: www.gov.scot/Resource/0049/00495356.pdf

⁷⁷ GERS 2013-14 page 77: www.gov.scot/Resource/0047/00472877.pdf

⁷⁸ www.dailyrecord.co.uk/news/politics/joan-mcalpine-unionist-parties-big-7563350#udITAu8SXx1Ojm0b.97

⁷⁹ GERS 2013-14 page 77: www.gov.scot/Resource/0047/00472877.pdf