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The Economic Consequences of Scottish Independence

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Helmut-Schmidt-Universität / Universität der Bundeswehr Hamburg
Holstenhofweg 85
D-22043 Hamburg

ISBN 978-3-86818-070-1

Typeset in Palatino by Klaus B. Beckmann

Printed by Medienzentrum at HSU / UniBw H

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliothek; detaillierte bibliografische Daten sind im Internet unter <http://dnb.d-nb.de/> abrufbar.

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Hamburg, August 2014

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Angus Armstrong, David Bell, David Comerford, Monique Ebell, David Eiser, Patrizio Lecca, Brad Mackay, Nicola McEwen, Mike McGoldrick, Peter McGregor and Kim Swales have each received financial support from the Economic and Social Research Council's "[Future of the UK and Scotland](#)" programme. They are grateful for this support, which has significantly increased their capacity to study the Scottish economy and to contribute to the present volume.

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Foreword

by Anne S. Gasteen, President of the [Scottish Economic Society](#).

The objectives of the Scottish Economic Society are to promote the study and teaching of economics on the widest basis, in accordance with the Scottish tradition of political economy inspired by Adam Smith and to provide a forum for the discussion of Scottish economic issues and their relationship to the political and social life of Scotland. In keeping with the latter objective, in a year when voters in Scotland go to the polls to make an historic choice in a referendum on Scottish Independence, the Society has sought to facilitate the economic debate surrounding this choice by supporting the publication of non-technical, informative research on a range of issues from a variety of perspectives. This volume brings together a number of papers from distinguished academic economists that consider: taxation and government spending, pensions, banking, debt and interest rates, trade borders and currency issues, business perspectives, energy policy, inequality, migration and labour markets. We hope that you will find this an informative, interesting and thought-provoking read.

The Society would like to thank all the authors for taking time out of their very busy schedules to contribute to this book and, in particular, the Editors, David Bell, David Eiser and Klaus Beckmann (former Scottish Economic Society President whose idea this was).

The information and views in the papers in this book are those of the contributing authors alone and do not reflect the views of either the Scottish Economic Society's Council or its Members.

Introduction

David Bell, David Eiser and Klaus Beckmann

1 The Referendum on Scottish Independence: A Brief History

Why is Scotland holding a referendum on independence in September 2014? This question puzzles most casual observers of UK politics. In fact, it has a long and intricate history. By way of brief introduction to this book on the Economics of Independence for readers that are not familiar with Scottish political history, perhaps a short explanation of the events that have led to this historical juncture, both for Scotland and the UK, might be useful.

First, a brief excursion into mediaeval history: following the Wars of Independence, Scotland was recognised by the Pope as an independent country in 1324. It remained an independent country, frequently allied to France, until 1707, when the Treaty of Union was signed. Its first article stated that:

“That the Two Kingdoms of Scotland and England, shall upon the 1st May next ensuing the date hereof, and forever after, be United into One Kingdom by the Name of GREAT BRITAIN.”

The background to the Treaty was that England wanted to be free of strategic concerns on its northern boundary and the Scots, heavily indebted due to an ill-fated attempt to colonise the Darien Peninsula in Panama, wanted to clear their debts and to gain access to England’s lucrative trading routes. Even though Scotland and England were politically united, Scotland retained its distinctive legal and educational systems.

Scots quickly became enthusiastic traders and played a major role in the expansion of the British Empire and in the industrial revolution. The latter part of the 18th century coincided with the ‘Scottish Enlightenment’ famous, for example, for the contributions that David Hume and Adam Smith to the development of economics and philosophy.

However, the political Union was always unbalanced with power being concentrated in London with the Westminster parliament. It was not surprising that rule from London was always unpopular with part of the Scottish populace. By the end of the 19th century, there was significant support, both popular and political, for “Home Rule” – greater devolution of power to Scotland. The pressure led to a considerable extension of administrative powers to Scotland, but political power was retained exclusively in London.

The Scottish National Party was formed in 1934. It was dedicated to taking Scotland out of the Union. After a long period without significant electoral

success, the discovery of North Sea oil in 1970 increased support for the SNP since it offered an economic panacea at a time when the Scottish economy was relatively weak compared with the rest of the UK (rUK). In October 1974, the SNP polled 30.4% of the vote and won eleven seats in the UK Parliament. Carried along by this momentum, a referendum on devolution was held in 1979. The Labour Government passed an Act which would have established a Scottish Assembly with limited powers. The referendum asked whether they wished the provisions of that Act to be put into effect. An electoral hurdle was set whereby not only did the referendum need to win majority support, it also had to be approved by 40 per cent of the registered Scottish electorate. It did succeed in winning a majority, but failed on the 40 per cent condition.

Support for a Scottish Assembly continued, but had little support within Mrs Thatcher's Conservative government. The Labour Party promised to set up a Scottish Parliament if it regained power. The Scottish Parliament was re-established in 1999, two years after Labour won the 1997 election.

The Parliament had extensive powers to control government spending – both current and capital, but the only new tax power was a provision which allowed it to vary the standard rate of income tax up or down by 3p. This power has never been used.

Seats are allocated in the Scottish Parliament using the Additional Member System (AMS). Each voter has two votes. One is used for the constituency Member of the Scottish parliament (MSP). There are 73 constituency MSPs. The other is used for the 'list' MSPs and is allocated to a party rather than an individual. There are 56 list MSPs. These are determined by dividing Scotland into 8 parliamentary regions, each of which elects 7 regional MSPs. Seats are allocated to make the overall result more proportional. The regional MSPs are selected from lists determined by each party. At the time it was designed, it was believed that this system would never result in any one party having an overall majority.

The Scottish Parliament held elections in 1999, 2003, 2007 and 2011. The first two parliaments were controlled by Labour-Liberal coalitions. In 2007, the SNP was the largest party. It governed under minority rule with support from the Conservatives on supply votes as necessary. In 2011, the SNP won an overall majority. In its manifesto, it promised a referendum on Scottish independence. In September 2014, that referendum will take place.

Support for independence has varied between 20 per cent and the 35 percent of the electorate since the early 1990s. Support for the SNP does not necessarily imply support for independence. However, the referendum on independence was an inevitable consequence of the outcome of the 2011 Scottish Parliamentary election.

2 The Referendum on Scottish Independence: What Matters?

What will sway the Scottish electorate in deciding how to vote in the referendum? Bill Clinton's 1992 presidential campaign coined the phrase "It's the economy, stupid". Just as it was relevant back then, this phrase neatly sums up what matters to the Scottish electorate in the forthcoming referendum. In the run-up to the referendum, the Scottish electorate seem to be particularly concerned about economic issues and their own finances might be affected by independence. This is in contrast with almost all other examples of independence movements, where issues of identity, ethnicity, religion, language and culture tend to have much more prominence.

The best known manifestation of this view is the famous "£500 question". In the 2013 Scottish Social Attitudes Survey, respondents were asked whether they would change their vote in the referendum if independence made them £500 a year better off or £500 a year worse off. Around 52% said they would support independence if they thought it would make them £500 a year better off while only 15% said they would back independence if it made them £500 a year worse off. Among those who think Scotland's economy will be better under independence, 71% are likely to vote Yes, while 86% of those who think economic conditions will worsen are likely to vote No.

Our own analysis also points to the primacy of economic issues. However, responses may have been conditioned by the way in which the question was framed. In a survey carried out at the University of Stirling in late 2013, we asked respondents "How important in deciding how you are to vote are the following factors?" Two of the options offered were "Scotland's history" and "Scotland's economy". Those taking the survey were offered a scale ranging from "0- not at all important" to "10 – extremely important". Their responses are shown in Figure 1. It is clear that the economy trumps history in the mind of the Scottish electorate as far as their voting intentions in the referendum are concerned.

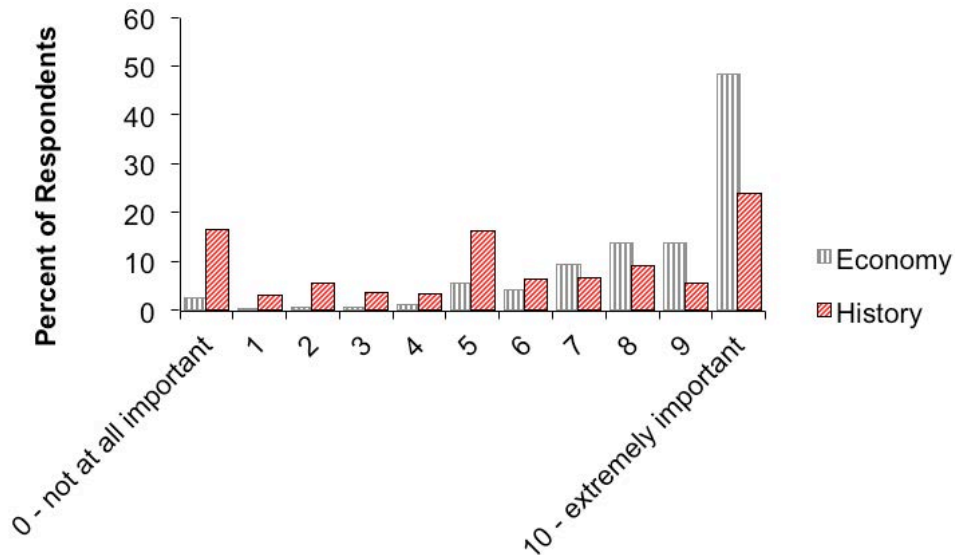


Figure 1: Importance of Scotland's Economy and Scotland's History in Voting Intentions.

3 This Volume

This evidence in the previous section clearly supports the argument that the Scottish case is unusual in the emphasis laid on economic issues. It also provides a key rationale for the writing of this book. In this volume, we have sought to provide coverage of many of the key issues that have emerged as the debate on the future of Scotland's economy has ebbed and flowed during the referendum campaign, which has been running since 2011.

Many contributions to the debate so far lack either analytic depth or accessibility. Our purpose is to fill this lacuna by providing a treatment of the economic issues involved that is fully accessible to the educated layman as well as all higher education graduates, no matter their field. We hope to produce a small volume that is both informative and entertaining to read, and which fits the "political economy" tradition as described in the mission statement of the Scottish Economic Society.

The idea for the book was born at the 2014 Annual Conference of the Scottish Economic Society. The organisers of the conference felt that the Scottish Economic Society was uniquely positioned to make a contribution to this historic debate, and Klaus Beckmann, at the time honorary president of the Society, invited David Bell to organise a policy forum on the "Economics of

Independence” which was held at the Scottish Economic Society Conference in Perth on 29th April 2014. Many of the chapters in the book originated with the presentations made at that conference. The conference included presentations by Angus Armstrong of the National Institute of Economic and Social Research, David Comerford and David Eiser of the University of Stirling, Professor Brad Mackay of the University of Edinburgh and Professor Kim Swales of the University of Strathclyde.

All of these researchers have received support from the Economic and Social Research Council. This organisation, which is funded by the UK Government but is strictly independent of it, has played an important role in the referendum campaign through its “Future of the UK and Scotland” programme, which has had a vital role both in informing and monitoring the debate.

We have also invited contributions from a number of well-known experts on different aspects of the Scottish economy. These include Professor Andrew Hughes-Hallett of St Andrews University, who is also a member of the Council of Economic Advisers to the Scottish Government, Professor David Cobham of Heriot-Watt University, who made a presentation on currency to the annual conference of the Scottish Institute for Research in Economics in 2014, Professor Robert Wright of the University of Strathclyde and past President of the Scottish Economic Society and Professor Nicola McEwen of the University of Edinburgh who has a special interest in energy issues. Finally, we invited Professor François Vaillancourt of the University of Montréal, who has made the study of the economics of state separation a central part of his research to make a contribution that sets the Scottish case in the context of similar movements elsewhere in the developed world.

We have organised the book in three sections. These broadly cover areas that are generic to the debate – Scotland’s fiscal position, debt, currency and trade. These are fundamental overarching issues around which there is still a great deal of uncertainty. Second, we consider issues that are of more particular interest, but are nevertheless of considerable relevance to the evolution of the Scottish economy in the medium to long-term and have also been debated widely in the course of the referendum campaign. Our third section focusses on issues that have received relatively little attention – what might happen to the UK’s fiscal structure if there was a No vote and what is the status of other independence campaigns elsewhere in the developed world. We have encouraged the authors to avoid technical language as much as possible, but inevitably there have been lapses, for which we ask your forbearance. Our intention is to inform the debate and to help the Scottish

electorate understand the often confusing arguments put by both sides. All the same, it must be noted that some of the sections particularly in the first part of this volume, express some quite divergent views, and we as editors have not attempted to insist that common ground be identified.

4 Acknowledgements

We are indebted to the Scottish Economic Society for hosting the Policy Forum on Scottish Independence at its 2014 Annual Meeting, from which the articles in the book largely emerged. In addition, we gratefully acknowledge that the SES decided to fund the production of this volume and to send it to all its members free of charge. Thanks are also due to the University Library at [Helmut-Schmidt-Universität](#) / Universität der Bundeswehr Hamburg (with which Klaus Beckmann is affiliated) for their support in printing, and in disseminating, the present volume. Finally, thanks are also due to the Economic and Social Research Council for its financial support for much of the research contained in this volume.

All this support notwithstanding, it is still the case that **the information and views in the papers in this book are those of the contributing authors alone and do not reflect the views of any supporting bodies or their other members.**

Fiscal Position on Independence

David Eiser and Mike McGoldrick

1 Introduction

Arguments about Scotland's likely fiscal position if it were to become independent have been at the heart of the referendum debate, and have become increasingly fractious. On the same day in May 2014, the UK Government issued analysis claiming that Scots would be £1400 per head worse off with independence compared to remaining within the Union, whilst the Scottish Government released analysis claiming that Scots would be £1000 per head better off.

This notion of being 'better off' refers to the public sector finances, and specifically the net fiscal deficit. The fiscal deficit is a measure of the difference between government spending and taxes raised. The UK Government's analysis argued that if it was to become independent, Scotland's fiscal deficit would be £1000 higher per person than the UK's at the time of independence in 2016, and would rise over time to £1,400 per person higher than the UK deficit. The UK Government refers to this as the 'dividend' of remaining within the UK. The Scottish Government has produced its own estimates, arguing that an independent Scotland could have a deficit £1,000 lower than the UK's in the long-run.

Ultimately of course, these discrepancies are driven by different assumptions about how the path of Scotland's tax revenues and spending pressures might evolve. Key factors driving these differences include the long-term path of tax revenues from North Sea oil and gas; the level of debt that Scotland would inherit on becoming independent and the likely interest rate it would pay on its debt; and the spending pressures associated with an ageing population and the extent to which these could be offset by policies to increase in-migration, employment or productivity.

It is extremely unlikely that any one projection will turn out to be 'right', and focussing on any one specific number – although a good way to get headlines – is unwise. Nonetheless, the electorate has been left incredulous at the scale of the discrepancies between estimates. Understanding how the fiscal forecasts are derived, and how varying specific assumptions leads to different estimates, is useful in understanding the fiscal challenges and threats facing an independent Scotland.

In this chapter, we outline the effect of different assumptions on the assessment of Scotland's fiscal position. In doing so, we do not aim to conclude that one projection is more accurate or likely than another, but to illustrate the importance of particular assumptions to the conclusions that are reached.

2 Scotland's current fiscal position

In order to understand Scotland's likely fiscal position on independence (assumed to be in 2016 if there is a yes vote) it is necessary to understand its current position (2012/13). There are no major differences between the Scottish and UK governments in relation to the current position given that it relies on existing data.

Table 1 considers Scotland's current fiscal position relative to the UK as whole. As such it can be interpreted as the fiscal position that Scotland would face if it was an independent country today, but with identical spending and taxation policies as currently, and facing an identical interest rate on its debt as the UK government does.

Table 1 categorises spending into one of several categories: general public services, benefits, defence and foreign affairs, and debt servicing. Spending on general public services is significantly higher per capita in Scotland than in the UK. The majority of this spending is made by the Scottish Government and Local Authorities on 'devolved' services, and the level of this spending simply reflects the size of block grant that the Scottish Government receives from the UK Government. Spending on cash benefits by the UK Government for people resident in Scotland is slightly higher than for the UK as a whole, (largely because of higher spending in Scotland on old age and sickness benefits). The UK's total spending on defence and foreign affairs, and on debt interest, is generally assumed to benefit all citizens of the UK equally, and is thus allocated to Scotland on the basis of its population share. In aggregate therefore, total public spending for the people of Scotland is around 12% higher than for the UK as a whole.

Tax revenues from onshore taxes (i.e. all tax revenues other than those from North Sea oil and gas production) are 2% lower per capita in Scotland than the UK. However, the vast majority (84%) of the UK's tax revenues raised from the offshore oil and gas industry are derived from Scottish waters (international law defines how the boundary between Scottish and rUK waters is likely to be split following independence, and this is one area where there appears to be relatively little scope for argument between the sides). With this 'geographic' share of offshore revenues, Scotland's total

taxation revenues are 10% higher per capita than the UK's (and equal to the UK's as a percentage of GDP).

Overall, Scotland's fiscal position in 2012/13 was slightly worse than the UK's, expressed both in per capita terms, and as a percentage of GDP. Scotland's offshore revenues go some way towards covering its higher public expenditure, but do not cover the spending gap completely (in most of the recent years, offshore revenues have been sufficient to compensate for Scotland's additional spending, but a decline in offshore revenues in 2012/13 – due in part to particularly high levels of investment in the offshore industry which can be used to offset tax liability – means that this was not the case). Scotland's per capita deficit (the difference between spending and revenues) of £2,305 is greater than the per capita deficit for the UK as a whole of £1,864, a difference of slightly over £400 per capita.

We now go on to consider how Scotland's fiscal position may be likely to evolve over the next few years, and how changes in key assumptions influence this assessment.

Table 1: Scotland's fiscal position relative to UK, 2012/13

	Scotland	UK	Scotland	UK	Scotland as % UK
	(£m)		(per capita)		
<i>Spending</i>					
General public services	£38,131	£378,449	£7,176	£5,941	121%
Benefits	£16,788	£196,048	£3,159	£3,077	103%
Defence and foreign affairs	£4,080	£48,919	£768	£768	100%
Debt interest	£4,102	£49,178	£772	£772	100%
TOTAL SPENDING (*)	£65,397	£700,117	£12,308	£10,990	112%
<i>Revenues</i>					
Onshore revenues	£47,566	£580,293	£8,952	£9,109	98%
Offshore revenues	£5,581	£1,051	£1,050	£16	6366%
TOTAL REVENUES	£53,147	£581,344	£10,002	£9,126	110%
GDP (geographic share)	£144,672	£1,573,541	£27,227	£24,700	110%
Spending as % GDP	45%	44%	-	-	-
Revenues as % GDP	37%	37%	-	-	-
Deficit as % GDP/ per capita	-8.5%	-7.5%	-£2,305	-£1,864	124%

Sources: Spend data from HM Treasury adjusted with benefits data from DWP and HMRC. Revenue data from PESA. * includes accounting adjustments so sums to slightly more than indicated in table.

3 Factors influencing Scotland's fiscal position in the first years of independence

3.1 North Sea Oil and Gas revenues

The tax revenues from North Sea oil and gas production tend to be very volatile from one year to the next. For example, the total value of North Sea taxation revenues accruing from Scottish waters was almost £12bn in 2008/9, halved to £6bn the following year, climbed back to £10bn in 2011/12, and then fell again to £6bn in 2012/13 (Figure 1).

Given this volatility, it is not surprising that future North Sea revenues are extremely difficult to forecast. Revenues depend not only on the volume of production, but also on oil and gas prices, the £/\$ exchange rate, the profitability of extraction (and thus production costs), and the tax regime (notably including tax allowances to reflect investment).

There are thus a wide range of forecasts of the likely value of taxation revenues from North Sea production. Figure 1 compares three of these forecasts: the 'central' projection used by the Office for Budget Responsibility (OBR) in its March 2014 Forecast, the Scottish Governments 'central' forecast from its March 2014 Oil and Gas Bulletin, and the most optimistic forecast of the Scottish Government. The two 'central' forecasts differ substantially, with the Scottish Government forecasting revenues of almost £7bn in 2016/17, over double the OBR forecast (£2.7bn). The differences largely reflect different views of the likely volume of production, but also reflect differences in oil price forecasts and other factors mentioned previously.

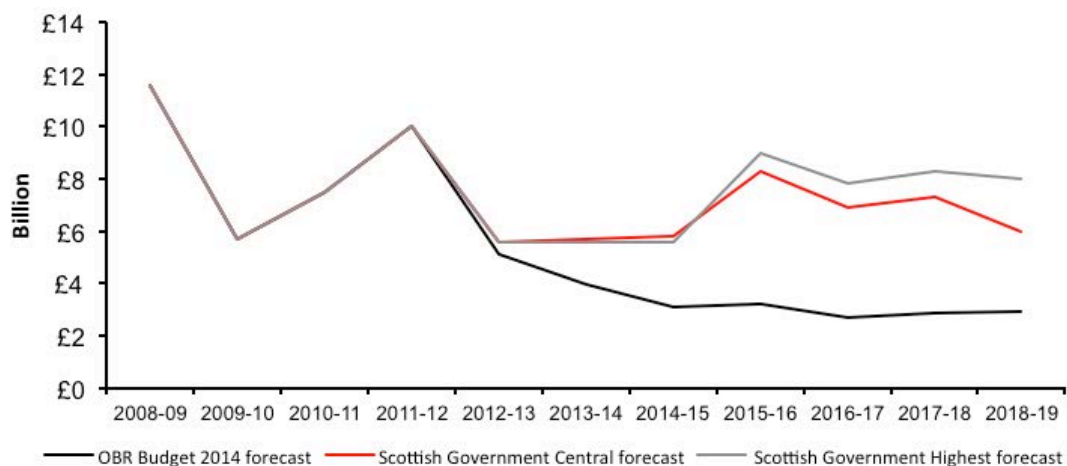


Figure 1:¹ oil & gas revenues

1. Note: figures from 2008/9-2012/13 are from GERS, forecasts from 2013/14 onwards are from the OBR's March 2014 Fiscal Forecast and the Scottish Government's Oil and Gas Bulletin May 2014.

3.2 Debt and borrowing rates

The UK has significant levels of government debt. The way in which this debt is divided between an independent Scotland and the continuing UK, and the interest rate that an independent Scotland pays on this debt plus any new debt that it issues, will have significant effects on Scotland's fiscal position post-independence.

The headline measure of debt used by the UK Government is public sector net debt (PSND). UK PSND was £1,189bn or 76% of UK GDP at the end of the last fiscal year 2012/13, and is forecast to rise to £1,515bn or 82% of UK GDP in 2016/17. There has been significant debate about how this debt should be split. The UK Government has argued that Scotland should inherit a population-based share of this debt. The Scottish Government argues that it might inherit a relatively smaller share of this debt for a variety of reasons, including: first, that Scotland should be responsible for a 'historic share' of debt (based on Scotland's historic contribution to UK public finances since 1980); second, that some of the UK's debt is associated with quantitative easing and as such should not form part of Scotland's inherited debt; and third, if an independent Scotland does not gain access to a population share of the UK's assets. Both of these positions are discussed in further detail in the paper by Armstrong and Ebell on Debt.

It has also been argued that, as a new, small state with no credit history and a relatively smaller market for its bonds, an independent Scotland would have to pay a higher rate of interest on any debt that it issues. Evidence from Armstrong and Ebell (2013) indicated that Scotland's borrowing premium could be between 0.72 – 1.65 percentage points higher than UK rates. In its analysis, the Treasury took the mid-point of this range (1.2%) as the indicative premium that the Scottish Government is likely to face; the Scottish Government's analysis did not factor-in a premium.

Varying these assumptions makes a large difference to Scotland's fiscal position on independence in 2016/17. If it were to inherit a historic share of debt at the end of 2015/16 and pay no premium on its borrowing, Scotland's debt spending in 2016/17 would be around £4.1bn. If it inherited a population share, its debt spending would be £5.2bn. And if it inherited a population share and faced a 1.2 percentage point premium on its borrowing, Scotland would face debt spending of £6.6bn in the first year of independence.

3.3 Institutions

The UK Government argues that an independent Scotland would incur the costs of establishing 'the institutions of independence'. These include for example the costs of establishing a tax and benefits system, setting up new welfare, tax collection, debt management, and security agencies, and setting-up pensions and financial regulators, a passport office, and foreign affairs offices. In its analysis, the UK Government estimated these costs to be £1.5bn (equivalent to 1% of GDP) spread over the first parliament.

There was however significant controversy about the magnitude of these costs. Some independent assessments estimate set-up costs closer to £0.2bn rather than £1.5bn. The Scottish Government argues that much of the institutional infrastructure is in place already, and that set-up costs could be mitigated through efficiency measures in IT networks for example. The Scottish Government's analysis implicitly assumes that these institutional costs are zero.

3.4 Policy choices

The Scottish Government's White Paper specifies a number of tax and spend policies which it may pursue in its first parliament and beyond. Table 1 summarises the key fiscal policy proposals which the Scottish Government indicates it will seek to implement in the first parliament.

Three areas of spending reductions are identified: a reduction in defence spending of around £0.5bn (bringing defence spending per capita in Scotland to around £520, compared to £615 in the UK), savings of around £0.1bn from minor policy changes, and a more aspirational target to find savings of £0.25bn from an administratively more simplified tax system.

Two tax cuts are proposed: a 50% reduction in Air Passenger Duty (APD), estimated by the UK Government to cost £130m per annum; and a reduction of 3 percentage points in the headline rate of corporation tax. This is estimated by the UK Government to cost £300m per year, although it is recognised that the policy is likely to have a stimulus effect in the longer-run.

The main spending proposal is to provide universal childcare to pre-school children. In the first years of independence, 600 hours of childcare will be provided to vulnerable two-year olds, rising to 1,140 hours provided to all 3-4 year olds and vulnerable two year olds. The spend profile of this policy develops through the first term of an independent Scotland, initially costing £100m per year and rising to £600m per year. In the long-term the policy is expected to stimulate labour market participation which could offset some of

these costs – the UK Government estimates that the policy may generate £130m per year in reduced benefit payments and higher tax revenues; the Scottish Government argues that the stimulus effect could be larger. Various other welfare spending commitments are expected to add up to around £400m per year in the first parliament.

Thus depending on the extent to which savings from administrative simplifications are realised, and the extent to which the policies generate supply-side benefits (such as increased labour market participation or inward investment) the tax and spending proposals that the Scottish Government has proposed for its first term represent net costs from between £50m-£400m initially, rising to anywhere between £400m-£900m by the end of the first term.

Table 2: Costs of Scottish Government policy proposals in the first term

Policy	Cost/ saving per year
Universal childcare provision for 3 and 4 year olds	£100m rising to £570m gross (£440m once knock-on benefits are considered)
Cut Air Passenger Duty by 50%	£130m - £230m
Cut Corporation Tax by 3%	£270m - £300m with a stimulus effect on GDP
Cut defence spending	£-500m
Welfare spending commitments (*)	£400m
Other savings (includes abolition of transferable income tax allowance and cancelling Share for Rights scheme)	-£100m
Simplifying the tax system	£-250m
Total	£50m rising to £900m

(*) These include halting the roll-out of Universal Credit and Personal Independence Payments, reversing the so-called 'bedroom tax', increasing Carer's Allowance, and minor changes to State Pensions.

3.5 Effect of assumptions on Scotland's fiscal position in the first years of independence

Figure 2 shows indicatively the effect of varying assumptions relating to the factors just described on the Scottish Government's likely fiscal deficit per person.

The red lines show how Scotland's fiscal deficit might evolve if the OBR's North Sea revenue forecasts materialised. The continuous line shows the position if Scotland inherited a population share of the UK's debt, paid no premium on its borrowing, and implemented the same tax and spend poli-

cies as the UK (OBR1). On this basis, Scotland's deficit in 2016/17 would be £1700 per person compared to an equivalent figure for the UK of £700 per person (this is where the UK Government's £1,000 'dividend' comes from). Scotland's deficit would be worse than this if it paid a premium on its borrowing of 1.2 percentage points above UK rates (OBR2); if it faced institutional set-up costs of £500m per year (OBR3); and if the policies it implements in its first years turn out to be towards the high end of the estimated costs (OBR4).

The blue lines show how Scotland's fiscal deficit might evolve if the Scottish Government's North Sea revenue forecasts materialised. The continuous line shows the position if Scotland inherited a population share of the UK's debt, paid no premium on its borrowing, and implemented the same tax and spend policies as the UK (SG1). On this basis, Scotland's deficit in 2016/17 would be just under £1,000, still slightly higher than the equivalent UK figure of £700. This deficit would be lower if Scotland inherited a smaller 'historic' share of UK debt (SG2); the effect of implementing policies would make little difference if these turned out towards the low-end of the estimated costs (SG3). SG4 shows Scotland's fiscal position if it inherited none of the UK's debt on independence.

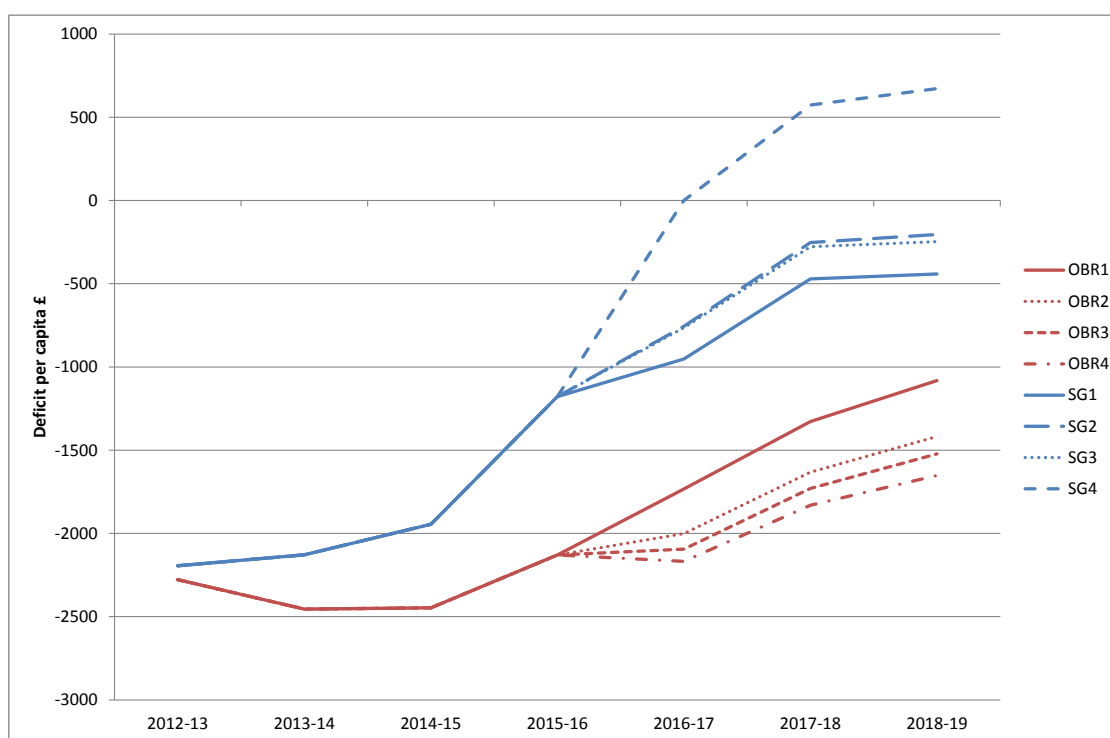


Figure 2: Effect of assumptions on Scottish fiscal position

4 Conclusions

The aim of this analysis has not been to replicate any of the specific scenarios of the UK or Scottish Government exactly, but to illustrate how varying some of the key assumptions can have profound effects on the estimate of Scotland's likely fiscal position in the first years of independence. The difference between the UK and Scottish Government central forecasts for North Sea revenues alone accounts for a difference in deficit of up to £700 per person, while differences in assumptions about debt levels and borrowing rates also have substantial effects.

All scenarios are indicative, based for example on assumptions about the rate of GDP growth. They also assume that the forecast real reduction in total government spending planned by the UK Government over the period to 2018/19 continues. In the majority of scenarios, Scotland's fiscal position is worse than the UK's, reflecting its higher per capita spending, and relatively static or declining revenues from North Sea oil and gas production. For Scotland to achieve a similar level of fiscal deficit as the UK in 2016, it would have to generate North Sea revenues according to its central estimate (substantially higher than the UK estimates), inherit a less than population share of debt, and face no premium on its borrowing. For Scotland to achieve a long-run fiscal deficit substantially below the UK's, it would have to experience consistently higher rates of productivity and labour-market growth. Although this is clearly its ambition, it is a fairly optimistic assumption to make.

Of course, the comparison of Scotland against the UK doesn't really reflect the choice facing the electorate at the referendum: the more relevant comparison is Scotland's fiscal position on independence against Scotland's fiscal position if it remained in the Union. Making this comparison requires an additional assumption to be made about how Scotland's grant settlement might change if it remains in the UK, in itself an issue around which there is great debate and uncertainty.

In the longer run, a key challenge for all European countries arises from 'population ageing'. Scotland's population is projected to age more quickly than the UK's over the period to 2035, which will pose an additional long-run fiscal challenge. But the scale of an independent Scotland's ageing problem would not be as great as that faced by many other Western European economies, including Germany and Italy, and the difference between the demographic pressures facing Scotland and those facing the UK as a whole are relatively small. The Scottish Government argues that it would

pursue a more 'open' immigration policy to counter its population ageing problem, and this is discussed further in the chapter by Robert Wright.

What is important in the long-run to secure a strong fiscal position is economic growth. The Scottish Government would argue that its policy proposals are designed with this in mind, and that realisation of growth benefits will ensure that an independent Scotland is in a strong fiscal position in future.

Long-Run Fiscal Issues

Patrizio Lecca, Peter G McGregor and Kim Swales¹

1 Introduction

At present, much of the debate related to Scottish independence has tended to focus on shorter-term issues, especially on the likely fiscal position if Scotland were to become independent in 2015/16. Fiscal sustainability, in the short-run, is going to be largely determined by the scale of the prevailing fiscal deficit, the excess of Government expenditures over Government revenues, and the scale of Scottish Government debt relative to GDP.

Scotland currently has high levels of government expenditure per head and significant devolved powers over the distribution of public spending. The overall fiscal position of a newly independent Scotland – in terms of deficit- and debt- to-GDP ratios looks challenging, and these will almost certainly exceed the Eurozone “rules” on fiscal sustainability (as will the RUK position, though perhaps not by quite as much).

The Barnett formula, which has delivered a beneficial settlement for Scotland in terms of public spending shares, will, of course, no longer apply. However, North Sea Oil (NSO) revenues have, in the recent past, been broadly sufficient to allow the maintenance of higher levels of public spending in Scotland, at least initially. In the longer-term, NSO revenues look set to decline, but at an uncertain rate, and will continue to exhibit considerable volatility, presenting a challenge for an independent Scottish Government.

Most of the debate to date has focussed on the fiscal position at independence, which has been the subject of considerable controversy, reflecting different assumptions about, for example, likely future oil revenues and the scale of Scottish Government debt (and of any interest rate premium to which it would be subject). Eiser and McGoldrick (2014) provide an analysis of this debate and Armstrong and Ebell (2014) provide further discussion of the likely scale of Scottish debt.

Given that we are dealing here with a constitutional change that is permanent and irreversible, it seems reasonable to focus on the longer-term fiscal policy issues (Goudie, 2013). In this paper we briefly review some of the key longer-term fiscal issues that will face the Scottish Government should there be a “yes” vote in the forthcoming referendum on Scottish independence.

1. The authors gratefully acknowledge the support of the ESRC under its Future of the UK and Scotland pre and post referendum Initiative.

The paper continues as follows. In Section 2 we consider the longer-run fiscal sustainability of an independent Scotland and the factors that are likely to impact on this. Section 3 discusses aspects of fiscal policy under independence. Section 4 is a brief conclusion.

2 Long-run fiscal sustainability

The Institute for Fiscal Studies² has analysed the fiscal implication of an independent Scotland identifying two negative long-term pressures on Scotland's public finances relative to RUK: Scotland's population is projected to age more rapidly than that of RUK and NSO revenues are likely to decline through time as reserves become exhausted.

Projections of both the levels of population in Scotland and RUK, and their age structure, are typically mechanistic. In particular, both are heavily dependent on what happens to net in-migration, which tends to be selective in both age and skill. The Scottish Government has clearly indicated a desire to adopt a more liberal immigration policy than Westminster, and this could conceivably have a major impact. However, there are potentially serious concerns raised in terms of maintaining completely open borders with RUK in these circumstances. Nonetheless, over the medium term, at least, the Scottish Government may be able to prevent the adverse (but mechanistic) population projections becoming a reality.

An independent Scotland would become a natural-resource-dependent, small open economy. Oil revenues would constitute a significant proportion of the Scottish Government's budget and have been, and are likely to continue to be, highly variable and unpredictable. This raises challenges for the management of the public finances. The SNP Government recognises this and advocates the development of an Oil Fund, drawing on the widely praised Norwegian experience. One problem is whether this would be possible if the Scottish Government chooses to maintain higher government expenditure per capita than in RUK since, at least initially, North Sea Oil (NSO) revenues would roughly offset Scotland's higher expenditure per capita, and if used for that purpose, cannot be accumulated as an oil fund.

A third negative long-term factor operating on the Scottish public finances relative to those in RUK is the likely increasing interest cost of Government debt, as Scottish Government debt replaces Scotland's share of UK Government debt.

² Amior et al., 2013.

Our analysis assumes that Scotland maintains a permanently fixed exchange rate with the rest of the UK (RUK) perhaps in the form of a monetary union, although pro-union parties are all denying the possibility of that particular option. Clearly this implies little influence on monetary policy (or none at all depending on the precise arrangements), but also implies restrictions on the aggregate fiscal policy stance (fiscal deficit and debt to GDP ratios).

3 Fiscal policy in an independent Scotland

It is likely that an independent Scotland will be rather constrained in terms of its ability to vary the aggregate fiscal stance, certainly in the early years. However, it would be free to pursue balanced-budget fiscal changes that do not impact on the overall fiscal stance (as reflected in the deficit- and debt-to-GDP ratios). While this means that revenues and expenditures have to move in the same direction, there would be scope for significant shifts in the levels of both in either direction, since under independence tax and expenditure choices are not subject to constitutional constraints.

3.1 The level (and composition) of public spending and taxes: Scandinavian and Baltic models

While the Scottish Government would have complete freedom to choose the levels of taxes and expenditures, they would be wise to anticipate the likely consequences of such changes. Scotland would remain a small, highly open economy, with regional characteristics given the continued integration of labour and capital markets. Policy choices would inevitably be constrained by their anticipated (and actual) impacts.

Nevertheless, under independence there would undoubtedly be very considerable scope for altering the levels of both government expenditure and taxes. This is not, of course, technical economic matter, but involves a fundamental choice about the nature of the society in which we live. For example, major tax and expenditure increases would shift Scotland in the direction of the Nordic countries, which are often regarded by Scots an example that is perhaps worth emulating. Significant reductions in tax rates and expenditures, on the other hand, would move us in the direction of the Baltic economies. Keating and Harvey (2014) characterise this as a choice between *social investment* and *market liberal* strategies, noting the attraction of the former in the Scottish context. In the social investment strategy “public expenditure is seen as a contribution to the productive economy rather than a drain on it”.

While no party in Scotland has yet committed itself to radical shifts in the levels of public expenditure and taxation in either direction, independence would clearly create the potential for it, and it is interesting to explore what the likely impacts might be.

3.2 The importance of attitudes towards public spending and taxation

It transpires that public attitudes towards public expenditure and taxation are very important (Lecca et al, 2014a). Generally, government expenditure financed by income taxation³ has a negative impact on GDP and employment. What we would expect is a beneficial impact on aggregate demand because the stimulus to public expenditure is greater than the contractionary impact of lower (more import-intensive) consumption expenditure. However, this is more than offset by the adverse competitiveness effects of the rise in income taxation as labour pushes up wages to restore their real take home wage.

A negative impact on GDP, employment and competitiveness is the probable outcome if government expenditure is not valued by residents or migrants. If instead we assume that public spending creates an amenity, which is valued by workers while bargaining their salary (which means that this is reflected in unions' bargaining behaviour) the impact of balanced budget fiscal expansions is more likely to be positive.

So, if workers are willing to give up part of their wage to have more public expenditure (e.g. public services) unions in effect bargain over a "social wage", in which the increase in public services arising from an additional increase in taxation are valued as much as (or even more than) the reduction in consumption expenditures⁴. In this case, since the social wage is maintained, the adverse competitiveness effects associated with bargaining over real take home pay would be eliminated, in turn generating an increase in economic activity and therefore employment.

Of course, once attitudes to public spending are acknowledged as potentially significant, the question of varying attitudes to different components of public expenditure arises. There is some evidence from the US, for example, that net in-migration responds positively to education and health spending, but is negatively related to welfare spending. Evidence from UK surveys of public attitudes seems to support this differential response to elements of

³ Hereafter, the analysis assumes that Scotland maintains a permanently fixed exchange rate with the rest of the UK (RUK) perhaps in the form of a monetary union.

⁴ This is the case when workers recognise that government consumption has greater multiplier effects than private consumption.

spending. So it is not simply public spending per se that matters, but its composition. We turn next to a consideration of a further aspect of the composition of government spending that seems to matter.

3.3 The importance of the “supply side” impacts of public spending

If public expenditure does have beneficial supply-side effects then the prospects of a positive economic impact from a balanced budget fiscal expansion are again enhanced.

The most obvious source of a beneficial supply side impact is public capital expenditure, for example on infrastructure, which impacts directly on the economy’s productive capacity. This acts to moderate and possibly offset any adverse competitiveness effect and potentially avoid crowding out effects on private resources even if bargaining is over net take home pay rather than the social wage. While evidence on the scale of these effects is limited, it is certainly entirely possible that these effects would cause balanced budget expansions in capital expenditure to have positive impacts on the Scottish economy (Lecca et al, 2012a), and the current Scottish Government appears to believe this.

At present, the Scottish Government does not have full discretion concerning the allocation of the Scottish budget between current and investment expenditure (Commission on Scottish Devolution, 2009). The composition of the Scottish budget is effectively determined by UK Government decisions. According to GERS figures (2008 and 2013), for the year 2008-2009 11% of the budget was allocated to public capital expenditure while the rest is made up of current purchase in goods and services. This share falls to 9% of total budget for the period 2012-2013. In an independent Scotland, the Government would be able to choose the share between the two categories of expenditure, and it seems clear that it would wish to increase the share of capital spending.

While public capital expenditure is the most obvious example of public expenditure that we would expect to have a beneficial impact effect on the supply side of the economy, it is by no means the only one. Many elements of what is classified as “current” government expenditure are, in effect, investments in human capital. Spending on education is one example, where we would expect productivity to be stimulated directly as a consequence of public spending, potentially with significant economy-wide impacts (e.g. Hermannsson et al, 2014). However, elements of health and other public spending can be similarly regarded.

3.4 Corporation tax

The Scottish Government presented evidence to the Scotland Act (2012) on the impact of a reduction in corporation tax rates (Scottish Government, 2011; Lecca et al 2012b). This suggests that a balanced-budget reduction in corporation tax rates from 23% to 20% would result in a stimulus to Scottish GDP (of 1.4%) in the long-run. The bulk of the stimulus comes through the lower cost of capital which stimulates investment demand, as capital is substituted for labour, and improves competitiveness (and stimulates net exports in the longer term).

3.5 Welfare

Under independence the entire welfare system would come under the control of the Scottish Government. The Scottish Government's (2013) White Paper contains a major proposal for pre-school education that it believes would be "self-funding". The idea is that improvement in child care provision would stimulate economic activity through an increase in the participation rate of mothers. Claims that this scheme could be self-funding have been challenged on the basis of the likely scale of the response from the group who would be affected by such a change.

The "growth incentive" argument implies that the devolved Scottish Government should be less concerned about economic growth than its UK counterpart – and idea for which there appears to be little evidence.⁵

4 Conclusions

The overall fiscal policy stance is likely to be very constrained, at least initially (either by explicit fiscal rules within a full monetary union or by markets), so there is unlikely to be much room for discretionary changes. However, this leaves plenty of scope for balanced-budget fiscal policy changes, including a choice of where the Scottish Government wishes to lie along the spectrum of tax/ expenditure combinations from the high spend/ high tax Nordic economies at one end to the low spend/ low tax Baltic economies at the other.

The impact of any balanced budget changes are likely to depend, among other things, on: public attitudes, the level and composition of public spending and, in particular, on whether a "social wage" bargaining model is

⁵ This is clearly not a comprehensive list of longer-term fiscal issues or choices (see O'Donnell, 2013). Equity is clearly important here, and is emphasised by the present Scottish Government. Adopting a more progressive tax system in Scotland would, however, carry the risk of greater out-migration of those on higher incomes.

established; the direct impact of the government spending on the supply side of the economy, which again will vary with the composition of expenditures, but seems likely to be enhanced by expenditure on infrastructure and education, for example. Welfare spending seems more problematic, in terms of likely attitudes and supply-side impacts, but the pre-school innovation is an example where a positive economic impact is possible.

Under independence, the Scottish Government would no longer benefit from the “pooling” of revenues across the UK and a degree of protection in downturns in economic activity, but the link between tax revenues and growth in economic activity would be enhanced, arguably strengthening the incentives for growth.

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Assets, Liabilities and Independence

Angus Armstrong and Monique Ebell

In the event of a vote in favour of Scottish independence, England, Wales and Northern Ireland would become the continuing UK state and Scotland would become a separate sovereign country. The institutions of the current UK, such as the Bank of England, would continue to be institutions of the continuing UK state but no longer responsible to an independent Scotland, unless both sovereign states agree otherwise. All liabilities incurred by these institutions after independence would belong to the continuing UK only and would not be the responsibility of an independent Scotland.

There is, however, the issue of dividing up the assets and liabilities of the current UK state at the time Scotland might become an independent country. This division is crucial for the viability of alternative economic frameworks, see in particular the chapter on *The Scottish Currency Question*, and capacity for an independent government to manage the economy. Despite the fluidity of international borders over the past sixty years, which has seen dozens of new sovereign countries created, history offers surprisingly few precedents on how to divide state assets and liabilities. Some claim that the UN Vienna Convention of 1983 (Article 40) provides a legal basis.¹ Yet the convention only requires an 'equitable' division of assets and debt, leaving 'equitable' undefined.

1 Public sector assets and liabilities

The best register of UK public sector assets and liabilities is the Whole Government Accounts (WGA) published by HM Treasury (2013) which presents the consolidated accounts of all audited public sector entities. A summary is presented in table 1 below. The total asset figure of £1,268bn (the sum of physical assets plus other assets and equity investments) is quoted in the Scottish Government's White Paper (2013) as the 'net' assets to be shared if Scotland becomes independent.² This includes £745bn of physical assets including property in the UK and overseas and the infrastructure, such as

¹ The Convention was not ratified by any OECD country and so hardly constitutes a legal guide. Article 40 states "When part or parts of the territory of a State separate from that State, and form a State, and unless the predecessor State and the successor State otherwise agree, the State debt of the predecessor State shall pass to the successor State in an equitable proportion, taking into account, in particular the property, rights and interests which pass to the successor State in relation to that State debt."

² Scottish Government (2013a) pp 30, 341 and 554. 'Net' refers to net of depreciation.

the road network. The Net Asset Register published by HM Government (2007) provides a detailed list of the location and value of a limited number of UK property assets. The latest Register based on valuations in 2005 shows UK net assets of £337bn. Scotland's department buildings alone are valued at £23bn (which includes the Scottish Executive offices, its Agencies, public corporations, the NHS buildings etc.) Many of the fixed assets may have been expensive to build and provide important public services, but they are also illiquid and may have a low market value. Other assets include £210bn of financial assets such as deposits in banks and equity holdings in part state-owned banks and intangible assets such as for military licenses.

Table 1: UK Whole Government Accounts 2011-12 (£bn)

Liabilities		Assets	
Net public service pensions	1,008	Physical assets	745
Government financing	966	Other assets and equity investments	523
Other liabilities and provisions	641	Net liability	1,347
Total	2,615	Total	2,615

Source: HM Treasury (2013).

The WGA exclude natural resources, such as the countryside and environment, and, in particular, the remaining North Sea oil and gas fields, which would be keenly contested in negotiations. Maritime experts expect that the oil and gas fields will be allocated by location with the median line the most likely boundary. On this basis, an independent Scotland could receive up to 84% of tax revenues from the remaining reserves.³ The amounts involved are uncertain and disputed. According to the Office of Budget Responsibility (2013) (OBR) central forecast, the total tax yield between 2018-19 and 2040-41 is estimated at £56bn. If an independent Scotland is awarded a geographic share of the oil and gas fields, the tax yield would be £50.4bn in cash terms.⁴ This benefit to Scotland is mirrored by a tax loss to the continuing UK.

2 Public sector debt

Since the Union was created, all citizens of the UK have also benefited to a greater or lesser extent from the services and investments provided by the state. It is, of course, impossible to disentangle who gained what over gener-

³ HM Revenue and Customs estimate a geographic share of taxes to be equivalent to 79% of total revenues.

⁴ The OBR's range of estimates for the remaining tax revenues based on high and low scenarios for prices of £82bn to £43bn and production £73bn to £40bn. Cash terms means no discounting of future income.

ations or what the counterfactual would have been if the Union had not existed. If Scotland becomes independent, the new Scottish state will be expected to compensate the continuing UK state for being relieved of (i.e. no longer obliged to pay) its share of outstanding UK public debt at the date of independence⁵. The compensation is complex and raises three important issues.

- I. Which measure of existing UK public debt is appropriate?
- II. How would the public sector debt be divided?
- III. How would an independent Scotland assume its share?

2.1 Which measure of debt?

The amount of debt to be shared depends on the definition of debt. The WGA net liabilities of £1,347bn take into account the assets and include known future obligations. It is therefore the most coherent measure of the UK's obligations. This is a key point in the debate. It is often implied that the assets and liabilities match; this is not the case. Part of the liabilities have accrued due to current spending rather than by accumulating matching assets. The net liabilities in the WGA can be thought of as a counterpart to the Public Sector Net Debt (PSND) used by governments to frame fiscal rules. The approximate difference is that the former includes not yet paid out but owed public sector pensions as liabilities and public sector fixed assets. This does not mean that the UK issues this amount of debt on financial markets; many of the liabilities are not due to be paid until some date in the future. Yet when deciding at which price to buy government bonds, broader exposures such as pension liabilities and contingent claims⁶ are likely to be considered.

The amount of market debt that an independent Scotland would be likely to assume is some share of an updated measure of the outstanding government financing in table 1. The PSND is a narrow measure of financial liabilities minus liquid assets (the financial assets in the WGA include foreign exchange reserves and cash deposits) measured on a cash basis (so without accruals). Both the Treasury (2014a) and Scottish Government (2014) have used the PSND in their projections of fiscal sustainability. A broader measure of Gross Debt or Maastricht debt is more often used internationally and does

⁵ A payment was made to Scots at the time of the Acts of Union in 1707 (the 'Equivalence'), in theory to compensate Scotland for becoming jointly responsible for UK debt, but in practice reflecting the political situation at that time.

⁶ Contingent claims are government expenditures which will occur in the future under some conditions or if certain contingencies occur.

not allow for netting-off liquid assets or the exclusion of debts issued by other public bodies. We prefer the latter measure as a more accurate indication of funding pressure because, in practice, all governments require a stock of liquid assets and therefore netting them from a debt measure provides a low estimate of the amount of debt to be issued.

2.2 *How to divide the debt?*

Once the measure of debt has been agreed, the next issue is the basis on which it is to be divided. There have been two cases of ‘friendly’ campaigns for independence that provide some guidance: first, the separation of Czechoslovakia in 1993; and second, the vote against Quebec’s independence from Canada in 1995. So far as general principles can be drawn, fixed assets are generally divided on the basis of physical location while non-physical assets and liabilities are divided on some basis of ‘fairness’ or equity, of which two main measures are a population and ability to pay. This makes sense as most of the fixed assets are specific to the location. For example, there would be little point in the two sovereign states having shares in the National Galleries on the Mound and in Trafalgar Square.

The division of UK debts, whether net or gross of financial assets, would be an important negotiation. On a population basis, an independent Scotland would be responsible for 8.4% of the outstanding debt. The resulting gross and net debt burdens for Scotland are summarised in Table 2 below. Scotland’s initial gross debt to GDP ratio would be 86% or £143bn, while the PSND measure would be 73% or £121bn. The latter ratio is included in HM Treasury (2014) and Scottish Government (2014). The Scottish Government has suggested another approach based on what they call a ‘historic’ share since 1980.⁷ The key issues are whether starting in 1980 is reasonable and whether an ex post calculation is justified. For example, had Scotland kept the oil tax revenues, is it reasonable to assume everything else has been unchanged (e.g. would there have been a monetary union)? Another option is ‘ability to pay’. On this basis an independent Scotland would have a higher per-capita GDP including North Sea oil output and so would take on a greater share of public debt.

The Scottish Government (2014) has also raised the idea that the £375bn of assets bought for Quantitative Easing (QE) and held by the Asset Purchase Facility, a wholly owned subsidiary of the Bank of England, could be deduct-

⁷ See Scottish Government (2013a).

ed from the PSND.⁸ The apparent reasoning is that as the assets are held by one arm of the state, so they can be ‘cancelled out’ against liabilities elsewhere of the state. However, there are at least three serious problems with this reasoning. First, the assets have been bought by issuing another offsetting liability of the same value so there is no net asset holding. Second, when the assets mature new government debt will need to be issued by the UK government to repay the Bank of England. Third, the debt was incurred as the existing UK and, because the policy is temporary, the assets will be sold back to the public and the offsetting liability reduced. For these reasons we are very doubtful that the QE assets can somehow be ‘cancelled out’.

Table 2: Hypothetical debt burdens for an independent Scotland 2015/16

	Measure	Total debt	Independent Scotland	
		£bn	£bn	Debt/GDP%
Baseline	Maastricht	1,701	143	86%
	PSND	1,439	121	73%
Historic	PSND	1,439	109	64%

Source: OBR (2014) and authors’ own calculations. Note, the ratios assume an Independent Scotland is awarded a ‘geographic share’ of hydrocarbon assets.

2.3 How would Scotland assume its share of debt?

The precise means of transferring the debt is also of great importance. In a technical note, HM Treasury (2014) re-iterated its full responsibility for the issued stock of UK government debt. This ruled-out somehow sharing out the outstanding debt, which would have probably constituted a technical default.⁹ This leaves two broad options for the Scottish Government to compensate the UK. The first option is where Scotland pays the full amount at independence, which we call a ‘clean break’ option. One would need to take the maturity of the debt into account. A simple back of the envelope calculation, taking the duration of UK public debt at 8.5 years and 4.1% as the discount factor (average yield on 10 year UK gilts since 2000) reduces the present value of a population share of gross debt to £102bn. ‘Clean break’ implies the Scottish government pays the UK government £102bn in cash in

⁸ Quantitative easing involves the Central Bank buying an asset – usually government bonds – by crediting commercial banks’ reserves at the Bank of England. These reserves are a liability of the Bank of England. If the government debt held by the subsidiary of the Bank was somehow ‘cancelled’ this would imply its liabilities exceed assets.

⁹ This would have been the first default on UK debt since Charles I.

2016/17. However, the only sizeable and marketable assets, which could be used to repay a large share of the debt is the oil and gas reserves.¹⁰

The second option, noted in the Scottish Government's White Paper (2013), is that an independent Scottish government would commit to paying its share of interest and principal payments as and when they fall due.¹¹ We call this the 'IOU' option. The important issue is what this implies for the debt repayment schedule of an independent Scotland. In NIESR (2014) we follow Scottish Government's White Paper (2013) re-financing suggestion, which states "the Scottish government re-finances its agreed share of UK debt as it matures, based on the overall maturity profile of UK debt."¹² We took this to mean that if the UK's debt stock included, say, £1bn of five year gilts, and Scotland were responsible for 8.4% of the debt, then Scotland would pay the semi-annual interest on £84mn of the five year gilts and repay £84mn of the principal at the end of the five years. The same pattern would occur across the "overall maturity profile of UK debt". According to the WGA the total government borrowing due to be repaid within one year was £224bn in 2011/12.¹³

The amount of debt an independent Scotland would need to issue in its first year has three parts: the amount of debt to be re-financed as it matures (described above), plus interest on the remainder of the IOU plus enough to cover any primary deficit (fiscal deficit minus interest payments) which might be incurred. HM Treasury (2014) takes a far more lenient approach than NIESR (2014). The Treasury assumes a population share of PSND rather than gross debt and that only 5% of the debt matures in the first year (which is £72bn and so much less than approximately £224bn). Scotland's share of the re-financing element is therefore 5% of £121bn or roughly £6bn. The interest rate charged on the remaining £115bn is also at the UK borrowing rate of 4% and the primary deficit is assumed to be £5.4bn.¹⁴ The total amount of debt issuance in the first year of independent would be £16bn,

10 In NIESR (2013) we propose a debt for oil swap. Because the UK Government would find the volatility of the oil revenues easier to manage this would make sense from both sides of the debate.

11 Scottish Government (2013) pp 73 and 76.

12 See Scottish Government (2013)

13 See HM Treasury (2013) p16.

14 Using the UK borrowing rate means UK taxpayers would subsidise Scottish taxpayers (assuming an independent Scotland would have a higher borrowing cost). The primary deficit takes the CPPR (2014) figure of £9.5bn less £4.1bn of interest payments.

considerably less than the £23bn in NIESR (2014). A critical question is the cost at which an independent Scotland could borrow.

3 Borrowing costs

Even if an independent Scotland uses sterling, there is no reason to assume that it would have the same borrowing costs as the rest of the UK. For example, Euro zone countries have very different borrowing costs despite using the same currency. In NIESR (2013) we published an analysis of the expected cost of ten year Scottish government debt compared to UK ten-year public debt. We showed that an independent Scottish government would be likely to pay between 0.72% and 1.65% higher interest rates for borrowing at ten year maturity. The analysis shows that the most important factor driving this spread is the size of the country, a measure of the liquidity of the bond market. Liquidity describes how easily investors can buy and sell without impacting market prices. The large country size/liquidity premium reflects that an independent Scotland would be a much smaller bond market than the UK gilts market.

The higher borrowing costs would be another factor that would add to the higher debt issuance requirement in the first year of independence. The higher government borrowing costs would also be likely to lead to higher borrowing costs for households and businesses in an independent Scotland compared to the UK. However, the increase is not on a one-for-one basis. Private citizens generally borrow at shorter maturities than the government (e.g. mortgages are tied to short term interest rates). Therefore, private borrowing costs are likely to reflect differences in short term interest rates, which are likely to be much smaller than the ten year interest rates we estimated. The extent to which an independent Scotland using sterling would have higher borrowing costs than the rest of the UK depends on the nature of the currency arrangement.

With all of these debt figures fresh in the mind, we recommend readers turn to the chapter on [*The Scottish Currency Question*](#). We cannot stress enough the importance of considering the currency question in conjunction with the debt issues discussed above.

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The Scottish Currency Question

Angus Armstrong and Monique Ebell

The single most important economic question in the Scottish independence referendum is which currency arrangement would an independent Scotland use? By the term ‘currency arrangement’ we mean both the physical currency (i.e. the notes and coins) and the role of the central bank that issues the currency. The choice of currency arrangement matters far more than just the notes and coins in peoples’ pockets. It determines the menu of available economic policy options, the interest rates at which people borrow money and the capacity of the economy to deal with crises when they next occur.

There should be no doubt that if Scotland becomes independent, then the existing currency arrangement would come to an end. Both sides of the debate accept that the status quo is not an option. The Scottish Government proposes using sterling in a formal monetary union arrangement. It suggests a novel governance structure for the Bank of England where decision making is shared between two separate sovereign states. As the Bank of England is an institution of the UK, this would require the full support and participation of the rest of the UK. Yet the UK Government has made clear its view that this proposal would be ineffective and not in the interests of citizens in either state. Therefore, the electorate faces an extraordinary impasse on the most important economic question relating to the referendum.

Before assessing the possible currency arrangement options, it is important to consider how the economic structure of Scotland would change with independence.¹ First, it is widely assumed that an independent Scotland would be awarded 85% (a ‘geographic’ share) of the remaining oil and gas fields. Scotland would be a relatively large exporter and the UK would be a small importer of oil and gas. Second, an independent Scotland would be expected to take on a fair share of the UK’s existing public debt.² Assuming relative size of population is a fair measure, an independent Scotland’s share of gross debt would be £143bn or 86% of GDP. Third, the Scottish government would be responsible for all public spending, taxation and borrowing, and cross border state fiscal transfers would cease.

1 See Armstrong and Ebell (2014) on the division of assets and liabilities in the event of Scottish independence.

2 See our chapter in this volume on “[Assets, Liabilities and Independence](#)” for details on the division of the UK’s existing public debt.

What does this imply for the best currency arrangement for an independent Scotland? There are three widely discussed possibilities, each of which involves a different central bank structure. We consider the economic implications of each option below. Note, we do not consider the euro because this requires Scotland to have its own currency (and meet the Maastricht criteria) and so is not an immediate option.³

1 Option 1: Formal Monetary Union

A formal monetary union between two or more states involves using the same currency and some sharing of a central bank. Some monetary unions occur within a single sovereign state. The US is the obvious example where the Federal Reserve Board makes monetary and financial policy decisions for the whole US which is carried out by twelve regional Federal Reserve Banks. Monetary unions also exist between sovereign states. The nearest example is in Europe where national central banks delegate monetary policy for the euro zone to the supra-national European Central Bank (ECB).⁴

The simplest case for using a single currency comes down to a trade-off: using the same currency reduces the cost of cross border trade, but it also means the same interest rate for all states. The benefits are more likely to outweigh the costs if economic cycles are similar across states, so that the same interest rate is likely to be appropriate for both countries. Even if the economic cycles are dissimilar, but wages and prices are flexible and capital and labour can move freely, a common interest rate may not be harmful. The idea is simply that to the extent that economic cycles diverge, and so a single monetary policy is less appropriate, fully flexible markets will correct for any differences in unemployment between states. Finally, countries which share risks through a common tax system, common fiscal policy or a common welfare state, will also find it less costly to keep a common interest rate, even if their economic cycles diverge.

The UK Government argues that the UK is already a fully functioning monetary union, underpinned by a political union between all nations of the UK. Regional economies are deeply integrated, there are institutions for

3 Previous entrants to the euro zone have been required to successfully peg their own currency to the euro for at least 2 years as part of the Exchange Rate Mechanism-II (ERM-II). If Scotland uses sterling then this would require the UK government to peg the pound in the ERM-II which is unlikely to be forthcoming.

4 It is noteworthy that when the ECB was created it lacked authority over financial stability specifically because this may involve tax payers' money and there was no fiscal union states. See Folkerts-Landau and Garber (1992).

sharing risks, such as the welfare state and cross-border fiscal transfers, and a political union which allows interests to be expressed while ensuring agreements are enforced. Scottish independence would, by design, end political union and some risk sharing institutions which are made possible by pooling tax revenues, such as the Bank of England. There is also a large body of evidence to show that the amount of trade across sovereign borders is much lower than when no border exists.⁵ Given the different economic fundamentals, the UK Government argues that the case for a formal monetary union would be greatly diminished.

The Scottish Government argues that the degree of economic integration between the UK and an independent Scotland would still be a basis for a formal monetary union, even without political union. Its case rests on the extent of cross border interconnections, since the whole point of independence is to create political and fiscal autonomy. To mitigate the cost of having to accept a monetary policy of a foreign country, it proposes that "ownership and governance of the Bank of England is undertaken on a shareholder basis and the shareholdings reflect relative population size."⁶ This would give an independent Scotland possibly one of nine votes when the Bank of England sets monetary policy. System wide financial policy would be also be conducted by the Bank of England for both sides of the border and any losses would be apportioned between states after they have been incurred.

In our research we argue that the best choice of currency arrangement for an independent Scotland is very tightly linked to the share of UK public debt it would inherit.⁷ Put simply, the amount of public debt determines how stable a currency union would be. When a currency union collapses, the economic and social costs from financial disruption far outweigh the possible costs from exchanging currencies. According to the IMF (2012) the average loss in output relative to trend from financial crises in advanced economies is over 20% of GDP. These are losses which can take a generation to regain and are orders of magnitude greater than a possible increase in the cost of cross border transactions.⁸ Avoiding a financial crisis from a compromised currency system must be the overriding objective. Any currency arrangement

⁵ See HM Treasury (2013)

⁶ See Fiscal Commission Working Group (2013) paragraph 731 p126.

⁷ See Armstrong and Ebell (2013).

⁸ The Scottish Government has suggested that higher transactions costs from having a separate currency might be 1/10th of a percentage point. this would be equivalent to 0.04% of GDP for Scotland and 0.004% of GDP for the rest of the UK

which is not capable of withstanding unexpected events is vulnerable to capital flight and speculative attacks.

The level of public debt matters for the stability of a currency union because it can limit the policy options when a large negative shock occurs.⁹ Shocks are unpredictable events, such as a sudden drop in tax revenues from North Sea oil, financial market turmoil or much higher interest rates due to rising UK property prices. With its own currency, Scotland would be able to soften the blow of negative shocks by reducing its own interest rates. In a formal monetary union, however, Scotland would only enjoy lower interest rates or a weaker currency if it was in the interests of the rest of the UK.¹⁰ The more divergent the economies, the less likely these interests will be the same. The next option is to borrow more. This is where indebtedness matters. The Scottish government will inherit a large public debt burden and borrowing even more may prove difficult or expensive. The only option left is to impose more austerity. As we know, this can be politically unpopular and policy-makers might be understandably wary.

Would a formal monetary union be stable? If there were any doubts that Scots would not accept the austerity, investors would be less likely to continue lending to the Scottish Government. This is a slow form of capital flight which, once it starts, is very difficult to stop without a financial rescue from another government or even the IMF. In the case of the euro zone the ECB has had to turn a blind eye to international treaties and bail-out sovereign nations. The UK authorities are no doubt aware that it might unwittingly become the backstop. We can also look back to history. One of the only examples of a peaceful country break-up in recent times is the Czech and Slovak velvet divorce in 1993. The Czech and Slovak governments agreed to keep using the same currency, and to share the central bank. Capital flight forced the governments to abandon the monetary union after only 39 days.

2 Option 2: Dollarisation

Although the UK Government and the opposition parties have all ruled out a formal monetary union, an independent Scotland could use sterling on an informal basis, an arrangement popularly known as dollarisation.¹¹ Coun-

⁹ The arguments on debt and currency choice are based on work done by Velasco (1996).

¹⁰ For oil prices the interests of an independent Scotland and the rest of the UK would be in the opposite direction.

¹¹ We use the term 'dollarisation' to describe a form of currency arrangement rather than the currency.

tries which have dollarised can broadly fit into three categories. First, tiny city-states such as Andorra, Monaco and the Vatican use the euro with a special dispensation from the EU. Second, states in transition, such as Montenegro and Kosovo use the euro without EU agreement. Third, countries which had legacies of economic or political instability, the most famous examples being Panama, Ecuador and El Salvador. If Scotland were to dollarise, it would be by far the biggest and wealthiest country to do so.

The critical difference between a formal monetary union and an informal currency union is that Scotland would have no share of the Bank of England. It would have to accept that the Bank of England would choose interest rates and monetary policy to suit the rest of the UK, regardless of whether appropriate for Scotland or not. The concerns around financial stability when public debt is high are even greater under dollarisation than under a formal monetary union. The arguments laid out above about the instability of having limited policy options when monetary policy and currency policy are unavailable, and borrowing may be difficult or expensive, apply equally to dollarisation.

Central banks have a unique property of being able to create money. They are therefore natural providers of emergency liquidity to financial institutions (and governments) when citizens and investors lose confidence in their institutions. dollarisation, using the currency of another country but without shared ownership of the central bank, would leave Scotland without any own entity capable of creating money, and hence without a natural backstop for its banks. The Scottish Government would need to build up enough reserves through years of running fiscal surpluses or Scottish banks would need to be more cautious about their lending and the amount of capital they hold to make needing assistance very improbable.

The most likely outcome of dollarisation is that Scottish banks would migrate to the rest of the UK where they would have the backstop of a central bank. UK banks would then provide banking into an independent Scotland through a branch network. Since the supply of loans into a foreign jurisdiction is generally a riskier proposition than at home, the cost of borrowing by private citizens is likely to be higher in Scotland under dollarisation. Financial stability policies in Scotland would be decided by authorities in the rest of the UK and for the benefit of the rest of the UK.

3 Option 3: Scotland's own currency

The one currency option that an independent Scotland can unequivocally deliver is its own currency. Having its own currency and controlling its own interest rates would provide an independent Scotland with the greatest amount of flexibility when faced with shocks. The more flexibly the Scottish government could respond to shocks, the greater the stability of its macroeconomic framework. While we acknowledge that exchange costs for trade would rise if the rest of the UK and Scotland no longer shared a currency, these costs pale in comparison to the costs of financial instability due to a failed currency or monetary union. Moreover, many countries in Europe with similar wealth and population size (such as in Scandinavia) and dependent on neighbouring markets have their own currency.

The challenge is how to leave the current formal monetary union of the UK to create a new currency in an orderly way. Usually, breaking up a currency union involves stamping banknotes in the breakaway territory, and imposing capital controls to prevent people from spiriting 'old' currency across the border. However, Scotland already has its own distinctive banknotes, which would make the note-swapping mechanics of a monetary union break-up easier. However, it might still be challenging for a newly independent Scottish government to introduce a new currency. It would be far easier to introduce a new currency on the back of years of fiscal surpluses and balance of payments surpluses to give citizens and investors confidence that a new currency value could be maintained. This would require a marked, but possible, change in the direction of economic management.

There are other significant challenges. While private debt contracts – mortgages and loans to Scottish firms – could be redenominated into Scots pounds, Scotland's obligations to repay its share of the UK public debt would, at least initially, be denominated in UK pounds. Leaving the debt denominated in UK pounds would imply that any depreciation (loss in value) of the Scots pound would lead to higher interest and capital repayments to the UK in Scots pounds terms. These risks are likely to mean higher credit risk for UK banks. It would therefore be in the interests of the rest of the UK to support the Scottish Government to ensure that the transition be as smooth as possible.

4 Conclusion

The moral of the story was best expressed by Professor Michael Dooley: "Exchange rate regimes are born at conference tables and laid to rest in

foreign exchange markets.” Governments can choose whatever currency arrangements they wish, but private citizens will decide whether or not they are stable. As we approach the referendum it appears that we are heading towards the option of ‘dollarisation’ almost by default. Yet this is an option that the Scottish Government’s Fiscal Commission Working Group does not consider a “clear option for Scotland.” While introducing a new Scottish currency has serious transitional risks, over the long term it is the best option for prosperity for an independent Scotland.

Currency union or independence?

David Cobham

The question of what currency Scotland would use if it became independent is obviously of great importance and has assumed a large role in the debate. The SNP's chosen solution – a negotiated currency union with the rest of the UK (rUK) – has been discussed at length, mainly from the No side. But the Yes side has failed to address the key issues around the continued use of sterling, including the question of whether currency union is in fact compatible with a normal definition of independence.

The argument for a negotiated currency union rests heavily on the extent of economic integration between Scotland and rUK, that is the importance of cross-border trade (which is obviously higher relative to Scotland's national income than relative to that of rUK). Scotland has much lower trade with the eurozone, and that makes the adoption of the euro less attractive, even without the recent difficulties of the eurozone and the growth of anti-European sentiment in Scotland as well as rUK.

In addition, a negotiated currency union would avoid the costs of setting up the institutions necessary for the introduction of an independent currency – not just a central bank, but also the financial infrastructure required for the deep and liquid money market which is needed to facilitate a modern monetary policy operating primarily through interest rates. Keeping the pound sterling would also avoid the non-trivial problem of persuading people (these days they can't be forced) to use the new Scottish currency rather than continuing to use the sterling they have to start with, supplies of which could be regularly replenished by the cross-border trade unless action was taken to stop it. On the other hand a separate, floating, Scottish currency might provide a useful buffer against external shocks, especially oil price shocks: if it appreciated in response to oil price rises, and depreciated in response to oil price falls, that would tend to smooth out the upward and downward fluctuations in Scottish income.

The case for continued use of sterling can also be related to the 'social union' between Scotland and rUK which the Yes side says will continue after independence. Strangely enough, one of the early attempts to synthesise the various criteria put forward by economists for defining an 'optimum currency area' – an area which should have a single currency within it, but one that is different from the currencies of other areas – was 'social unity'. This was thought of as a function of two factors: first, the extent to which real wages in

different regions move together (if relative real wages do not change when the exchange rate changes because nominal wages adjust in line with prices, then the ability to change the exchange rate cannot affect competitiveness and is of little value); and, second, the willingness and ability to make fiscal transfers between regions so as to offset regional recessions and booms.

However, the crucial arguments about a negotiated currency union are these: that it would be in rUK's interest only if there were severe constraints on Scottish fiscal policy, and only if adequate arrangements were put in place to safeguard financial stability; but if these constraints and arrangements were accepted it is not clear whether Scotland would still be really independent.

The fiscal policy constraint issue is one which has been discussed in different contexts for many years. It was an important element in the debate on European monetary union (EMU) from the 1980s onwards. Fiscal limits (3% maximum for the budget deficit as percentage of national income, and the ratio of debt to income to be less than, or at least approaching, 60%) formed part of the entry requirements to EMU under the Maastricht Treaty. And the Stability and Growth Pact whose first version was agreed in 1997 was designed to incorporate those limits as permanent constraints within EMU. However, for a variety of reasons the constraints did not operate as effectively as they should have done, and this was one of the key elements in the eurozone crisis which erupted in the wake of the global financial crisis.

The financial stability issue, on the other hand, was neglected in many countries before the crisis. In the UK, for example, the Bank of England paid little attention to financial stability for which it was only partly responsible under the existing arrangements, and its immediate, though not its later, response to the crisis was poor. In the eurozone, financial stability was a national central bank issue and there was more or less no mechanism for coordination, and in addition the European Central Bank (ECB) had no formal role as a 'lender of last resort'. This meant that the ECB was not in a position to provide short-term emergency funding to a particular bank which had an illiquidity (cash flow) problem, that is it could not meet its immediate obligations because its assets could not be realised quickly without large capital losses.

Last resort lending is widely agreed to be an essential element in a central bank's ability to address financial crises in the short term. But dealing with banks in trouble also typically requires the injection of equity capital into the bank, to rebuild its capital when that has been reduced by losses, and that

can only be done by governments which have the ability to raise funds through taxes.

The effect of the eurozone crisis has been to make policymakers even more aware of the problems which can arise from fiscal and monetary decision-making being located in different places. Some European opinion has responded by attempting to outlaw budget deficits of any kind, which would mean that no fiscal stabilisation policy is feasible. But even 'moderate' opinion in rUK (and the rest of Europe) would insist on very tight limits on deficits for a post-independence Scotland in a negotiated currency union: in that case Scotland's fiscal policy would be tightly limited, and since it would have no independent monetary policy to deal with shocks, stabilisation would be very difficult and booms and recessions might be aggravated.

The financial stability arrangements required in such a union would be highly complex. There would need to be prior agreement on the sizes of the Scottish and rUK governments' relative contributions to financing bailouts of Scotland- and rUK-based financial institutions, together with agreement on procedures: who takes the crucial decisions, when and how. And because rUK would obviously have a much larger share in financing bailouts the rUK government would naturally and reasonably be inclined to make sure that it had both overall control and a guarantee of a substantial Scottish contribution to any bailout nailed down in advance.

These issues have simply not been addressed by the Yes side. We do not know what fiscal constraints they might accept, or what financial stability arrangements they would favour. Instead, the Yes camp just asserts that post-referendum 'rational' London politicians will understand that it is in the interest of the rUK to agree to the kind of currency union which the SNP prefers and therefore they will agree to it. But this assertion of 'rationality' on the part of politicians and governments is unconvincing.

Economists have frequently – more frequently since the crisis – been criticised for assuming that all economic agents act 'rationally', that is, they take appropriate actions to enable them to reach clearly-defined and well-understood objectives. This assumption is convenient (all too convenient, some might say) in many contexts, because it saves the trouble of modelling what agents want, their perceptions of these desires and their understanding of the mechanisms that might enable them to fulfil them. But anyone who has spent time analysing the decisions of policymakers knows that policymakers spend a lot of time trying to work out the mechanisms concerned, that they are often unclear about what they really want, and that all sorts of non-

economic and non-‘rational’ factors influence their decisions. There is therefore something very odd about politicians assuming other politicians are rational in this way.

However, if a negotiated currency union, which in some ways replicates the pre-independence arrangement, is so desirable, and if a real ‘social union’ exists between Scotland and rUK (as it certainly does with respect to the northern and more peripheral parts of rUK, even if there is less social union with the outside-London ‘Home Counties’), then it does not make sense to ‘dis-integrate’ the UK in a way that leaves Scotland with a cosmetic but in reality very limited independence. It would be better to restructure the constitutional arrangements between the different regions of the UK in a federal direction, as many are now beginning to propose.

The Scottish Economy under Independence

Andrew Hughes Hallett

Scots will vote for, or against, independence from the rest of the UK on 18 September 2014. Although the vote is apparently a straight yes/no question, there are three possible outcomes: yes, no, or a negotiated increase in local autonomy – in effect a form of federalism – as the Prime Minister, and senior figures in all three unionist parties, have made clear in recent policy statements. In this they agree: the status quo cannot continue.

1 Why we might expect better outcomes from local policy choices

Oates decentralisation theorem states, “in multilevel governments, each level of government (including the central government) will maximise social and economic welfare within its own jurisdiction”¹. That automatically provides a higher level of welfare than in a regime where a government provides a uniform set of policies/public goods – since, having additional choices, local policymakers could always replicate the common policies if they wished. In general they won’t. It is *always* better to tailor policies to fill local needs. Decentralisation will therefore produce better outcomes for all – subject to not devolving so much as to create diseconomies of small scale or adverse spillover effects on the delivery of public services or the performance in other sectors of the economy.

2 An analytic framework

Faced with the need to create an economic policy framework from scratch, we have to start from a system that ensures the economy’s financing needs, represented in the identity,²

$$S - I = (G - T) + (X - M)$$

are always satisfied. That is, the economy must have the capacity to manage three imbalances: the private financing (savings-investment) gap, the fiscal (public spending-revenues) gap, and the foreign financing (trade) gap. This in turn implies we need financial regulation, sustainable fiscal rules, and a currency/monetary policy choice.

1 Oates W E (1972), “Fiscal Federalism”, Harcourt, Brace Jovanovich, New York.

2 S denotes savings, I investment, G public spending, T government revenues, and $X - M$ represents the current account balance.

Scotland as an independent economy, or an economy with fiscal autonomy, or as a devolved economy within the meaning of the 2012 Scotland Act, will be no exception.

The first point is that the UK and Scottish governments are engaged in a series of parallel and overlapping policy games. A parallel game is where the same opponents play each other in more than one arena: in this case, in the political and economic arenas. An overlapping game is where each player is engaged against different opponents, where the strategies pursued in one game limit the strategies available in another. In this case, an economic game where the UK and Scottish governments play against each other, but also against firms in the private sector. That obviously impinges directly on the parallel economic and political games.

The solution of these games shows how the threat points – that is the best outcomes that each player can achieve for themselves without cooperating, accommodating or otherwise making concessions to the other player – would alter from the *status quo ante*. To illustrate, the currency choice poses a significant dilemma for both governments. The outcomes in the absence of cooperation, concessions or a formal currency union, would lead to a considerable improvement on the current status quo for Scotland. But rUK would inevitably suffer.

To see this, one has to recognise that the UK government can do nothing to prevent Scotland taking the pound if she wishes³, any more than the US government can stop Ecuador using the dollar; or Montenegro the Euro. All rUK can do is deny Scotland any influence over policy at the Bank of England. But that just reproduces the current position. Nothing would change for Scotland if London were to refuse to share sterling and monetary policy, since it doesn't share them now. Given independence or fiscal autonomy, the only difference would be that Scotland gets to add tax powers to the existing monetary set up. She would therefore be unambiguously better off: more policy instruments to serve the same targets – instruments that can now be designed to fit Scotland's specific needs, rather than the UK average.

But rUK would be worse off; no better off since monetary policy would be set exactly as now, but worse off to the extent Scotland uses her new tax powers to her own advantage and rUK loses certain tax revenues/subsidies.

³ To take just one example of the currency options open to Scotland. This example is used to establish the status quo threat point. It does not imply that it would be the best option short of full monetary union.

3 Financial regulation and liquidity access

The difficulty with adopting sterling *unilaterally* would be the loss of access to liquidity (cash on hand), and an absence of regulation for Scottish financial firms. However Scotland could "opt-into" the EU banking union. This is a key point, giving the financial sector easy access to liquidity via both the Euro and Sterling markets and to wider protection from financial crises (a wider pool of rescue funds) for everything else. The threat point of the economic game shifts again, with consequences because to block monetary cooperation would make a fiscal union look financially risky for firms in rUK.

Facing a tight general election in 2015, it is hard to believe the UK government would choose to deny a currency union when the consequences would make their own supporters worse off, but Scotland better off. This may explain why conflicting messages are coming from the Prime Minister's office and from George Osborne as to whether a currency union would be negotiable or not. After the referendum, there will be no incentive for either side not to agree a currency union as long as effective fiscal controls are put in place on both sides. Since the Scottish fiscal position will be stronger (a smaller public debt ratio, and a budget surplus when national accounts are recalculated to reflect the changed flows of taxes and public spending as explained below) this would not be hard to arrange.

It would be harder to persuade the UK government whose fiscal position will be weaker and a possible threat to Scotland. Sterling without monetary union may therefore be a risky option for Scotland *unless* combined with an opt-in to the EU's regulatory and banking union with formal ECB backing; as Denmark, not a Euro member, has done. Faced with uncertainty and mixed messages from the UK government, deeper liquidity markets, wider rescue funds, and a more developed banking union, some financial firms could feel safer in Scotland.

4 Fiscal imbalances

Under independence or fiscal autonomy, the loss of fiscal transfers from London will be more than compensated by the repatriation of tax powers; that is a restoration of a diversified set of revenues and stabilisation mechanisms, supplemented by an oil fund to stabilise oil/gas revenues. The currency union issue is important here because research on optimal currency areas shows that the bulk of risk sharing in mature currency unions is borne

by cross-border asset holdings or financing loans. Risk sharing is therefore best preserved if a currency union is maintained.

The Office for Budget Responsibility estimated Scotland's fiscal deficit to be 5.2% of GDP in 2013/14 – that is *current* spending relative to combined offshore and onshore GDP. Many people quote larger figures because they include capital spending, to be paid for by future revenues, and then exclude offshore GDP – the obvious source of future revenues.

Under independence, this deficit forecast would have any increases in North Sea revenues added in (an extra £1.5bn)⁴; plus taxes currently paid to London by cross-border commuters (£1bn, estimated by Oxford Economics); the return of subsidies made to rUK pensions (£1bn, reflecting the lower life expectancy in Scotland); the return or part-return of debt interest payments made to the UK treasury (£3bn, using historical debt); plus gains from defence restructuring (£0.5bn); the return of Scotland's share of quantitative easing assets at the Bank of England (£1bn) and subsidies made to rUK housing benefit where housing costs are higher (£0.5bn).⁵ Those revenue and spending reallocations imply a fiscal surplus of £1bn, or 2/3% of GDP, before policy changes or new taxes are introduced.

Debt: taking a share of UK public debt is resolved by the UK government's announcement that it would assume responsibility since it holds the legal title. So Scotland could start with no debt and no debt repayments. The possibility remains that Scotland might agree to assume a share to create a cooperative start to the fiscal independence framework, but it is not required. Not to assume any debt would raise the UK's debt ratio to 106% – about the same as Italy's debt at the start of the crisis.

The compromise of Scotland's historical debt, a figure obtained by restoring past budget surpluses contributed by Scotland to Scotland's population share of UK debt, would leave Scotland with a debt ratio of 45% or half its population share of overall UK debt.

⁴ Forecasted oil revenues of £3.2bn are included in the OBR figure; the extra reflects forecasts made by the oil and gas industry itself for the additional output expected from new investments of £14bn in 2012-14.

⁵ These figures are approximate, but reflect fiscal flows that can be traced through the 2013 OBR forecasts; Bell, Comerford and Eiser (2014); "Funding Pensions in Scotland" National Institute Economic Review (2014); and Briefing Note 139, IFS (July 2013). Defence restructuring is from Scottish Government announcements.

5 Credit markets and bank regulation

If existing models for predicting risk premia for Scotland are correct, then the absence of material deficit or debt levels would lead to lower interest rates in Scotland than rUK after an initial adjustment. Combined with a separation of private from public risk (the banking union being used to resolve the former, a fiscal commission the latter), this would *lower* the market rates in Scotland. Whether that is realistic is yet to be seen; it depends on the supply and demand for financing flows in other sectors, their spillovers onto fiscal imbalances, and on policy changes on either side of the border. But the combined effects of the new regulatory system – that is the UK Banking Reform Act, or the EU banking union – will reduce financial assets under Scotland's supervision to about the level of GDP, but leave rUK more exposed.

6 Fiscal rules

The implication of this is that the UK government's refusal to entertain the idea of a currency union is more a fear that Scottish fiscal policy might become expansionary and unsustainable, than a fear of lost political control. That is legitimate given that the identity at the start applies to any common financial zone; unrestrained expansions of fiscal deficits easily cause higher interest rates and liquidity stops/capital reversals in the private or foreign capital markets – and ultimately to default. This may require taxpayer bail-out funds to stabilise those markets and re-establish credit, but creates an incentive for fiscal policymakers to free-ride.

While true, it is important to note that: a) this argument cuts both ways, the UK with weaker fiscal balances could just as easily disrupt markets in Scotland; b) while a unilateral adoption of sterling would remove any moral obligation to bail out Scotland's fiscal behaviour, it does not rule out or reduce the chances of disruptions or liquidity shortages in either place. Hence a better solution is to impose fiscal rules, demonstrably enforceable and overseen by an independent fiscal commission acting as monitor and fiscal regulator of last resort, to separate public from private sector financing risk:

- (a) Discretionary private resolution under the relevant banking union; currently the national regulators with locally incorporated subsidiaries as required by the EU, Vickers, UK conduct regulation, Basel III and the UK Banking Reform Act. That implies a jointly owned and operated EU/UK rescue vehicle for the private sector.

- (b) Public bail-outs ruled out. A graduated debt warning system, and “chapter 11” restructuring process under a Fiscal Commission or IMF administration in cases of impending default, could be substituted instead.

Sensible fiscal rules would include debt targeting, implying a primary surplus budget rule and a golden rule of public capital financing. The UK has used similar rules in the past, but no longer does so. Balanced budget rules (a fiscal compact) are not recommended as they are neither necessary nor sufficient for maintaining sustainable debt; nor is it possible to calculate structural deficits reliably in real time. Expenditure/revenue rules (austerity measures), popular in some quarters, have been widely criticised for being counterproductive because, by operating on one side of the fiscal imbalance, they damage the other side; and because they miss the source of the problem if other financing imbalances at the start are pressing.

7 Conclusion

Fiscal rules and banking union membership remove the chances of a separate financial crisis. There are only two ways such crises could happen in a currency union: a sterling crisis, or a Scottish banking crisis. The first, as nearly hit us in 2009-11, would involve everyone just as it would now. The resources for resolving it would be the same, exchange rate adjustments included. So the chances of survival are the same. Second, with the Scottish banks 95% owned and operated in England under the changes brought about by the 2013 Banking Reform Act, Scotland would not be affected alone or even majority affected. Indeed that is the whole point of a banking union in the first place. The only difference is that we might be in a larger resolution mechanism.

The Border Effect and Scottish Independence

David Comerford

1 Introduction

The border effect is the empirical regularity that trade is much higher within countries than across national boundaries. This clearly has some relevance for the economics of Scottish independence, but how much and what exactly is this relevance?

In Comerford & Rodriguez Mora (2014), I used a calibration approach to measure bilateral border frictions between many countries and between many regions within countries (where data is available) using a gravity model of trade. Within this model we can conduct policy experiments, and report the model implied productivity or welfare consequences. The results from this work are consistent with the standard results from the literature on the border effect (for example McCallum (1995), and Anderson & van Wincoop (2003)): as shown in Figure 1, we observe that border frictions are systematically higher between the countries of the EU compared with the border frictions between members of other continental scale federations that form single nation states, like the states of the USA or the provinces of Canada.

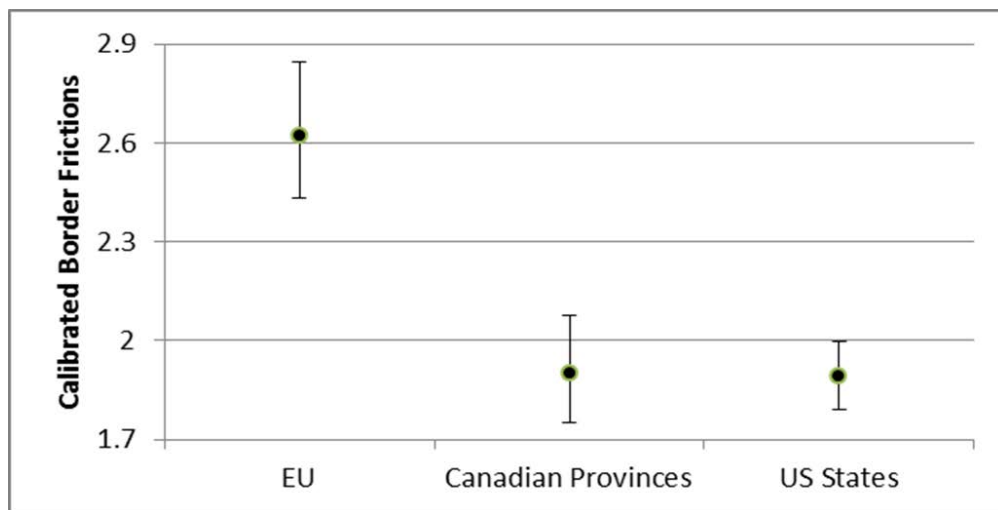


Figure 1: mean bilateral border frictions compared¹

¹ Figure 1 shows how the mean bilateral border frictions (in notional model-based units) compare between three continental scale federations: the EU, the USA, and Canada. Border frictions are systematically lower in the USA and in Canada. Given the continental scale of all three of these federations, physical distance does not explain this difference. McCallum (1995) and Anderson & van Wincoop (2003) showed that the US-Canada border had a strong effect in limiting trade between US states and Canadian provinces, so while language

2 Viewing Scotland as if it were an independent country

The patterns of trade exhibited by Scotland are abnormal in a European context.

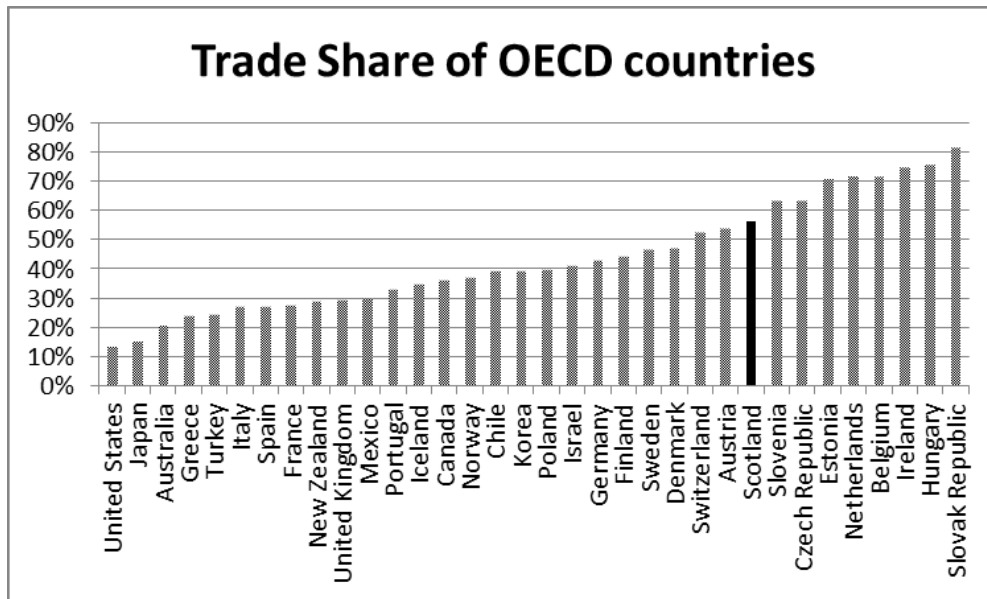


Figure 2: trade share of OECD countries²

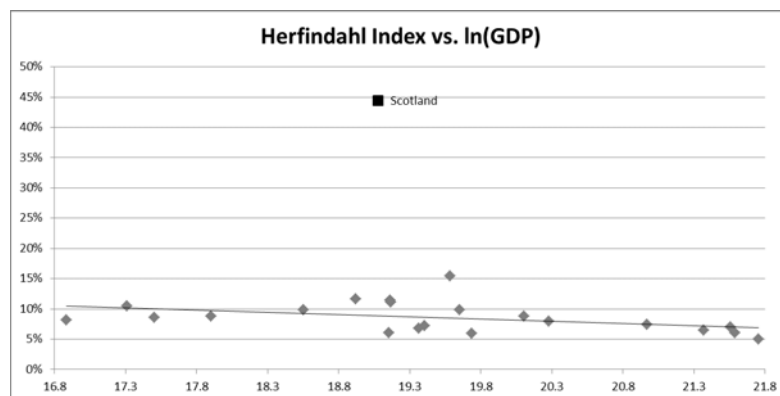


Figure 3: Herfindahl index versus log GDP³

diversity likely explains some of the difference between the EU and the USA/Canada, the fact that the EU is a group of countries rather than a group of regions within a single country likely also contributes to this difference. Source: Comerford & Rodriguez Mora (2014).

2 Figure 2 shows the average of imports and exports divided by GDP for the OECD countries (excluding Luxembourg for whom the figure is over 100%) and Scotland, in rank order. Source: Comerford & Rodriguez Mora (2014).

3 Figure 3 shows a Herfindahl Index of trade concentration for EU countries. A value of 0% corresponds to perfectly diversified trade, while a value of 100% corresponds to trade only with a single trading partner. The values are shown plotted against GDP since we may

Figure 2 above shows that Scotland is a relatively open economy, with trade openness akin to many of the small successful economies of north-west Europe that the Yes campaign compares to Scotland. However, Figure 3 shows that Scotland's trade is highly concentrated with the rest of the UK (rUK). This level of trade concentration is extreme when compared with other EU countries. This is the hallmark of having relatively frictionless region-region type borders with a single trading counterparty, and frictional country-country type borders with all other potential trading partners. There are no pairs of independent countries in the world which concentrate their trade in the manner seen for Scotland with respect to the rest of the UK.

3 How will integration with rUK change on independence?

Given the systematic difference between the border frictions within and between countries, and the anomalous pattern of trade currently exhibited by Scotland, we cannot expect the border frictions between Scotland and rUK to remain as they currently are. We measure the border frictions between Scotland and rUK as being of the relatively frictionless region-region type. In the long run, whilst we may expect Scotland and rUK to remain close trading partners, after independence this relationship must eventually come to look like the relationship between two independent countries rather than between two regions of the same country. Membership of international free trade areas like the EU or the EEA does not guarantee frictionless trade – unless perhaps we are at the start of some dynamic process which ends with a United States of Europe, and with border frictions between EU countries at a similar level to those observed between US states.

In Comerford & Rodriguez Mora (2014), we proposed that a suitable counterfactual for the Scottish-rUK border on independence is perhaps the calibrated Irish-UK border friction. Ireland may be a suitable counterfactual since both Scotland and Ireland share a common language with the rUK, and Ireland is a former member of the UK. Using Ireland as a counterfactual could be argued to underestimate the costs of increased trading frictions because Ireland is an exceptionally open economy by standards of other OECD members (compare costs if Scotland instead took on the frictions associated with the Spain-Portugal border in Figure 4), but it could be said to

expect small countries to both trade more, and also perhaps to concentrate their trade more with a suitable trading partner. The negative trend confirms this intuition, and so as a small country, we may expect Scotland to show a high Herfindahl index – but the observed value is higher by orders of magnitude over what we might expect given the trend. The reason that Scotland's value is so high is the extremely high concentration of its trade with rUK. Source: Comerford & Rodriguez Mora (2014).

overestimate the costs since, unlike Scotland, trade in goods between Ireland and the UK is largely across a sea.

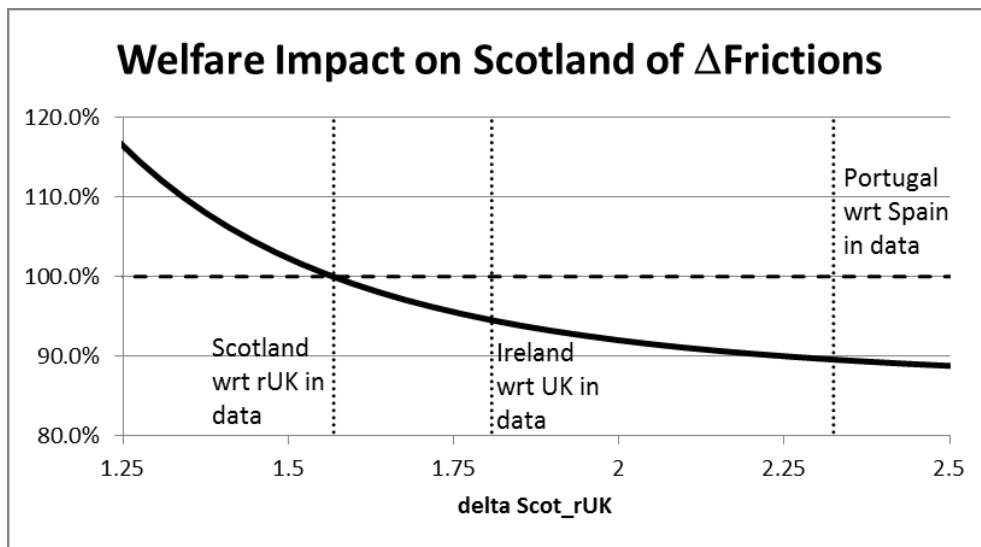


Figure 4: welfare impact on Scotland⁴

The impact of performing this counterfactual exercise is a function of assumed parameters, but the central estimate in Comerford & Rodriguez Mora (2014) is a reduction in Scottish GDP of 5.5%. This is calculated by keeping the “model Scotland” identical to its calibrated position in all respects except that we change its border frictions with rUK to those of Ireland with UK. This is in a model which embeds common economist understandings of gains from integration, so this exercise is only capable of generating costs. This is (emphatically) not “the impact of independence on Scotland's GDP”. Many other things will also change and the overall impact is perfectly conceivably positive. The point of Comerford & Rodriguez Mora (2014) is to show that if we look at entities which are part of nation states as if they were nation states, then there is something anomalous about the patterns of their trade: they are anomalously integrated with the other parts of their nation state. Independent countries do not behave like this. Since we tend to view trade and integration as positive aspects, then reducing integration in a model can only ever produce costs without benefits. Of course benefits could arise, however given the research question of Comerford & Rodriguez Mora (2014), I don't have a theory for why other changes would occur - this is not

⁴ Figure 4 shows how Scottish productivity changes as Scotland-rUK border frictions (in notional model-based units) change. So if the Scotland-rUK border keeps the border frictions measured in the data, then its productivity is 100% of the productivity as measured in the data. If Scotland takes on the measured Ireland-UK border frictions, then its productivity is 94.5% of the productivity as measured in the data: this is the source of the 5.5% cost figure. Source: Comerford & Rodriguez Mora (2014).

to say that such theories don't exist, or that we should not expect these other changes.

The impact of a completely autarkic Scotland, using the same parameters as used to generate the 5.5% cost, is a reduction in Scottish GDP of 20.9%. The very close trading relationship with the rest of the UK therefore accounts for more than a quarter of the total Scottish gains from trade, and this proportion is relatively independent of parameters⁵. The implication is that, unless we suppose that being in the union increases trade frictions between Scotland and the rest of the world, sharing a state with rUK promotes economic integration, and independence for Scotland will be associated with a reduction in Scotland's economic integration into the world economy.

4 Scotland's integration with the rest of the world

Economic integration and gains from trade can clearly be achieved by having a large country that trades a lot within its own borders. Conversely, economic integration can also be achieved in a small country that is open to the rest of the world. Is there any evidence for the impact of Scotland's union with rUK on Scotland's trade with the rest of the world? Figure 5 shows the border frictions for Scotland and for the OECD countries with respect to their largest trading partners, and with respect to the rest of the world (i.e. excluding their largest trading partners). We see that Scotland's border friction with its largest trading partner (rUK) is abnormally low compared with every other country in the OECD's frictions with their largest trading partner. Conversely, Scotland's border frictions with the rest of the world are in line with the equivalent measures for the other countries of the OECD. Therefore, we cannot state, when compared across the OECD, that Scotland appears to be substituting close links with rUK for frictional trade with the rest of the world. On this comparison, it appears that Scotland's closeness to rUK enhances its economic integration with the world.

The pro-independence side of the referendum campaign has consistently pointed to the other small nations of north Western Europe (the Nordics plus Ireland, Austria and Switzerland) as suitable benchmarks for an independent Scotland. Their incentive in this regard is clear since in terms of income per capita and in terms of the distribution of income or wealth they compare very well to Scotland and to the UK. How does this comparison look when

⁵ It could be that trade is not valuable, and that both the cost of Scotland taking on Irish border frictions, and the cost of complete autarky, are very low. It would still be the case though that the integration gains from low border frictions with rUK account for more than a quarter of the total Scottish gains from trade.

we look at trade and economic integration? We can see from Figure 2 that, with its extreme integration with rUK, Scotland is more open than all these countries with the exception of Ireland. We can also see from the left panel of Figure 5 below that Scotland has much lower frictions with its largest trading partner than any of these nations do with theirs (Germany in all cases except Ireland and Norway for whom it is UK). However, Figure 6 overleaf does indeed show that these countries consistently have lower border frictions with the rest of the world excluding their largest trading partner.

Scotland is the clear outlier with the most frictional external trade. The pro-independence campaign therefore would presumably argue that, as the level of Scottish-rUK integration diminishes to the level of Irish-UK integration, the level of Scotland's integration with the rest of the world may increase – at least to the average level seen in this group. It is important to be clear as to the evidence presented in Comerford & Rodriguez Mora (2014): the level of integration between Scotland and rUK is exceptional in OECD terms, no independent countries integrate to this extent; the level of Scottish integration with the rest of the world is slightly below average in OECD terms, but not exceptional. We contend that Scottish rUK integration will decrease, but increasing the level of integration with the rest of the world should certainly not be seen as automatic: if there were some automatic mechanism operating here then we would have to question why some independent countries (e.g. Portugal) do not achieve this level of economic integration.

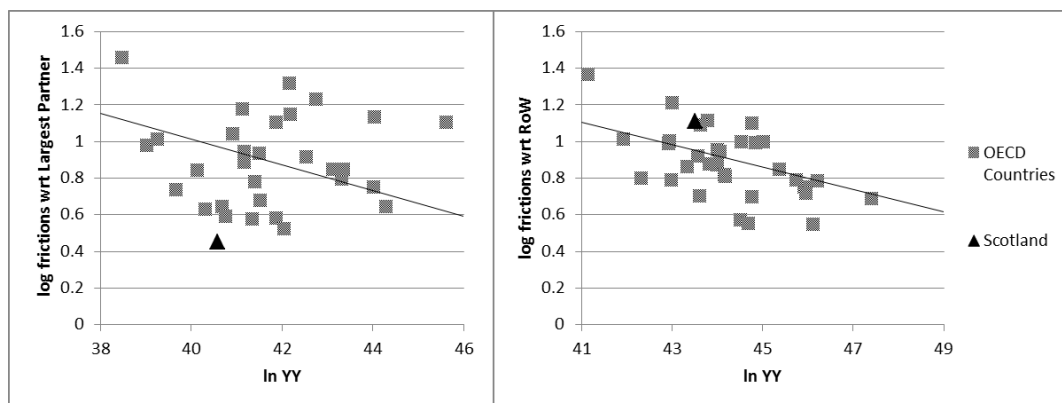


Figure 5: scatterplot of log border frictions against combined GDP⁶

⁶ Figure 5 shows the natural logarithm of the measured border frictions (in notional model-based units) against the combined GDP of the trading parties: country & largest partner in left panel; country & rest of the world excluding largest partner on right panel. It is necessary to control for the GDPs since there is an expected relationship between size and measured frictions. Source: Comerford & Rodriguez Mora (2014)

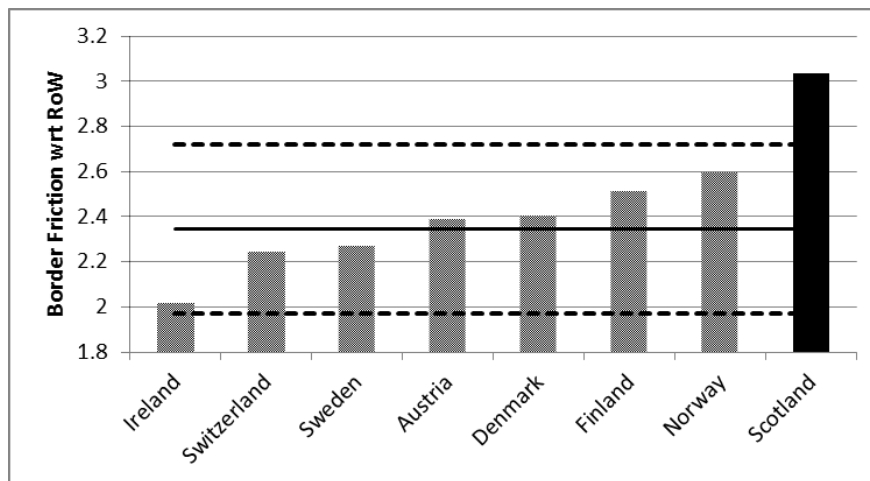


Figure 6: measured border frictions excluding largest trade partner⁷

It is worth evaluating the scenario in which Scotland's integration with rUK declines (to Irish levels) at the same time as some reasonable increase in Scotland's integration with the rest of the world (to the average of this highly performing group of north Western European countries). This provides some quantification of the plausibility of claims that Scotland will benefit economically from independence: if we base an optimistic scenario upon the pro-independence side's selection of suitable comparators, and we still find costs on independence, than perhaps any claim of benefits from independence could be strongly disputed. However, I do not find this: the overall impact on Scottish GDP of a decline in integration (to Irish levels), combined with an increase in Scottish integration with the rest of the world (to average small north Western European levels), is an increase of 3.5% i.e. a boost to overall economic integration.

The low border frictions with rUK are clearly an artefact of sharing a state and independence will reduce economic integration between Scotland and rUK. Comerford & Rodriguez Mora (2014) makes a strong case that Scotland's trade concentration WILL fall in the long run after independence. Those who claim that Scotland will become a typical small north Western European independent country can claim though that independence could credibly be associated with a higher overall level of economic integration because Scotland also has the scope to improve its external trade position (given the comparison with the subset of OECD countries that the pro-independence side typically choose).

⁷ Figure 6 shows measured border frictions (in notional model-based units) between the country & the rest of the world excluding their largest partner. Source: Author's calculations using methodology of Comerford & Rodriguez Mora (2014)

5 The dynamics of changes in border frictions

What are the dynamics of these changes? Scotland's border frictions with rUK will rise – but this is not because tariffs are going to be imposed or border posts are going to be erected. Rather, it will be because the business community of the future does not share the same social and business networks with its counterpart south of the border, and because of regulatory divergence. Both of these effects take time, and likely occur over generations rather than years – although there is the possibility of trade disruptions and consumer boycotts etc. if the negotiations over independence become particularly fractious. We do not study the possible dynamics in Comerford & Rodriguez Mora (2014). However, HMG (2013) illustrated the time that border effects might materialise over, with reference to the UK share of Irish trade time series, shown in Figure 7. This shows that Irish-UK trade, as a share of total Irish trade, fell post-independence to current levels over timescale of perhaps 80 years. If this timescale is used as a guide for Scotland's post-independence experience, then the 5.5% cost of the Scotland-rUK border coming to resemble the current Ireland-UK border could be thought of as a -0.1% increment to Scotland's growth rate i.e. cumulative, but indistinguishable within normal fluctuations on an annual basis.



Figure 7: UK share of Irish trade⁸

If Scotland votes for independence then its trade concentration will fall because its integration with rUK will eventually fall. If Scotland achieves the favourable scenario suggested by the pro-independence side then it will effectively be substituting trade with the rest of the world for its current

8. Source: HMG (2013) page 62.

trade with rUK. It cannot be assumed that this substitution will occur automatically – abstract changes to international border frictions do correspond to real changes in the real world. The business surveys conducted by MacKay (2014) find that *"companies that have a majority of their trade in the rUK rather than in Scotland (often at a ratio of 90% to 10%) appear far more affected [identify more risks than opportunities] than companies with the majority of their trade either in Scotland, or globally. ... companies which were ... trading predominantly in a global market appeared to be less affected by the constitutional debate than PLCs with significant trade in the rUK"*. This is exactly what we might expect given the scenarios in which Scotland does badly or well out of independence:

- Scotland does badly (5.5% of GDP cost) if its border with rUK becomes as frictional to trade as the current UK-Ireland border, and
- Scotland does well (3.5% of GDP benefit) if its border with rUK becomes as frictional as the current UK-Ireland border, at the same time as its border with the rest of the world becomes as frictional to trade as the current average for small northern European countries.

In both cases trade with the rest of the UK falls substantially: companies for whom this is the entire focus of their business are correct to think that independence implies risks. But companies which operate internationally may see opportunities: Scotland's trade with the rest of the world could improve.

What are the dynamics of these changes? Scotland's border frictions with rUK will rise – but this is not because tariffs are going to be imposed or border posts are going to be erected. Rather, it will be because the business community of the future does not share the same social and business networks with its counterpart south of the border, and because of regulatory divergence. Both of these effects take time, and likely occur over generations rather than years – although there is the possibility of trade disruptions and consumer boycotts etc if the negotiations over independence become particularly fractious. We do not study the possible dynamics in Comerford & Rodriguez Mora (2014). However, HMG (2013) illustrated the time that border effects might materialise over, with reference to the UK share of Irish trade time series, shown in Figure 7. This shows that Irish-UK trade, as a share of total Irish trade, fell post-independence to current levels over timescale of perhaps 80 years. If this timescale is used as a guide for Scotland's post-independence experience, then the 5.5% cost of the Scotland-rUK border coming to resemble the current Ireland-UK border could be thought of as a -0.1% increment to Scotland's growth rate i.e. cumulative, but indistinguishable within normal fluctuations on an annual basis.

6 Conclusion

Clearly union was in Scotland's economic interests in 1707 as the integration benefits of access to the English empire were extremely valuable. Back then, the only way to achieve the productivity gains associated with large markets was to operate within a large country. This is not so clear in 2014 where the promotion of economic integration is the reason d'être of the EU and WTO. These organisations have not led to trade between countries becoming as frictionless as internal trade, but they have reduced the advantages of large country size, such that this is no longer a dominant feature of the calculus. Even if the actual impact of independence was simply the 5.5% cost estimated in Comerford & Rodriguez Mora (2014), then this reduction would take Scotland to somewhere between New Zealand and France in GDP per capita terms. The standard of living is not noticeably poor in these countries, and it may be that this is viewed as a cost worth paying. The number of countries in existence has approximately doubled since 1950s, and few seem to want to reverse their independence processes. Small open countries, which are highly integrated into the world economy, seem to be doing well.

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Immigration Policy and the Labour Market: Options for Scotland

Robert E. Wright

1 Introduction

Like most other high-income countries, the population of Scotland is ageing rapidly, with the age distribution shifting away from the “younger” to the “older” age groups. However, with population ageing the population of working age, say aged 20-64, gets “squeezed”, resulting in low, slow or no growth in this age group. This is an important group since around 95 per cent of total employment is concentrated in this age range. There is no doubt amongst economists and business leaders that a growing skilled labour force with the right skills is essential for sustained long-term economic growth. However, given Scotland’s demographic past, there is considerable concern that the labour force will not grow much—if at all—over the coming decades.

Population ageing is caused mainly by below replacement-level fertility. Fertility in Scotland has been below the replacement-level for over 40 years (see Lisenkova and Wright, 2009). Unless there is a dramatic and permanent increase in fertility (which seems unlikely), the labour force will only grow if net-migration is positive. Net-migration is the difference between “immigration” (individuals moving to Scotland from the rest-of-the-UK and abroad) and “emigration” (individuals moving from Scotland to the rest-of-the-UK and abroad). As is shown below, under what the author believes are a reasonable set of assumptions, future growth in the labour force will be dependent on year-on-year historically high levels of net-migration, which in turn will be dependent on year-on-year historically high levels of immigration.

The purpose of this chapter is to consider the role that immigration and immigration policy will play in Scotland’s future. The “first future” is one where the Scottish people vote for independence and where Scotland is accepted as a new and full member of the European Union. In this future, Scotland will need to put in place an immigration system, and formulate an immigration policy that focuses on Scotland-specific needs and interests. The “second future” is one where the Scottish people vote to remain in the UK, and it is recognised that the current UK-wide system is not serving Scotland-specific needs and interests. In this future, immigration becomes a shared responsibility of the Scottish and UK Governments.

2 Immigration and the Scottish Labour Market

Figure 1 shows the number of people aged 20-64 in Scotland in the period 2012-2051. The figure is based on estimates from the most recent set of “official” population projections produced by the Office of National Statistics (ONS, 2013). Two projections are shown. The first is the so-called “principal” projection. This projection is the baseline projection and the assumptions are best described as a continuation of the status quo or an extrapolation of the “recent past”. This projection assumes indefinitely below replacement fertility, gradually declining mortality and a constant net-migration of +15,500 people per year. The second is a “variant” projection. This projection assumes the same for fertility and mortality as the principal projection but net-migration is assumed to be zero. This projection is a “zero net-migration” or “natural increase only” projection, since it is assumed that immigrants balance emigrants and population growth and age structure changes will be caused only by the difference between births and deaths. By comparing variant projections to the principal projection one can understand in a meaningful manner the relative importance of the underlying assumptions.

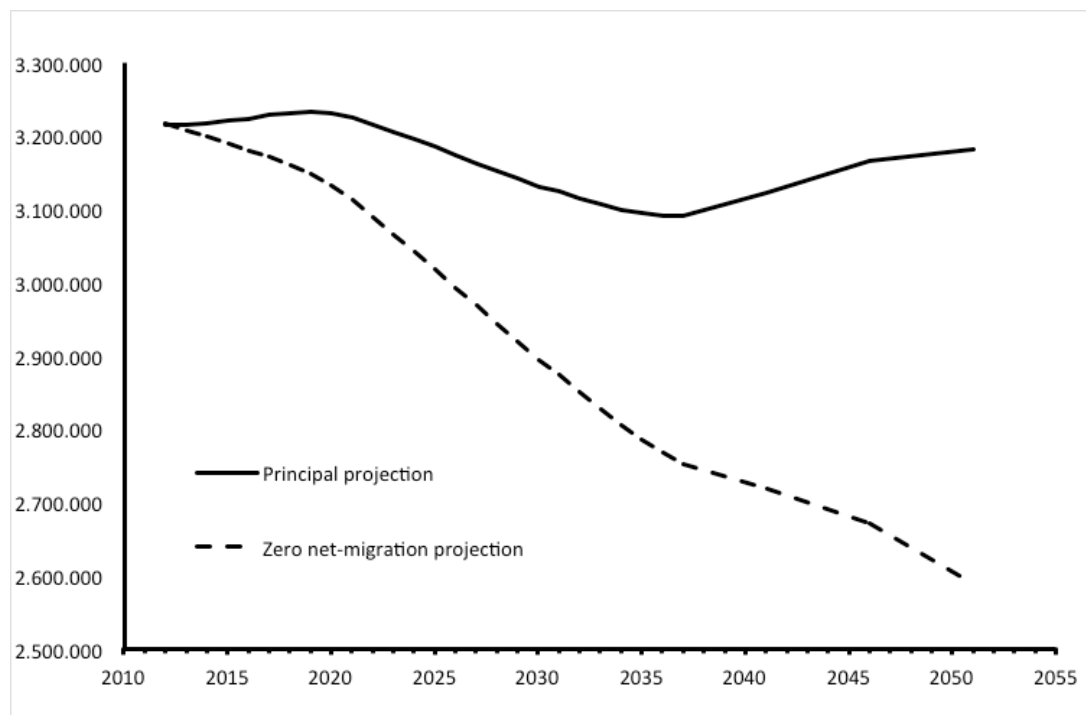


Figure 1: projected number of people in the 20-64 age group, Scotland, 2012-2051¹

The principal projection suggests that the number of people in this age group will stagnate in this period hovering around the 3.2 million people mark.

¹ Source: (ONS, 2013).

However, the situation is very different when zero net-migration is assumed. Under this scenario, the number of people in this age group is expected to fall by around 20 per cent to around 2.6 million over the next three to four decades. This translates into a large decline in the potential labour force. Lisenkova, Mérette and Wright (2013) demonstrate that a decline of this magnitude is associated with considerable welfare loss and a large reduction in the average standard of living. If their finding is to be believed, then growing the labour force through higher net-migration is a policy priority. In order to do this in a managed manner, an immigration system based largely upon labour market requirements is needed—and this need is regardless of the whether Scotland is independent or not.

3 Immigration Policy in an Independent Scotland

In order to focus the discussion in this section, assume that Scotland becomes an independent country outside the European Union. If this was the case, then the country could put in place an immigration system that builds on the practises followed in countries that “manage” immigration. In addition, Scotland would not be required to follow the good—or bad—practices prescribed by a dominant and larger political entity such as the UK or EU.

There is a large body of research in the field of population economics concerned with designing immigration systems aimed at meeting specific economic and social criteria (see Constant and Zimmermann, 2013). In addition, detailed data has been collected relating to the effectiveness of immigration systems in a variety of countries. This includes countries with “points-based” selection mechanisms that emphasise employability (such as Australia, Canada and the UK) as well as countries with selection mechanisms based on other criteria like family reunification (such as the United States). It is my view that it would not be a difficult task to design and implement an immigration system in an independent Scotland based on economic and labour market considerations.

Such a system might be based around five immigrant types or classes. The first class are *Economic Migrants*, who migrate almost exclusively for employment and earnings reasons. Within this class of immigrants there are three sub-classes: (1) “high-skilled immigrants”; (2) “low-skilled”; and (3) “entrepreneurs”. A point-based immigration system, not dissimilar to the system currently in place in the UK, could be used to “select” low-skilled and high-skilled immigrants (see Mosca and Wright, 2009). With respect to

entrepreneurs, a set of thresholds could be set in terms of the amount of money invested in the economy and/or the number of jobs created.

The second class of immigrants are *Refugees and Asylum-seekers*. With only three international airports, and sea ports far away from the main refugee source countries, it seems unlikely that Scotland would attract a large number of individuals applying for asylum at ports of entry. However, Scotland would likely want to be a party to the *United Nation's 1951 Convention and 1967 Protocol on Refugees*. This would require Scotland to grant asylum to a given number of refugees on an annual basis. Given the experience of other countries that contribute to the global refugee problem in this manner, this would translate into Scotland accepting a few hundred people per year. This is a very small number when compared to overall population size of 5.3 million and net-migration over the past decade averaging 20,000-25, 000 people per year.

The third class are *Family Reunification Immigrants*. An example would be a non-Scottish citizen who marries a Scottish citizen. A key question here is what other "relatives"—if any—would be treated as family reunification immigrants—mothers, fathers, sisters, brothers, cousins, etc? In addition, a points-based system could be configured to allow the allocation of points for having a relative or relatives who are citizens living in Scotland (as is done in Australia and Canada). Deciding how far down the family tree family tree you want to go is a tricky issue.

The fourth class of immigrants are *Students*. Most would be studying at further or higher education institutions. Whether it is appropriate to refer to international students as "immigrants" is debatable. However, Scotland has a large higher education sector compared to England and many other high-income countries. In addition, international students make a significant contribution both in terms of the tuition fees paid and in costs-of-living expenditure to the Scottish economy (see Tindal et al., 2014). It is often forgotten that most students return to their country of origin after graduation so their migration is "temporary". However, there seems to be desire amongst international students to stay in the Scotland after graduation to gain practical work experience in an English-speaking environment. This was allowed under the "Fresh Talent System" but this was abolished by recent UK immigration policy reforms. Lumping students in with other classes of immigrants (as is current practise) seems inappropriate since they are very different to other classes of immigrants.

The fifth class of immigrants are immigrants who do not fit into any of the other four classes. This would in a sense be a residual category, which can simply be referred to as *Other Immigrants*. It would include temporary workers who come to Scotland to work in a specific job for a specific time period (e.g. in agriculture or fish processing). It would also include foreign nationals who are employed by a foreign-owned company or multi-national. Such immigrants could be dealt with through a system of visas and work permits.

In addition to the criteria that defines each of these classes of immigrants, the immigration process should contain, for obvious reasons, some form of criminal background check. Likewise, a medical health check should be carried out. The expenses associated with both could be recouped in an application fee (as is common in most countries). Scotland would need to create an institution to manage the system.

How would European Union requirements impact on the immigration system outlined above? As I have documented elsewhere (Wright 2013), with respect to these five immigrant classes, there is little in EU legislation that restricts the way immigrants are selected. For example, I can find nothing that is contrary to the way in which the UK's points-based system operates. There is a Directive relating to international students that refers mainly to conditions of admission of third-country nationals for the purposes of studies, pupil exchange, unremunerated training and voluntary service. However, these requirements are not inconsistent with current UK and Scotland practice since the *Bologna Accords* have been adopted. These two immigrant classes will most certainly be important in an independent-Scotland, and EU legislation will not impose on how individuals are selected (see Coldwell, Lisenkova and Wright, 2011). There appear to be no requirements concerning family reunification immigrants. Finally, EU member-states can have a national system of visa, residence permits and work permits but the holder does not have the right to reside (and hence work) in other EU member-states. However, there is a clause in Article 77 stating that the EU should pursue : "... the policy on visas and other short-stay residence permits".

There is considerable EU legislation surrounding Refugees and Asylum-seekers. The longer-term aim of these requirements is to move forward in a step-by-step manner to create a European Asylum System. The UK has opted-out of several of these requirements but opted-in to others. As mentioned above, such requirements would not likely impinge much on

Scotland, mainly because the expected numbers would be very small. Much of this legislation is concerned with establishing the minimum standards in the ways in which those seeking asylum should be treated. These requirements are very specific and detailed. It is my view, however, that current UK practice is not below these minimum standards.

An independent-Scotland could join the EU *Blue Card* system. The aim of this system is to attract highly qualified immigrants by supporting member-states and EU companies' efforts to fill gaps in their labour markets that cannot be filled by their own citizens, other EU citizens or legally resident non-EU citizens. Once a member-state grants a *Blue Card* to an immigrant, after two years that person can move to a job in another member-state in an unrestricted manner (i.e. before obtaining EU citizenship). It is clear that the *Blue Card* system will result in an independent-Scotland having less control over immigration. However, it is my view that the flow of *Blue Card* immigrants to Scotland would be small, especially relative to the numbers of EU citizens moving from other member-states to Scotland. In addition Scotland would likely lose immigrants to other member-states but not to what remains of the UK since the UK is not a member of the system. It is unclear whether Scotland would be a net-loser or net-gainer in the two-way flow of *Blue Card* holders.

4 Developed Immigration Policy in a "United" UK

If Scotland becomes an independent country it could put in place an effective immigration system capable of pursuing an immigration policy based on both humanitarian and economic considerations. However, what if independence is not achieved? This does not mean that Scotland would not be able to pursue an immigration policy in line with its needs. There is however a broad consensus amongst Scottish political parties that the current UK-wide immigration system (and recent changes in immigration policy) is not serving the interests of Scotland. Basically the sticking point is that the Scottish Government wants to increase/maintain immigration to Scotland while the UK Government wants to drastically reduce immigration to the UK as a whole.

Given these very different policy objectives, the key question becomes how does one increase immigration to Scotland (as the Scottish Government wants) and at the same time reduce immigration to the United Kingdom (as UK Government wants)? At first these policy objectives may appear to be totally incompatible. Immigration policy is set for the UK "as a whole" by

the UK Government and any policy that reduces immigration to the UK “as a whole” will also reduce immigration to Scotland (see Coldwell, Lisenkova and Wright, 2011). This will certainly be true unless immigrants to the UK are required to reside and work in a particular region for a minimum period of time. However, there is nothing in the current immigration system that takes into consideration the different demographic conditions that exist across the UK.

This is not true elsewhere. For example, regional differences are a key feature of Canadian and Australian immigration policy. These differences are reflected in the immigration system. All ten provinces of Canada (and one of its three territories) have agreements with the federal (Ottawa) government relating to immigration which takes into consideration specific provincial (territorial) requirements. Beginning in the late 1990s, “Provincial Nominee Programmes” (PNPs) have been established. PNPs are negotiated agreements that essentially mean that responsibility for immigration is shared between the provincial and federal governments. Similar agreements exist between the territorial and federal governments in Australia, although regionality is less central in Australian immigration policy.

In practise these programmes mean that applicants with certain skills face a lower immigration threshold if they agree to live, work and stay in a particular province/territory for a minimum period of time. This minimum period of time is often 1,095 days of residence, which is also what is needed to be eligible to apply for Canadian citizenship. Once citizenship is obtained (or the minimum period expires), the individual can of course reside anywhere in Canada. One of the main reasons PNPs were introduced was to counter the historical tendency of immigrants to concentrate in the three main cities of Toronto, Montreal and Vancouver. They are based on the empirical regularity that once an immigrant arrives in one province, after two years of residence, the probability of moving to another province drops off considerably. In other words, if you get people to a particular region in the first place for a period of time, there is a high probability that they will stay permanently. The parallel to Scotland and the UK is obvious.

The Canada-Quebec Accord (CQA) goes one step further and essentially devolves responsibility for immigration to the province of Quebec. In this arrangement, potential immigrants apply directly to the Province of Quebec and not the Dominion of Canada. The CQA is also a points-based system. However, the weighting is different. Essentially the CQA system awards fewer points for education/qualifications/employability and more points for

knowledge of the French language. Quebec “picks” the immigrants and the federal government issues the visas and work permits, and administers the medical and criminal background checks.

The UK immigration system could easily and quickly be modified along these lines to meet Scotland’s needs by allotting more points to applicants who agree to live, work and stay in Scotland. Immigrants who choose this option could be issued with a visa that states that they are only allowed to work in Scotland. The period of this permit should be the same amount of time needed to apply for citizenship, which can be varied. This simple modification will only work if the government is serious about enforcing the terms of the residence requirement. Immigrants who fail to meet the residence requirement would have their work permit revoked and would no longer have the right to work. Since a “deal is a deal”, the government must be prepared, as a last resort, to deport those who fail to live up to the agreement. Given the UK Government has promised to be “tougher” when it comes to immigration matters in terms of enforcing deportation orders this does not seem to be a massive leap forward in current “policy”.

5 Concluding Comments

Immigration is currently a “reserved power” in UK. This means that immigration policy is decided by the UK Government and the immigration system is managed through the Home Office. The Scottish Government plays no direct nor significant role in immigration matters. An independent Scotland would need to put in place an immigration system and formulate an immigration policy that focuses on Scotland-specific needs and interests. However, this is not to say that independence is the only way for Scotland to pursue an effective immigration policy. The UK immigration system could be adapted to allow Scotland to be “more independent” with respect to matters relating to immigration. There are countries (most notably Canada) where the responsibility for immigration is shared across different levels of government. Of course a similar shared system in the UK would require the Scottish and UK Governments to work more closely on matters relating to immigration. It does not mean that both would need to pursue the same immigration policy.

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Energy Independence and Interdependence

Nicola McEwen

1 Introduction

The Scottish government's independence prospectus is one which is embedded in a vision of transnational interdependence and renewed partnership among the nations of the British Isles. In the field of energy, the White Paper on *Scotland's Future* proposed that an independent Scotland would continue to participate in a GB-wide market for electricity and gas, with continuation of the current trading and subsidy arrangement, a single GB Transmission Operator to balance electricity supply and demand and co-operation between the respective regulators. It also advanced setting up an Energy Partnership between the Scottish and UK governments such that they jointly steer their approaches to the energy market (Scottish government, 2013: 295-97). Taking electricity as its focus, this article evaluates the prospects of market integration and energy partnership after independence. It first sets out the Scottish government's ambitions for renewable electricity against the backdrop of the current constitutional settlement. It then considers different dimensions to market integration, including cross-border trade, infrastructure and consumer-based subsidy regimes. It concludes that independence should not pose a barrier to an integrated market for the trade of electricity, but there may be political barriers to realising other aspects of the partnership model.

2 Scotland's energy ambitions

Scotland's abundant natural resources are arguably one of the country's greatest assets. Long before the discovery and exploitation of North Sea Oil, the Scottish Office under the leadership of the then Secretary of State Tom Johnston led the transformation of hydro-electricity in Scotland from its pioneering roots to a major nationalised industry. Building on that extensive hydro-capacity, successive Scottish governments since devolution have set ambitious low carbon energy goals, exceeding both UK and EU targets. The SNP government, in particular, has embraced the renewables agenda with increasing commitment since its election in 2007, and now aims to source *the equivalent of 100 percent* of Scotland's electricity consumption from renewable sources by 2020 (Scottish government, 2011; McEwen and Bomberg, 2014). These ambitions are not without substance. Between 2003 and 2011, renewable electricity installed capacity in Scotland increased by 187 percent, while

generation from renewables increased by 269 percent (CCC, 2013: 18). Scotland is recognised within and beyond the UK as a leader in renewables, hosting 38% of the UK's installed renewable capacity in 2012, including almost 90% of the UK's hydro capacity and 44% of its onshore wind (DECC, 2013).

One of the notable aspects of this expansion and ambition in renewable power is that it is set against a backdrop of very little constitutional power over energy policy. The Scotland Act (1998) reserved to Westminster most areas of energy policy, including the generation, transmission, distribution and supply of electricity, as well as ownership, exploitation and regulation of other energy sources, and the regulation of energy efficiency. The Scottish Parliament was given responsibility for *promoting* renewable energy and energy efficiency, but cannot *legislate* in the field of energy. The Scottish government did inherit from the former Scottish Office some non-legislative executive powers acquired at the time of electricity privatisation, including the power to grant or withhold consent for new generating stations and power lines. It also had power to set a Scottish Renewables Obligation, currently the principal mechanism for promoting industry investment in renewable energy throughout the UK, but this power will be withdrawn under UK electricity market reform – the first formal withdrawal of devolved power since the Scottish parliament's establishment.

The reservation of energy policy means that the Scottish government and parliament lack formal powers to effect changes to the market or the regulatory system. This has created frustrations, for example, with the locational system of charging for electricity transmission; many consider it inhibits renewable energy investment in the Scottish Highlands and Islands by imposing the highest grid connection charges for energy generated in regions remote from highly populated urban centres, while subsidising connections in many of these urban areas. The absence of formal constitutional power means that the Scottish government has had to rely upon the use of 'soft power' – the powers of persuasion – in its attempts to influence the shape of UK energy policy and market reform, with only limited success. Independence would see a transfer of legislative competence over all aspects of energy to the Scottish Parliament, but if it entailed continuity of the GB market to the extent envisaged in the White Paper, we might question the capacity of the Scottish government to develop market and regulatory conditions to suit its distinctive policy priorities.

3 Prospects for a common energy market under independence

The common GB electricity market dates back to 2005, when the Scottish market merged with its English and Welsh counterpart to form the British Electricity Trading Transmission Arrangements (BETTA). It was intended to encourage competition in the wholesale and retail markets, better value for consumers, and a bigger market for renewable generators (Prandini, 2007). The UK also operates an integrated system for subsidising electricity generation within the GB market, with support mechanisms for electricity generation and transmission pooled among GB consumers and financed by levies on their electricity bills. Northern Ireland, which has devolved powers over energy policy, operates within an all-Ireland market but also benefits from the UK consumer subsidy to renewable generation, although costs for grid infrastructure are borne by consumers within Northern Ireland (interviews with regulator and energy officials, May 2013).

The Scottish government's White Paper on independence envisaged continuation of a GB-wide electricity market reflecting the integrated transmission networks between Scotland and the rest of the UK and their 'common interest' in sharing energy resources, including a single system of shared support for renewables and the grid. The justification for such a high degree of integration and cross-subsidy is the contribution that Scottish electricity exports can make to cost effectiveness and energy security; Scottish generation, it is argued, '*is now essential to ensuring the lights stay on across these islands*' (Scottish government, 2013: 781).

The UK Department for Energy and Climate Change acknowledged that '*in the event of independence, there would be a mutual benefit to Scotland and England and Wales from continued cross-border trade in electricity*' (DECC, 2014: 20). However, it challenged the claims made about the significance of the Scottish contribution to energy security in the rest of the UK, arguing instead that the main benefit of exports of electricity generated from Scottish wind farms is to reduce temporarily the need to generate power from higher cost coal and gas plants when the wind blows. Moreover, the UK government has argued that the integrated GB market '*could not continue in its current form*' if Scotland becomes independent (*ibid*: 7).

In considering whether GB market integration could survive a transition to Scottish independence, it is helpful to disentangle its different dimensions, in particular by separating wholesale market trading from issues of allocating the costs of incentivising the renewables industry and subsidising the electricity grid infrastructure.

3.1 Wholesale market integration

Notwithstanding the relatively recent introduction of BETTA, there is little prospect of disintegration of the wholesale GB market for buying and selling energy. Independence would not change geography. The UK and Scotland would continue to share an island and an island grid, facilitating market integration and necessitating some co-operation. Many generators and suppliers operate and trade across the border and could be expected to lobby both governments toward maintaining an integrated energy market. Moreover, the GB market currently has a low level of external interconnection - links to France, Ireland, the Netherlands and the Isle of Man amount to around 5% of capacity. This reinforces the incentive to maintain strong interconnections on the British mainland.

There are many successful examples of integrated electricity markets across national boundaries in Europe, reflecting a trend towards market integration. For example, the Nordic countries brought their individual deregulated markets together in the 1990s, creating a cross-border power exchange which now includes Estonia, Lithuania and Latvia, with significant cooperation between transmission operators and energy agencies across the Nordic countries (interviews with Danish and Norwegian officials, Sept-Oct 2013). The European Power Exchange – Epex Spot – serves as a wholesale market for members to buy and sell electricity in Germany, Austria, France and Switzerland, including through cross-border trade. The UK government collaborated closely with its Irish counterpart to establish the Single Electricity Market (SEM) on the island of Ireland. The SEM provides a mandatory pool into which all generators producing electricity above 10MW must bid. Although there are separate regulators in the north and the south, they cooperate closely within the SEM committee to oversee the operation of the single market, while the separate licensed transmission operators, SONI in the north and Eirgrid in the south, are both part of the Eirgrid group.

Although in some cases the origins were endogenous, transnational regional markets are an intentional step towards EU wholesale market integration. EU energy legislation, especially the Third Package, established a framework which will lead to common rules and ‘network codes’ for the operation of an internal electricity market across Europe. The Third Package set up an infrastructure to support market integration, including the Agency for the Cooperation of Energy Regulators (ACER) and the European Network of Transmission System Operators (ENTSO-E). It introduced a European Target Model to ensure the gradual harmonisation of rules for managing

congestion, supply and demand, equitable access to transmission networks across borders, and greater interconnection between member states to permit cross-border electricity flows. The UK, as a member state, is a signatory to this EU legislation and bound by its directives. It could not discriminate against Scottish generators nor deny them access to the grid. Moreover, the UK has long supported EU market integration – it is political and institutional integration which it has found more problematic. Achieving EU electricity market integration, and harmonisation of national and regional systems, presents a significant challenge. But there is no reason to assume that Scottish independence would augment the challenge, and the direction of travel suggests that maintaining a GB wholesale market would be an interim measure towards these broader EU-wide goals. The challenge for the Scottish government and the industry would be to ensure that Scottish renewable electricity could be generated for export at competitive prices.

3.2 Common subsidy regime

The UK currently operates a common system for encouraging generators to invest in low carbon electricity generation. To date, the main market mechanism used to incentivise large-scale renewable generation has been the Renewables Obligation. There are three Renewables Obligations – for England and Wales, Scotland and Northern Ireland – and although they are closely aligned, the Scottish government exercised discretion to give added incentive to marine renewables by increasing the number of renewable obligation certificates (ROCs) awarded for wave and tidal-sourced electricity. UK Electricity Market Reform will see the RO phased out and replaced by a uniform system of Feed-in Tariffs with Contracts for Difference. CfDs are long-term private law contracts which will pay generators the difference between a measure of the market price for electricity and the longer-term price (the strike price) needed to encourage investment in different technologies which the government is keen to support.

Generation also needs an effective transmission network, the costs of which are recovered from generators and suppliers through the transmission charging regime (TNUoS). The operation of this scheme has proved especially controversial in Scotland and is widely regarded as a major obstacle to fulfilling Scotland's renewable ambitions; generation opportunities are predominantly in areas where existing grid infrastructure is poor and requires costly upgrades, while charges for connecting to the transmission network are higher.

The costs of investing in renewable generation and grid infrastructure are ultimately borne by consumers across the UK as suppliers recoup costs through energy bills up to a limit set by the UK Treasury. The Scottish government's White Paper envisaged that this common subsidy regime would continue on a similar basis after independence, that is, that consumers across rUK and Scotland would continue to pay for investment in generation and networks irrespective of where these costs were borne. Put crudely, this could mean that the larger consumer base south of the border would be subsidising electricity generation and capital investment north of the border. The UK government and the Secretary of State, Ed Davey, have cast considerable doubt over the continuation of these arrangements after independence.

In the event of a Yes vote, there would be significant pressure from the energy industry to ensure that existing accreditations under the RO would be 'grandfathered' to ensure agreed payment arrangements were upheld (interviews with industry representatives, April-May 2014). Though relatively unusual, maintaining cross-border subsidy schemes beyond the transitional period would not be unprecedented. Since 2012, Sweden and Norway have shared a Joint Green Certificate scheme which operates in a similar way to the Renewables Obligation in the UK. Such cross-border schemes are facilitated by EU law. The EU Renewable Energy Directive 2009/28/EC established a set of co-operation mechanisms to help member states meet their 2020 targets, including joint support schemes, joint projects and statistical transfer. To date, the Norwegian-Swedish certificate scheme, which predates the directive, is the only co-operation mechanism to be implemented. The UK government and the Irish government had signed a Memorandum of Understanding with a view to setting up a joint project to help meet the UK's 2020 obligations and broader capacity constraints. However, the planned wind farm in the Irish Midlands – which would have been financed by UK consumers and could have seen 8 gigawatts of power exported directly into the UK network – was shelved in spring 2014 after failure to agree an appropriate level of subsidy.

The limited use of the opportunities for cross-border cooperation reflects the difficulties in integrating separate national processes, systems and policy priorities. However, Scotland and the rUK would be starting from a position of integration. Independence negotiations would focus on how, and how much, to *dis-integrate*. Co-operation mechanisms should be easier to maintain where they already exist than to design anew. The extent to which this

happens would depend upon the political climate in which independence negotiations took place, and the broader climate of opinion on energy pricing in rUK. Fuel bills and the costs of subsidising renewable energy are highly politicised north and south of the border, and are likely to play a role in the forthcoming UK General Election. It may be politically difficult for the UK Government to deviate from its stated position in the event of a Yes vote, even if it were minded to do so.

4 Conclusion: Governing energy interdependence

If a degree of market integration was maintained upon independence, it would require cooperation between governments to oversee it. The White Paper suggested the two governments establish a formal Energy Partnership. In addition to facilitating the necessary coordination, it is said that a formal partnership would give Scotland a bigger role in influencing and steering the system to match the needs of Scotland as well as the rUK to ensure that *'new investment in Scottish generation is not compromised by the Westminster Government's proposals to overhaul the structure of the electricity market and enter into expensive, long-term contracts for nuclear generation'* (Scottish government: 779).

There is very little detail in the White Paper about the form such a partnership would take, or how it would work to the mutual benefit of both governments. There are no existing intergovernmental forums which could adequately serve such a partnership. The All Islands Approach, initiated within the British Irish Council, has not fulfilled aspirations. A new forum would have to be established, with guiding principles for joint working, decision-making and dispute resolution. There are models of cooperation that could be drawn upon were there a will to form such a partnership. The Irish SEM committee, for example, is made up of the representatives of the regulatory authorities north and south of the border, while officials from the Irish government and the Northern Ireland Executive meet in a Joint Steering Group to cooperate on the SEM as well as to coordinate the implementation of EU directives (interview with Northern Ireland official, May 2013). The need to monitor and coordinate the implementation of EU directives also underpins much of the cooperation which takes place among system operators and energy officials across the Nordic countries, often under the umbrella of the Nordic Council of Ministers.

Partnership of any kind requires a willing partner, and would surely come at a price. Even if there was a will on both sides to maintain a fully integrated market and to have a formal partnership, it is not clear how a Scottish

government could exert sufficient influence in overseeing the electricity market to enable it to address the perceived failings of the current system. It is unlikely, for example, that independence with a high degree of energy market integration, including shared financing of grid infrastructures and low carbon incentive schemes, would give the Scottish authorities increased power to alter the current transmission charging system, ensure the investment required to improve grid infrastructure in the north of Scotland, or shape the broader process of electricity market reform. Nor is it clear that such a partnership would be viable, or palatable, for either government should the two diverge further in their energy policy preferences. A Scottish government could not deter the rUK government from investing in nuclear generation if this continued to be a policy priority. When Norway and Sweden agreed their green certificate scheme, Denmark opted not to join because, as a technology neutral scheme which supports the cheapest forms of renewable energy, it would be detrimental to Danish ambitions to promote more expensive offshore wind (interviews with energy agency and TSO officials, Sept-Oct 2013). Distinctive national priorities sometimes require distinctive national decision-making structures.

Thus, while independence would be inevitably accompanied by a degree of interdependence in the electricity and broader energy field, it may not be the extent of interdependence envisaged within the White Paper. This looser interdependence could incur some costs – for example, financing renewables ambitions and grid infrastructures from a smaller consumer base could mean higher costs for consumers, or suggest a need for more investment from general taxation or borrowing (but see Toke, *et al.* 2013 for an alternative view). But there are opportunities too. Policies that prioritised greater investment in energy efficiency would reduce energy demand and can be expected to produce savings for consumers, while greater control over energy policy can provide the Scottish government with more opportunities to design and shape an energy system to suit its own policy objectives.

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Business attitudes

Brad MacKay and Veselina Stoyanova

1 Introduction

On September 18th, 2014, Scots will vote on whether to secede from, or to remain part of the United Kingdom. It is a Union that Scotland has shared since 1707. As the referendum date nears, the debate over whether Scotland would be better off as an independent nation, or as part of the Union has intensified.¹ One of the single most important determinants of any country's future economic prosperity is business competitiveness investment and growth. Understanding the implications of the referendum debate outcome for business decision-making and vice versa can therefore be an important guide to the economic consequences of the vote, and its implications for Scotland's fiscal position, and wealth creating potential.

The uncertainties posed by the referendum on Scottish independence have the potential to influence any number of business decisions, such as whether to invest, re-invest, expand, withdraw, locate or relocate business activity within or out-with Scotland. There have been several studies whose aim has been to explore business attitudes towards independence, and business decision-making in conditions of constitutional and political uncertainty in Scotland and the United Kingdom. From these studies we are able to develop a broad typology that helps to give an indication of how businesses in different sectors might behave under different constitutional scenarios.

After outlining the positions of the Scottish Government and the UK Government on independence in relation to business, this chapter presents the data from over 60 interviews between November 2013 and February 2014 with senior business leaders in randomly selected medium (over 50 employees) and large (over 250 employees) companies. The chapter also draws on two other surveys of business attitudes towards independence to place the findings in a wider context. In particular, it compares its findings with Bell and McGoldrick's survey with the Scottish Chamber of Commerce (SCC) of 759 businesses,² and Ivory and MacKay's survey with the Federation of

1 See The Scottish Government. (May 2014). *Outlook for Scotland's Public Finances and the Opportunities of Independence*. Edinburgh and HM Treasury. (May 2014). *Scotland analysis: Fiscal policy and sustainability*. London.

2 Bell, D. and McGoldrick, M. (May 2014). *Business attitudes to Constitutional Change*. Glasgow: Scottish Chamber of Commerce.

Small Business (FSB) of 1800 small businesses.³ It also refers to the Aberdeen and Grampian Chamber of Commerce (AGCC) survey of oil and gas companies led by Grant Allan.⁴ The fundamental question that this chapter deals with then, is, what are business attitudes towards Scottish independence?

2 The Scottish Government Position

In a series of papers, the Scottish Government argues that Scotland has a highly skilled workforce, world-class businesses, an internationally recognised brand, a reputation for innovation, and substantial natural resources. It suggests that industrial manufacturing has suffered decades of neglect. The UK economy, it proffers, is dominated by London and the South East. Many of the policy levers for creating jobs and wealth in Scotland are reserved powers for Westminster. The Scottish Government states:

“Control of taxation, public spending limits, regulation of business and industry, and competition policy all rest in London. Successive devolved Scottish governments have had considerable success in reducing unemployment, increasing employment and promoting inward investment. But the fundamental economic decisions that affect Scotland are taken in Westminster, often by governments that have no popular mandate in Scotland, and in the interests of an economy and society with different priorities from Scotland.”⁵

Independence, the Scottish Government maintains, will allow it to reduce Air Passenger Duty by 50 percent, business rates for small businesses, and corporate tax by three percentage points to counter the ‘gravitational pull’ of London and the South-East. Compliance costs for business will be reduced through a simplified tax system, and, combined with greater control over immigration and capital investment in infrastructure, will improve productivity. Links between businesses, funding providers, public sector agencies and universities will be improved with a coherent strategy and shared priorities. A package of employment measures designed to enhance employee representation and female participation on company boards and to create cohesion and opportunity in the workplace will help to improve fairness and

3 Ivory, S. and MacKay, B. (July 2014). *Small business attitudes to constitutional change*. Glasgow: Federation of Small Business.

4 Grant, A. (June 2014). *Aberdeen and Grampian Chamber of Commerce Oil and Gas Survey*. Glasgow: University of Strathclyde, www.agcc.co.uk.

5 The Scottish Government. (2013). *Scotland's Future: Your guide to an independent Scotland*. Edinburgh. p. 42.

company performance.⁶ The economy will be rebalanced through policies to improve innovation and exports and re-industrialisation.⁷ They argue:

“An independent Scotland will have the opportunity to pursue policies designed to grow the economy and create jobs. With responsibility for the full range of policy levers, the government of an independent Scotland will be able to create a more supportive, competitive and dynamic business environment.”⁸

The Scottish Government views independence as an opportunity to transform the economy through policy choices that better reflect the priorities of Scottish households and businesses, and to create a fairer society.⁹

3 The UK Government Position

The UK Government argues in their *Scotland Analysis* papers that Scotland has flourished as part of the UK; it is one of its wealthiest parts. Scotland's economy has outperformed many small independent European states. The UK, they maintain, is one of the most integrated single markets in the world, and Scottish businesses have become successful within that policy and regulatory context. Scotland's strong sectors in defence, energy and financial services rely on the UK market where a majority of their trade is. As part of the UK, Scottish businesses have a market of 63 million people. An independent Scotland would have a population of 5.3 million. They argue that some 70% of Scottish exports go to the rest of the UK (rUK). In addition, goods, services and people can move freely throughout the UK. Furthermore, business and consumers benefit from the stability of the pound Sterling, shared institutions, regulations, infrastructure and a single labour market. Costs and investment in, for instance, energy, are shared by the UK as a whole. Moreover, costs for businesses and consumers are kept lower by the reputation of UK institutions and the scale of the UK. They argue:

“As it stands, the UK is a true domestic single market – with free movement of goods and services, capital and people. Businesses are able to trade freely across the whole of the UK; consumers

⁶ Ibid.

⁷ The Scottish Government. (2014). *Reindustrialising Scotland for the 21st Century: A Sustainable Industrial Strategy for a Modern, Independent Nation*. Edinburgh.

⁸ The Scottish Government. (2013). *Scotland's Future: Your guide to an independent Scotland*. Edinburgh. p. 96.

⁹ The Scottish Government. (May 2014). *Outlook for Scotland's Public Finances and the Opportunities of Independence*. Edinburgh.

benefit from a greater number and variety of goods and services at lower prices; and workers are able to access a greater number of jobs allowing them to maximise their skills and realise their range of aspirations. It is one market with no internal barriers to the flow of goods, capital and labour.”¹⁰

The UK Government argues that if Scotland were to become independent, the UK would cooperate in areas of mutual interest, as it does with other independent states. There would not be a monetary union with a shared currency with Scotland. Scotland would have to support its own financial sector during crises. Scottish businesses and consumers would no longer benefit from the same borrowing rates available to the UK. Scottish firms might no longer be eligible for bidding on MoD contracts. Costs and investment in, particularly, energy, would no longer be spread across the UK as a whole, but borne by Scotland. Scotland would have to set up its own funding councils for universities. Trade might also be reduced by ‘border effects’ caused by trade barriers between the UK and Scotland.¹¹ They state:

“The UK’s shared business framework helps drive growth and competitiveness across the UK, and is at the centre of Scotland’s success in creating businesses that can compete on the world stage. This UK-wide framework and guaranteed access to the whole of the UK’s domestic market, underpins FDI in Scotland.”¹²

They conclude that Scottish business has the best of both worlds: they have the benefit of the size, stability and strength of the UK, *and* they are also supported by the focused and targeted efforts of the Scottish Government using devolved powers.

4 Evidence from business

4.1 The sample

In-depth interviews were conducted in five, broadly defined, strategically important, and mobile growth industries including energy, engineering and industrial manufacturing, electronics and technology, financial services and life sciences. Interviews were semi-structured, meaning that they were a

10 HM Government. (July 2013). *Scotland analysis: Business and microeconomic framework*, London. p. 5.

11 HM Government. (June 2014). *United Kingdom, united future: Conclusions of the Scotland analysis programme*.

12 HM Government. (July 2013). *Scotland analysis: Business and microeconomic framework*, London. p. 6.

conversation based on five questions relating to whether the referendum posed uncertainties, opportunities and/or risks, whether businesses were contingency planning, if the prospect of a referendum was having a material impact on business decisions, and whether it might under different constitutional scenarios (see Table 1 for industry profile).

Table 1: Industry Profile

By Sector	No.	%
Financial Services (life insurance, retail, wealth management)	20	33
Energy (incl. Hydro and Oil and Gas companies)	12	20
Electronics/Technology	9	15
Life Science	7	12
Engineering/Industrial Manufacturing	12	20
Total	60	100
Other (Food and Drink)	4	

While small businesses (0-49 employees) account for some 98.3% of the 343,105 private sector enterprises operating in Scotland as of March 2013, they make up 42.3% of private sector employment and generate 23.6% of private sector turnover. The 2,270 large businesses operating in Scotland, by contrast, only make up 0.7% of the total number of the 343,105 businesses operating in Scotland, but account for 45.3% of private sector employment, and crucially, generate 63.3% of private sector turnover (see Figure 1 for business size, employment and turnover in Scotland). What happens with these businesses following the vote, therefore, is critical for Scotland's economic prospects.¹³

¹³ McPhee, D. (Accessed March 17, 2013). Business in Scotland. Scottish Government, <http://www.scotland.gov.uk/Topics/Statistics/Browse/Business/Corporate>

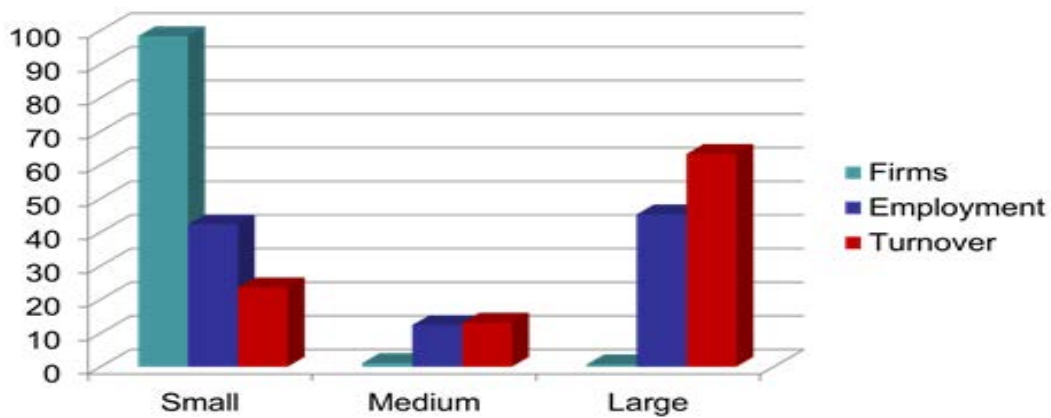
Figure 1: Business size, employment and turnover in Scotland

Figure 1: business size, employment and turnover in Scotland

In the sample, just over half of the firms were large (250+ employees), while just under half of the firms sampled were medium (50+ employees). Of the firms sampled, a little over half were registered in Scotland, while the rest were registered outside of Scotland. Only 6 firms had their primary trade in Scotland, with the remaining firms trading predominantly in the rUK and globally. Just under half of the firms sampled were PLCs.

4.2 Opportunities posed by the independence referendum

In the interview-based research across five industries, 23 business leaders (of 60) reported that they had yet to identify any obvious opportunities for their businesses, and a further seven indicated the opportunities would be marginal or negligible. Of the 30 business leaders able to cite opportunities, only in eight cases (13%) were they able to cite potential opportunities specific to their business. Six business leaders indicated that the opportunities presented by independence outweigh the risks, while 54 indicated that, at present, the risks outweigh the opportunities. Opportunities cited tended to relate to tailoring government policy to the specific needs of the Scottish economy, such as export support, rather than specific business opportunities. The business leaders sanguine about the opportunities came from smaller medium-sized companies (50-90 employees) in all but one case (see Table 2: Identifiable opportunities from the independence referendum outcome).

Table 2: Identifiable opportunities from the independence referendum outcome

Industry	Financial Services	Life Sciences	Electronics/ Technology	Engineering/ Ind. Manuf.	Energy (incl. oil and gas)
Key Opportunities					
Products/Services	4	2	–	1	1
Income tax decreases	6	–	–	2	–
Corp tax decreases	2	–	–	2	2
Access to government	–	1	1	1	1
Liberal Immigration	2	2	1	2	1
R&D Rebates	–	–	1	–	–
Redesign Regulations	–	1	1	–	3
Scottish Brand/Pride	1	–	1	1	–
Made in Scotland prov.	–	–	–	1	2
Gov. funding/subsidy	–	4	–	2	2
Connections	–	2	1	1	–
Skills training	–	–	–	1	1
Influence EU Directly	–	–	–	1	1
Change model of independence	2	–	–	–	1

The findings from interviews with senior business leaders in medium and large companies are largely consistent with findings from survey responses from FSB and SCC members. In 50% of the 60 interviews, business leaders suggested there might be opportunities posed by the independence referendum outcome. This compares with 49% in the FSB study, and 53% in the SCC study.

However, 50% of business leaders interviewed thought that independence would not bring any new business opportunities. This contrasts with 51% of FSB and 47% of SCC members surveyed.

While 13% of the senior business leaders interviewed in the ESRC study could identify a potential business opportunity presented by the independence referendum, in only about 5% of cases was it an opportunity that would lead to additional investment/growth. For example, an opportunity frequently cited, but with no explicit link to either firm growth or investment aside from adapting a marketing strategy, was closer identification with the ‘Scottish brand’. A second commonly cited opportunity was better access to government policy-makers. This compares to 1% of respondents who could identify an opportunity for business growth in the survey of FSB members, and 4% of the SCC members. Of the 60 interviews with senior business leaders in the ESRC study, 10% emphasised the opportunities over the risks posed by the independence referendum outcome, compared to 27% of FSB members surveyed.

4.3 *Uncertainty/Risk posed by the independence referendum outcome*

Across the five industries in the ESRC study, business leaders reported that the fundamental challenge posed by the independence referendum is uncertainty over and above the normal business uncertainty that business leaders are used to dealing with, and have an understanding of. But the uncertainties also contain in them a number of key risks that independence could pose to business. The key uncertainties cited in order of magnitude included currency, regulation, taxes (both corporate and income taxes), recruitment and retention of employees, and EU membership. A possible in-out referendum on the UK's membership of the EU and lingering uncertainty in the event of a no vote were also cited. Where independence presents direct risks to business is with the prospect of the higher costs, complexity, difficulties in accessing key markets, and reduced competitiveness that could result from being in a separate Scottish jurisdiction and a much smaller market from that of the rUK.¹⁴ Other risks cited included brand reputation, group relief on taxes, pension costs, basic research funding for universities, IP legislation and border effects with cross-border trade.

Some variation existed across business types. For example, companies with a global customer base, or the subsidiaries of global companies operating in Scotland had more mixed, and often moderate views about risks in contrast with companies with significant trade in the rUK. A minority of predominantly smaller companies with both customers and suppliers located primarily in Scotland were also more sanguine about the risks posed by independence. In energy, for example, service companies appeared less concerned with some risks than exploration and production companies in oil and gas and hydro companies. There was more variation in responses from business leaders in wealth management and servicing, particularly where clients were primarily global or Scottish based, than financial services more generally. Firms supplying to the MoD were also concerned about future procurement, as internal EU market rules do not apply to defence acquisitions (Article 296), which are exempted, and also the reputational importance of supplying to the MoD and the 'British brand' for exporting internationally. Firms with headquarters in Scotland and most of their trade in the rUK were universally concerned about being located in a separate jurisdiction from where the bulk of their customers are (see Table 4: Uncertainties/Risks posed by the independence referendum outcome).

¹⁴ The Chicago economist Frank Knight differentiated between risk, which is quantifiable, and uncertainty, which is not, in his 1921 book *Risk, Uncertainty, and Profit*. Boston, MA: Hart, Schaffner & Marx; Houghton Mifflin Company.

Table 4: Uncertainties/Risks posed by the independence ref. outcome

Industry	Financial Services	Life Sciences	Electronics/ Technology	Engineering/ Ind. Manuf.	Energy (incl. oil and gas)
Key Risks					
Change in Currency	14	2	5	5	5
Regulatory Changes	15	3	1	1	5
Personal Taxes	10	1	2	2	4
Corporate Tax	8	–	2	4	5
EU	8	–	3	4	5
Recruitment/Retention	7	1	2	1	3
Compet./Client Reloc.	5	–	–	5	–
Reputation	5	1	3	3	–
Investment/financing	–	4	3	4	2
Pension Costs	3	–	–	2	–
No vote. In-out ref. etc.	1	–	1	2	1
Cross-border Collabor.	–	2	–	–	–
Licencing/Labour Laws	–	–	1	4	2
IP	–	1	1	–	2

The findings from the ESRC interview-based research are also largely commensurate with the large-scale surveys of FSB and SCC members (see Figure 3). Only a small minority of business leaders in the three studies reviewed here perceive there to be no risks with independence (5% ESRC, 13% FSB, 23% SCC), while a substantial majority suggest that there are (95% ESRC, 87% FSB, 77% SCC). Extrapolating from the frequency by which the risks of independence are cited compared to the opportunities, it appears that the perceived risks outweigh any identifiable opportunities that independence might bring, at least in the transition period following independence (e.g. in 90% of the 60 ESRC interviews, and 51% of FSB responses. See Figure 3: Uncertainties/Risks posed by the independence referendum outcome).

While the major risks posed by uncertainty around the currency, taxes, and the EU were largely consistent across the surveys, there was also some variation with other risks. Business leaders in the FSB survey, for example, were more focused on the practicalities of independence, such as cross-border invoicing and VAT payment, or postal and shipping charges, whereas the SCC survey also emphasised concerns over the transition period to independence and the general business environment.

4.4 Contingency planning and impact on decision-making

At the time of conducting the interviews, the degree of contingency planning taking place in firms varied markedly. It included: (1) none at all, (2) discus-

sions, (3) monitoring risks, (4) analysis and tactical planning around specific products, services and contracts, (5) strategic plans to restructure the business so that economic activity could be moved elsewhere, (6) deferring investment decisions, and (7) relying on existing business continuity plans. Of those businesses not contingency planning, reasons included assumptions that independence would not happen, the scale of uncertainty, contingency plans already being in place for business continuity, particularly for global companies, and finally, the perception that, either way, it would have little impact on their business. Seven business leaders in the sample of 60 have indicated that the debate has influenced business decisions, and 53 indicated that it is business-as-usual (see Table 5: Contingency planning and impact on decision-making and strategy).

Table 5: Contingency planning and impact on decision-making and strategy

Industry	Financial Services	Life Sciences	Electronics/ Technology	Engineering/ Ind. Manuf.	Energy (incl. oil and gas)
Contingency Planning					
Discussions	16	1	2	2	5
Monitoring risks	4	1	2	1	1
Analysis/tactical plans	12	–	–	4	4
Investing in/existing option to restructure	3	–	3	1	2
Rely on business continuity plans	3	1	2	–	–
Deferring investment	–	1	–	1	2

* These numbers are fluid and, data suggests, largely reflect the time interviews were conducted and previous stability in the polls (November to February). As polls have narrowed, there appears to be more wide-spread contingency planning and deferment of investment, as has the publication of annual reports from PLC companies in recent months.

Of the 60 business leader interviews for the ESRC study, approximately 75% suggested that the referendum outcome, if a 'yes' vote, would have an impact on strategy/operations (this compares with 67% of FSB and 49% of SCC members). But what that might be was less certain. Around 7% indicated that they'd deferred some investment until after the referendum (compared to 18% of FSB members).

Interestingly, in a recent survey of oil and gas companies, 45% of firms suggested that investment plans were being reviewed or deferred until the referendum outcome is known, while 38% of companies, many of whom operate globally, indicated it would make little difference to the sector

(contrasted with 18%, primarily small companies that thought it would be a positive development for the sector, and 12% primarily medium sized companies that thought it would be negative; see Figure 4: Independence debate impact on decision-making).

Positive changes of strategy and/or operations included adapting marketing to identify more with the Scottish brand, adjusting operations to adapt to changes in the business environment, or focusing on the Scottish side of the businesses. In each of the surveys, a very small minority indicated investing or expanding the business. In 13% of interviews in the ESRC sample, however, business leaders implied that they'd developed contingency plans, or invested in 'the option to restructure', depending on what materialised following a 'yes' vote (compared to 10% of FSB and 10% of SCC members surveyed). The option to restructure generally referred to migrating/relocating economic activity out of Scotland.

5 Conclusions

Evidence from independent, politically-neutral studies of business leader's attitudes towards Scottish independence is relatively consistent. Uncertainty over the currency (with a strong preference for Sterling), EU membership (with a strong preference for remaining in the EU), regulation (with a strong preference for having a common regulatory framework with the rUK), taxation (with a preference for competitive taxation, consistency with the rUK and stability) and the general trading environment, poses a significant challenge to business. The perceived risks associated with such uncertainties expressed by business leaders are highly specific and directly concern business activity. An average of half of business leaders' surveyed cannot identify any opportunities that independence would present for their businesses. Of those able to identify opportunities, they are less specific or unspecific and tend to relate more to the economics and politics of the debate. Only a small minority can identify an opportunity for business investment and growth.

A majority of business leaders indicate that the potential costs and risks of independence to business outweigh the perceived benefits and opportunities that might occur. Unsurprisingly, PLC companies headquartered in Scotland appear to be more affected than companies headquartered outside of Scotland. Companies supplying to the MoD also report that independence could pose a challenge to their business. A significant number of medium and large companies have the majority of their trade in the rUK (typically 90% rUK,

and 10% in Scotland), and appear far more affected than companies whose trade is mainly in Scotland, or is diversified globally. Medium sized, privately owned companies appear more willing to absorb downside risk than PLCs, the latter of who are also concerned about shareholder value. Medium sized, foreign-owned companies trading predominantly in a global market indicate they are less affected by the constitutional debate than PLCs trading primarily in the rUK. Business leaders of smaller medium-sized, private companies exporting globally, and smaller firms whose trade (both customers and suppliers) is predominantly in Scotland are the most likely to emphasise the opportunities presented by the possibility of Scottish independence.

Business attitudes towards Scottish independence are clearly influenced by a combination of where the business is domiciled, customer location, head-quarter jurisdiction and ownership structure. In all three studies reviewed here, approximately 10% of business leaders indicate they may move business activity out of Scotland in the event of a yes outcome.

Business leaders point out that the companies having success in Scotland today have achieved it within the market, policy and regulatory context of the UK. If independence changes this, the foundations on which they have built their success also changes.

Pensions

David Bell and David Eiser

1 Introduction

The Scottish Government has been keen to stress that pension rights and benefits will not be affected by independence. Its desire to reassure people is understandable – pensions are among the most important financial contracts that individuals enter, and people in Scotland will be keen that they receive the rights and entitlements that they have built up – whether these are ‘rights’ to the State Pension built up through National Insurance payments or contributions to an occupational scheme.

It is useful to distinguish between three types of pension:

- The State Pension, which is a payment to all those of pensionable age, with the payment depending on National Insurance Contributions (NICs) made over the lifetime;
- Public sector pensions (workplace pensions for those who have worked in the public sector); and
- Private sector pensions

There is no obvious reason why the conditions around any of these should change radically on independence. The Scottish Government plans to keep the State Pension largely in its current form (although with a couple of minor changes – making it slightly more generous for certain people and temporarily delaying the increase in the State Pension age). Most public sector pensions in Scotland are already managed as Scottish (rather than UK) schemes.

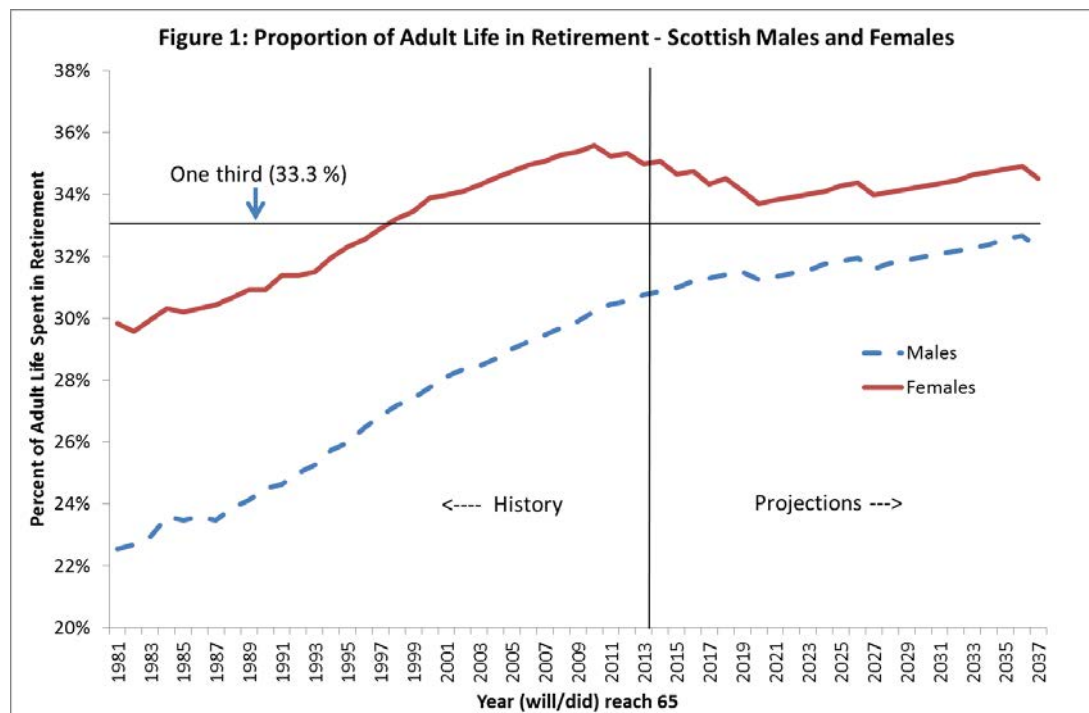
The main long-run pension challenge is their affordability as the population ages. This is a challenge regardless of the constitutional position, although it is slightly more acute in Scotland than in the rest of the UK. The affordability issue is perhaps more likely to result in higher contributions for current workers (and taxpayers) than for pensioners themselves. Adjusting pensions already being paid is usually a last resort. There are also some issues to resolve in relation to how existing pension liabilities might be split between Scotland and the continuing UK. Finally, there is an important question regarding the supply of pensions, given that one of the great strengths of Scotland’s financial sector is its life and pensions companies.

2 What will happen to the State Pension if there is a NO vote?

The State Pension is an important source of income for pensioners. The average State Pension payment is £130 per week in Scotland, approximately the same as in other parts of the UK. The State Pension is a major component of total government spending, costing £6.8 billion in 2012/13 in Scotland, equivalent to around 40% of all spending on benefits and tax credits, and 10% of total public spending for and on behalf of Scotland (DWP, 2013). Changes in State Pension policy can thus have important implications both for pensioners and for the public finances.

The State Pension age for men is 65; for women it has traditionally been 60 but since 2010 it has been increasingly gradually and will reach 65 in 2018. Between 2018 and 2020 the age for men and women will increase to 66, and to 67 by 2028.

The UK Government is committed to the principle of adjusting the state retirement age so that the around one third of adult life (age above 20) is spent in retirement. It has been adjusting women's state retirement age towards this aim since 2010. Figure 1 shows how this proportion is likely to vary in the future in Scotland if there are no further changes to the state retirement age other than those announced by the UK government.



3 What will happen to the State Pension if there is a Yes vote?

The Scottish Government has been keen to stress that there will be relatively little upheaval in arrangements for the State Pension, should Scotland become independent. However, it does outline a number of areas where policy in an independent Scotland may differ from that in the UK (Scottish Government, 2013).

- A delay in the rise in the pension age to 67 until 2034. Between 2028 and 2034, people in Scotland would be entitled to the State Pension one year earlier than people in rest of the UK.
- Retention of the Savings Credit element of Pension Credit – an income-related benefit top-up for pensioners on low incomes who have saved some money for their retirement. It currently benefits 9,000 pensioners in Scotland to a maximum of £18 per week. The UK Government plans to abolish this credit after 2016.
- An increase to the Single Tier Start Rate, which would be set at £160 per week in Scotland, £1.10 higher than in the UK, and will be uprated each year by the so-called ‘triple-lock’, which means that the state pension will increase by the maximum of: (i) the increase in earnings; (ii) the increase in prices or (iii) 2.5 per cent, whichever is higher.

These policy proposals are costly. Delaying an increase in the State Pension Age is particularly costly for the public finances, as it means reduced revenues from labour taxes and increased pension payments. The Scottish Government has claimed that the delay is affordable because life expectancy is lower in Scotland – pensions cost less in Scotland because people do not receive them for so long (Bell et al. 2014).

However, a more relevant question is to consider spending on the State Pension relative to the working age population, because the working age population pays the taxes which fund pensions. Between now and 2035, Scotland’s population is projected to ‘age’ more quickly than that of the UK. Ignoring the effects of the policy change discussed above, Scotland’s spending on the State Pension will, by 2035, be around £400 million higher than if Scotland faced the same age distribution as in the rest of the UK. This is equivalent to a cost of £115 per working age individual in Scotland.

The Department for Work and Pensions has estimated the costs of the State Pension proposals in the White Paper at £1 billion per year by 2032 (DWP, 2014). Their cumulative impact is to increase the size of Scotland’s State Pension funding gap, relative to the working age population, by a further

£288. (The most costly policy proposal is the delay in the State Pension age increase, which is estimated to cost £0.8 billion, but only applies for the years 2028-34). Thus whilst the State Pension might be more generous in an independent Scotland, the revenues to pay for this will have to be found either through taxes or reduced government spending elsewhere.

It is likely to be administratively difficult to establish whether those receiving the State Pension built up their qualifying years in Scotland or in the rest of the UK. This is clearly important in determining where the liability for State Pension payments lies. If the data is unavailable, some rough rule of thumb is likely to be negotiated, such as the liability for paying the State Pension lying with the state in which the pensioner is resident. Even more problematic will be the determination of liability for payment of the pensions of the 1.1million UK pensioners who live abroad.

4 Public Service Pensions

Around one million people in Scotland currently have a direct interest in one of the five main public service pension schemes (for teachers, NHS workers, local government, police, and the fire service), either as members, as pensioners or as dependants. In 2009/10, the five schemes paid out £2.8 billion to pensioners while public bodies contributed £2.2 billion and employees paid £814 million to meet their expected long-term costs (Audit Scotland, 2011).

There are both funded and unfunded public service pension schemes in Scotland. The Local Government Pension Scheme is the main funded scheme (where payments are financed out of the contributions that pensioners themselves made when they were working); the NHS, teachers, police and fire-fighters' pensions are all unfunded (pensions paid to current pensioners are financed from contributions paid by current workers).

Whether Scotland becomes independent or remains in the Union, the key challenge is the affordability of these schemes. Prior to the recession in 2007/8, the Scottish pension schemes received more in contributions than they paid out to retirees. This position deteriorated each year, and in 2011/12 these schemes (funded and unfunded) paid out over £300m more than was received. This trend reflects a reduction in returns on investment, combined with real terms increases in payments which have not (for unfunded schemes) been equally matched by an increase in contributions.

The five schemes are already managed as separate Scottish pension schemes, and thus arrangements for their management are not expected to change radically on independence. But most shortfalls in the unfunded schemes in any given year are met by the UK Government and thus funded by UK-wide taxation. Scottish taxpayers will obviously become fully responsible for such shortfalls should Scotland become independent.

Public sector pensions form a major part of government's future liabilities (i.e. liabilities that have been incurred for activities that occurred in the past). In fact, public sector pensions are the largest future liability identified in the UK's Whole of Government Accounts (WGA), accounting for £1 trillion of the UK's total liabilities of £2.6 trillion (HM Treasury, 2013).

Table 1 shows public service pension liabilities in UK and Scotland. Scotland is exposed to broadly its population share of public sector pension liabilities. However, as there are no separate civil service or armed forces schemes in Scotland, negotiations would have to take place around how the UK's liabilities for these pensions might be split on independence.

The liabilities do not reflect the pension that may be paid to current employees for any further years of service that they may accrue or for future employees. Hence it represents only a partial assessment of how pensions will affect the public finances in the future. Nonetheless, the value of these pensions clearly adds to the overall indebtedness of the public sector.

The issue of meeting these pension commitments is not directly related to the constitutional issue. It will arise irrespective of the referendum outcome. Public service pension schemes should broadly balance, in other words the employee and employer contributions over a period of time should match payments to pensioners. Throughout the 2000s, the expansion of public sector employment helped keep public service pension schemes solvent. A shrinking public state could pose major challenges to the funding of public pensions, particularly those that are 'unfunded', for which current payments are met from current contributions. Shortfalls in such schemes could be met either by increasing current contributions (from employers, employees, or both), or through general government revenues.

Filling a gap through general government revenues would imply an increase in taxation or reduction in spending on public services. Either case may be viewed as being inequitable, as it represents a redistribution of revenues to retirees of the public sector from the general population. Scotland has a slightly higher proportion of public sector workers than the rest of the UK

(25.6% v. 23.1%) and this explains its relatively larger liability (relative to its population share of 8.3%) for unfunded schemes.

Table 1: Public service pension liabilities in UK and Scotland (£bn)

	UK	Scotland	Scotland as % UK
Unfunded (gross)			
Teachers	233.3	23.6	10.1%
NHS	282.6	25.3	9.0%
Civil service	155.1	N/A	
Armed forces	105.6	N/A	
Police	101.6	9	8.9%
Fire	21.2	2.3	10.8%
Other unfunded	20	0.7	3.5%
Total unfunded	919.3	60.9	6.6%
Funded (net)			
Local govt	78.4	25.1	32.0%
Other funded	10	N/A	
Total funded	88.5	25.1	28.4%
TOTAL	1007.8	86	8.5%

Source: Whole of Government Accounts; Scottish Public Pensions Agency

5 Occupational Pensions

The White Paper (Scottish Government, 2013) states that ‘Occupational and personal pension rights and accrued benefits will not be affected by Scotland becoming independent.’ The Scottish Government proposes to continue policy to encourage private pension saving, including the roll-out of automatic enrolment.

But there are important questions around how pension fund assets held by Scots might be invested in government bonds, and the implications for returns. This is especially the case if Scotland were to adopt a separate currency.

Pensions are funded by purchasing assets which earn a return. Because they produce a safe and predictable return, government bonds almost always form part of these assets. While pension funds may hold bonds from a number of countries, they tend to concentrate on holding domestic government bonds. This is likely to be a market that pensions companies understand well and where there is no risk associated with currency fluctuations,

which might be the case with foreign government bonds. Our analysis suggests that in 2013, Scots held around £165 billion of pension fund assets, of which around £44 billion was held in UK government bonds.

However, these funds are held by UK pension companies on behalf of all their UK customers: any distinction between Scots and the rest of the UK fund members is not relevant at present. After independence, the existing contracts would presumably be honoured. But if an independent Scotland adopted its own currency, Scottish pensioners might gain or lose depending on how this currency fares in relation to sterling. This would likely raise difficult legal issues, given that the pension contract was initially made in sterling.

For those currently investing in a pension, the market for Scottish Government bonds would be more relevant. The Scottish Government will need to sell such bonds immediately post-independence in order to fund its public services. If Scotland is still part of a currency union, these bonds would have to be more attractive than UK bonds in order to attract pension fund buyers. This might require that Scottish bonds offer a higher rate of return than UK bonds, and this may be the case if the Scottish Government faces a higher rate of borrowing on its debt than the UK Government does. This “liquidity premium” may allow Scottish pension funds to purchase a larger fund for retirement than UK counterparts. Under a currency union, it is less clear that there would be any dividend for Scottish pensions.

6 Conclusions

In the case of a Yes vote, the Scottish Government has indicated that it would provide a slightly more generous State Pension, and delay the UK Government’s planned rise in the State Pension age to 67 by around eight years. The more generous State Pension will affect the affordability challenge posed by an ageing population and would have to be funded through general taxation.

Affordability will also be affected by the fact that Scotland has a higher proportion of public sector workers and a more rapidly ageing population. Under current arrangements, shortfalls in Scotland’s unfunded pension schemes are met through UK taxation, whereas under independence, shortfalls would clearly have to be met through Scottish tax receipts alone.

For both the State Pension and UK-wide public sector pensions (civil service and armed forces pensions), independence would trigger the need for

discussions between the UK and Scottish Governments as to how to split liabilities for pensions for people who have accrued entitlements in a different state from the one in which they retire.

For those investing in occupational pension schemes, the prospect of an independent Scotland adopting its own currency raises issues: Scottish pensioners who had invested in UK schemes may find the value of their pension fluctuating depending on the exchange rate between sterling and the new Scottish currency. On the other hand, independence may enable Scottish workers to secure a larger pension fund for their retirement, if the Scottish Government has to pay more to borrow than the UK.

The funding of state and public sector pensions will be difficult whatever the constitutional outcome. The Scottish Government has been keen to stress that pension arrangements will change little if at all under independence. Nonetheless, although conditions may not change much for pensioners, the challenges posed by an ageing population are likely to require some combination of increased contributions and/or general taxation in order to fund existing liabilities. Although this challenge will exist whatever the constitutional position, the affordability challenge is likely to be more acute for Scotland than it is for the rest of the UK.

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Inequality

David Eiser

*'This level of inequality offends
the very basis of a good society'*
Alex Salmond¹

1 Introduction

Inequality has been at the centre of the debate on Scottish independence since the referendum was announced. In making a case for independence, the Scottish Government has argued that UK policy does not do enough to address rising inequality. Independence, it is argued, would give access to the fiscal levers necessary to address inequality².

This chapter reviews inequality trends in Scotland within an international context. It asks how policy can affect inequality, and discusses the opportunities and constraints that independence will bring in addressing inequality.

2 International context/ drivers of inequality

The conventional economic view is that some level of inequality in society is necessary to provide people with the incentives to work and invest. Beyond a certain level however, inequality can have detrimental effects. Higher income inequality is associated with reduced social mobility between generations (OECD, 2011; Portes, 2011). Higher income inequality in the present makes family background play a stronger role in determining the adult outcomes of young people, with their own hard work playing a commensurately weaker role (Corak, 2013). This offends many people purely on the basis of what is perceived as 'fair', and risks creating a society that is 'dynastic', rather than dynamic.

Beyond this notion of fairness, inequality can have negative consequences for economic growth (Ostry et al. 2014). This can occur if the poorest in society cannot afford to invest in education, or if it enables the richest to influence policy in such a way as to entrench their position and stifle competition and growth (Stiglitz, 2013). There is some evidence that inequality contributed to the recession, as disproportionate income gains among the

¹ Speech to the SNP Party Conference, October 2013.

² The analysis in this chapter deals specifically with inequality of income; throughout the chapter, the word inequality can be inferred to imply income inequality.

rich were invested in the financial markets, increasing the supply of credit to lower income households who became increasingly indebted as they tried to maintain their relative standard of living in the face of declining real incomes (Wisman 2013; Lucchino and Morelli, 2013). Inequality is also linked to a wide range of social problems, including political disengagement, social exclusion, poor mental and physical health, and crime.

So how does inequality in Scotland compare with similar countries? Figure 1 shows that inequality in the UK is high relative to international comparators, but that this is largely the result of a 'London-effect'. Inequality in Scotland is roughly average compared to OECD countries, but is slightly higher than the European average, and notably higher than in the Nordics.

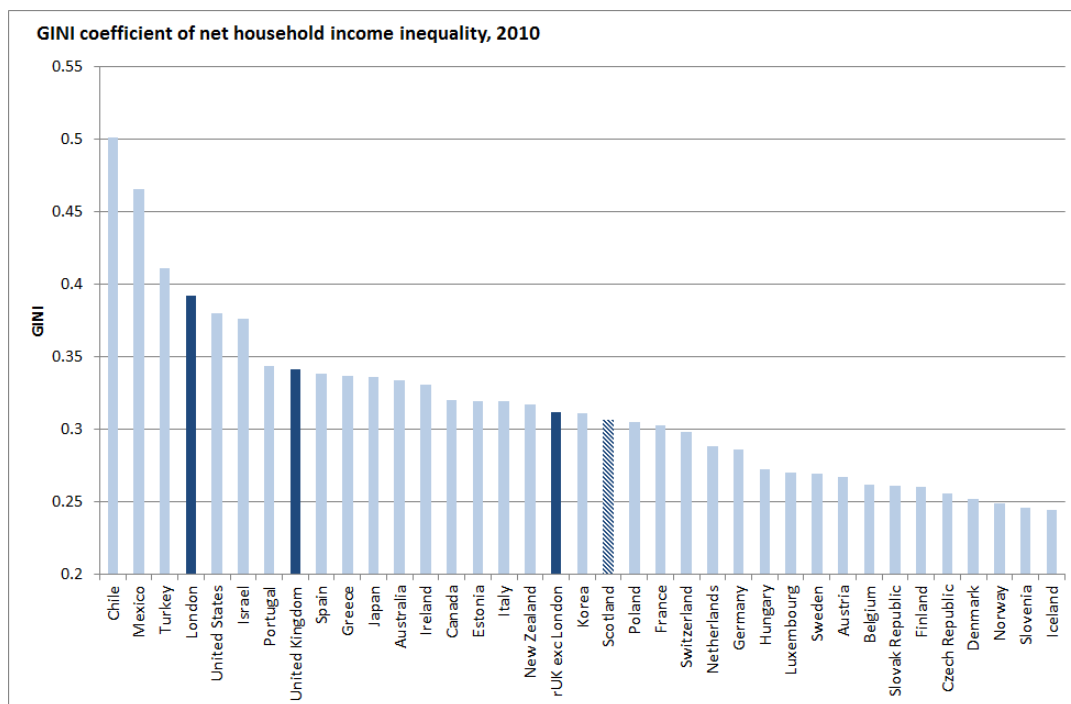


Figure 1: Household net income inequality in OECD countries, 2010³

Figure 1 shows inequality after taxes paid and benefits received. However, it would be wrong to assume that the UK's relatively high inequality is caused by it having a tax and benefit system that is not very redistributive. In fact, the UK's tax and benefit system is equally as redistributive as the average tax and benefit system in OECD countries. In the UK, taxes and benefits reduce the market income (i.e. pre tax and transfer) GINI coefficient by 13 percent-

³ The measure of income used here is household disposable income (i.e. after taxes and transfers). Incomes have been 'equivalised' to take account of household composition, e.g. to reflect the fact that, to attain a given standard of living, a household with two adults and two children requires a higher income than a single-person household.

age points, (across OECD countries as a whole, taxes and benefits reduce the market income GINI coefficient by 12 percentage points). The Nordic countries have slightly more redistributive tax and benefit systems than the UK, which reduce the market income GINI coefficient by 13, 14, and 15 percentage points in Norway, Denmark, and Finland respectively (Sweden=12).

If the UK's high inequality is not caused by the tax and benefit system, it follows that it is caused by a high inequality of market incomes (i.e. income before taxes and benefits). The reasons why market income inequality is particularly high in the UK is due in part to historical factors. Most of the increase in market income inequality occurred during the 1980s and early 1990s. De-industrialisation led to falling demand for lower and middle paying jobs, and combined with labour market deregulation (particularly the declining role of Trade Unions) this bid down real wages in the lower part of the income distribution. At the same time, financial deregulation and reduced top rates of income tax led to increases in the income shares of top earners.

Since the late 1990s, inequality has continued to rise, but more slowly. The number of jobs in semi-skilled occupations that can easily be mechanised or off-shored has continued to decline, but there has been some increase in demand for low-paid jobs in occupations that cannot be mechanised, and rates of pay in these jobs have been protected to an extent by the introduction of the minimum wage in 1997. However, the changing nature of job demands (greater flexibility of working hours), and further labour-market deregulation (e.g. zero-hours contracts) has meant that the average hours worked by those in low paid jobs has tended to fall, and this has been a major driver of the increase in inequality in recent years.

At the top of the pay distribution, the most notable trend over the past 10 years has been the continued pulling away of the salaries of the highest 1% of earners. For example, the richest 1% of Scotland's adult population earned 6.3% of total pre-tax incomes in 1997, rising to 9.4% in 2009. There is an ongoing debate as to whether this increase in top pay is fair in the sense of reflecting the skills and value added of top executives, or whether it simply reflects the ability of these individuals to set their own pay or lobby for pay increases, especially in complex organisations where performance is difficult to measure.

Inequality trends in Scotland largely mirror those for the UK, albeit at a slightly lower rate. Increases in benefit spending and the introduction of tax credits during the early and mid 2000s compensated for the (relatively small)

increases in market earnings inequality during this period. Since the recession, falls in higher earnings have offset the initial phases of the real terms reductions in benefit spending. Many commentators expect that inequality will begin to increase soon, as economic recovery combines with the UK Government's welfare reforms.

3 Policies to address inequality

To what extent could varying particular tax and benefit policies influence the level of net income inequality in Scotland? Comerford and Eiser (2014) have modelled the effects of various hypothetical tax and benefit changes on levels of net income inequality in Scotland. For example, they look at the effect on inequality of increasing rates of income tax (particularly for higher earners), and increasing rates of benefit for those out of work or on low incomes.

The results suggest that reasonable changes to taxes and benefits – such as increasing out of work benefit payments by 10%, raising the higher rate of income tax by 1p, or reducing the additional income tax threshold from £150,000 to £100,000 – would have a fairly insignificant effect on disposable income inequality. Even if these policies were implemented simultaneously, Scotland is unlikely to close more than a fifth of its inequality gap to the Nordic countries. Moreover, some of these tax and benefit changes would be politically difficult to implement, and some would cost a substantial amount.

This is not to say that fiscal policy is unimportant. It does have some effect on inequality, and the analysis of Comerford and Eiser did not consider all possible tax levers. For example, the rationale for inheritance tax (a tax of 40% on transfers of wealth over £325,000 made in the years preceding death) is to temper differences in life chances that arise through fortunate or unfortunate circumstances of birth. At the moment, inheritance tax does little to reduce inequality as it only affects around 1% of deaths. An independent Scotland may choose to radically overhaul this tax, potentially replacing it with a tax on inheritances that individuals receive over the lifetime (Adam et al. 2013).

It may also be that fiscal policy can have some longer-term impacts on inequality. For example, there is some evidence that the earnings of the highest earning 1% have increased most in countries which have cut top tax rates the most since the 1980s. There are two potential explanations for this: one is that lower top tax rates encourage work effort and business creation among the most talented; another is that lower top tax rates might increase

the incentives for high-paid individuals to bargain for higher pay. In the first case the increase in top incomes reflects 'work effort', which may stimulate wider economic growth which could be inequality reducing, whereas in the second case the increase in top incomes comes purely from top earners taking a larger share of the pie, unambiguously increasing inequality. Picketty et al. (2014) find evidence that the second effect dominates. This implies that increasing top tax rates could result in a redistribution of pre-tax incomes without detrimental effects on growth.

The preceding case is an example of where fiscal policy influences inequality not only by redistributing incomes, but also has an effect on the distribution of market incomes in the first place. Other policies that can influence the distribution of pre-tax earnings include policies related to labour market regulation. The minimum wage, introduced in 1997, does seem to have mitigated inequality increases, although its value has fallen in real terms since the recession. Policies which increase labour market flexibility, such as zero-hours contracts and other forms of very flexible or temporary working, may help to raise the overall level of employment but they have also tended to increase inequality by creating large sections of the labour market that are reliant on insecure and part-time work. It is unclear whether labour-market reforms would be more possible if Scotland was independent. Politically, it could be argued that there is greater will among Scottish politicians to introduce some of these reforms. Economically however, it may be more difficult for Scotland to introduce reforms in isolation, as this may induce some businesses to locate into rUK, undoing any beneficial outcomes in the Scottish labour market.

Ultimately, reducing inequality in a very significant way will require more than just using fiscal policy to redistribute incomes; it also requires a redistribution of earnings themselves. There has been some debate, stimulated by organisations such as the Jimmy Reid Foundation (Danson and Trebeck, 2013), as to whether Scotland could achieve a transformative change towards a high-value economy in which low-paid, insecure work is largely a thing of the past. This admirable vision would require fundamental change in terms of the balance of economic sectors, business ownership models, collective bargaining arrangements between employers, employees and government, different models of social welfare state, and so on.

Whilst the feasibility of such a transformative change could be debated, what is clear is that education will continue to play a very important role in determining economic fortunes both individually and collectively, and will

be a key factor shaping the distribution of market (i.e. pre-tax) incomes in future. Unfortunately, there is evidence that children from poorer families in Scotland already lag their peers academically when they start school, and this gap widens through the education system (Sosu and Ellis, 2014). Given that those with better qualifications earn a wage premium over those with fewer qualifications, there is a risk that these educational inequalities for children will translate into earnings inequality as adults, and in turn into educational disadvantage for the children of those adults (Lindley and Machin, 2012). This is the kind of inter-generational inequality that many people find particularly offensive. Addressing these educational inequalities at an early age, enabling wide and fair access to higher education, investing in lifelong learning, and engaging employers in the education system, are all important policies for addressing inequality in the long-term. Education is already a wholly devolved matter for the Scottish Government.

4 Conclusions

Inequality skews opportunity and limits intergenerational mobility. A desire to reduce what is perceived as a particularly high level of inequality – particularly when compared to the Nordic countries – has been one of the main arguments used by supporters of independence to justify their case.

The analysis in this chapter shows that inequality is higher in Scotland than in Nordic countries not because the UK's tax and benefit system is much less redistributive than the Nordics, but because the inequality of market (pre tax and transfer) incomes is higher in Scotland. Fiscal policy levers can help address inequality, and there is certainly scope to make the UK's existing tax and benefit system more redistributive. But fiscal policy is not in itself a panacea for inequality, (not least because, in a small open economy such as Scotland's, the effectiveness of fiscal policy may be constrained by the international mobility of people, incomes, and firms).

Achieving Nordic levels of inequality would require a shift not only in the tax and benefit system, but also in the distribution of market incomes. This could be achieved in part by changes to labour market regulation, but it is also likely to require more fundamental change in relation to areas such as wage bargaining and business ownership models, and these kinds of economic cultural change may be difficult to achieve; they are unlikely to be attained through the exercise of particular policy levers.

Ultimately, the future path of inequality is likely to be strongly determined by the role that technological change will play in influencing the demand for

skills. There remains disagreement about the extent to which future computerisation might substitute for humans in jobs at different parts of the wage distribution. But it seems almost certain that we are moving to a world where jobs requiring high cognitive, analytical and interactive skills are increasingly commanding a wage premium over lower-skilled jobs, for which labour supply is almost infinite. Ensuring that people can access an appropriate portfolio of skills to meet the demands of changing labour markets is thus a key part of any policy to address inequality.

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Sovereignty debates elsewhere

François Vaillancourt

1 Introduction

The purpose of this paper is to summarise briefly similarities and differences between Scotland, Québec, Flanders and Catalonia with respect to the drivers of secession and the obstacles it encounters. A more in-depth focus will be put on Québec given that it has held two referendums and is the expertise of the author. We first discuss the drivers of secession then examine issues that are raised when a discussion around secession takes place. We draw on Castells (2013) and Ruiz-Huerta (2013) for Spain as well as on Gérard (2013).

2 What are the drivers of secession?

Secession can be seen as part of a continuum of solutions to intergovernmental relations between two groups. Vaillancourt (1998, 2010) presents the continuum as follows in the case of Canada:

- a) *A more Uniform Canadian state*. This option implies that Canada would become an English-only quasi unitary state and would remove any distinct treatment of Québec.
- b) *The status quo*. This option, however ill-defined and changing over time implies no change in the existing degree of distinctiveness of Québec but changes in its other powers as Canada may see fit to grant it through various non-constitutional means (administrative or legal).
- c) *Asymmetric decentralization to provinces*. This option, which was discussed in 1987-1992 (Meech and Charlottetown accords) and is similar to the status of Scotland, gives Québec a "distinct" status with additional powers not granted to other provinces.
- d) *Symmetric decentralization to provinces*. This option gives all provinces new powers through constitutional changes or at least the right to claim them, but without an explicit recognition of Québec's distinction.
- e) *Decentralization to language groups*. This is not done in Canada but done in Belgium with co-existing second tier governments distinguishing between geographical regions (Flanders, Wallonie, Bruxelles) and language communities (Flemish, French, German) with regions responsible for physical infrastructure and communities for human capital.

- f) *Club sovereignty*. This concept is based on the fact that individuals living in the same territory can, with respect to some dimensions of their lives such as religion, choose to adhere to a group or club and live by its rules.
- g) *Sovereignty/Independence*. This is the dissolution of a country.

As argued elsewhere (Vaillancourt, 2011), geography, history, demography, economics and politics are the main drivers, ordered by decreasing degree of permanence, of inter –governmental arrangements. In the case of secession (we do not consider the break-up of the USSR or Yugoslavia as secessions but rather as disintegration) one would expect that;

- Geography: More eccentric regions (land's end, little contiguity, topographically isolated ...) of a given country would be more likely to seek secession than those imbedded in its centre. In the case of the four regions examined here, three are situated at one end of the country they belong to isolated while Québec is more in the middle of Canada. Recent cases of secession such as those of Eritrea, Kosovo, Slovakia and South Sudan or the demands of Zanzibar involve relatively eccentric regions ;
- History: Regions that in the past were independent or benefited from strong autonomy would be more likely to seek secession than those who did not. Scotland was independent in the past, Catalonia was at least strongly autonomous (county of Catalonia under the crown of Aragon), while Flanders or Québec were not independent countries but had some autonomy. One point to note is that in other cases than those discussed here the revocation of some special autonomy status seems to be associated with an increased demand for secession (Eritrea, Kosovo and South Sudan);
- Demography: Ethno/linguistic/ religious differences are often a determinant of the quest for autonomy that can end with secession. In Catalonia, about 40% self- identify as Catalans and 45% as Castellans (Spanish) speakers; thus Catalans are not the majority in Catalonia and a minority in Spain. In Belgium 60% of the population belongs to the Flemish community; the large majority live in Flanders, and they are a minority in the region of Brussels. In Québec, 80% of the population are francophones but they represent only 25% of the population of Canada. Finally, in Scotland, the vast majority of the population is English-speaking and thus no different in that respect from the population of the United Kingdom or England. We note that language is different from ethnicity and

- religion as a driver of secession as it is not only an identity marker but human capital used in the labour market;
- **Economy:** One would expect richer regions of a country to be more willing to seek out secession than poorer ones, especially if they contribute more through formal or informal equalisation mechanisms to central government revenues than the benefits they derive from its spending. One would also expect that regions less integrated in national markets than others due to their economic structure or location (export oriented...) to be more willing to secede. Catalonia and Flanders are richer than the rest of their countries and thus make a net contribution to the national treasury ; Québec is a net beneficiary of federal revenues. Scotland benefits from a generous grant from Westminster through the Barnett formula transfer, although in recent years the generosity of this grant has been more or less offset by the value of North Sea oil and gas taxation revenues. One point to note is that support for NAFTA (the North American Free Trade Area) was stronger in Québec than in the rest of Canada; this weakened the trade links between Quebec and the rest of Canada and strengthened Quebec's trade links outside of Canada. In turn this reduced the influence of Canadian political leaders in the secession debate;
 - **Politics:** Both national and regional leaders can encourage or discourage secessionist sentiments. This can play out both in the short and long term.

Table 1 summarizes the arguments above.

Table 1: Four drivers of secession for Catalonia, Flanders, Québec and Scotland (Source: The author)

Regions	Geography Excentric re- gion	History Claim to past independence	Demography E/L/R: Lan- guage	Economy Rich com- pared to country
Catalonia	Yes	Yes-Disputed by some	Yes-Catalan	Yes
Flanders	Yes	No	Yes- Flemish	Yes
Québec	No	No	Yes -French	No
Scotland	Yes	Yes	No	Disputed de- pends on Oil ownership

3 The secession process

In Quebec and Scotland, the central government acquiesced to demands for an independence referendum: implicitly (by participating in the campaign) in 1980 and 1995 in Québec, and explicitly in 2014 in Scotland. In Catalonia, the demand for a referendum has been met by a firm No from the central government, and in Flanders there is no demand for a referendum.

3.1. *The territory*

One problem that often occurs in the case of secession is what the borders of the new state are. In the case of Catalonia and Scotland, land borders appear well settled, but in the case of Québec there are two issues.

First, the issue of the “northern lands”: the actual territory of Québec is larger than the original area when the province was created in 1867. This is the result of two expansions, respectively in 1898 and 1912. At that time, part of land formerly administered by the Hudson Bay Company (known as Rupert’s land) that was purchased by the federal government in 1869 was transferred to Québec where it is referred to as James Bay/Ungava. These lands are alleged by some participants in the secession debate to revert to Canada in the case of secession. Complicating this issue is that a substantial number of residents of this sparsely populated territory are aboriginals, while a substantial amount of hydroelectricity is produced there.

The second issue is the status of parts of Montréal that may want to remain Canadian.

In the case of Flanders, Brussels (one of three distinct regions in Belgium), is fully enclosed in Flanders and populated mainly by French speakers. Some proponents of Flemish secession argue it should be part of Flanders.

Finally one notes that all four regions have their own sea access. In three cases, the seceding region is at the extremity (north in all cases) of the country. Québec is the exception as its secession would divide Canada in two halves. This will require setting up a land bridge perhaps similar to ones found in some customs unions. Catalonia sits astride the main Spain –EU trade route; one would need to somehow integrate it in pan European trade if it was no longer an EU member. Similarly the port of Antwerp, the second largest by volume in Europe, would need to be somehow linked to Europe should Flanders no longer be part of the EU.

3.2. *Citizenship*

In terms of citizenship, one finds that Québec secessionists often argue that one can be a citizen of Québec yet hold a Canadian passport. In the case of Europe, this issue appears to matter less in the sense that independent countries issue their variety of European passport, contingent on being part of the EU. In so far as labour mobility remains a key part of the European compact, seceding regions that remain in Europe (see below) will see their population have easy access to other European labour markets

3.3. *Defence*

In terms of defence Scotland is the base for the nuclear deterrent (submarine fleet) of the United Kingdom while Québec is part of the territory of NORAD (North American Aerospace Defence Command) and part of the northern frontier of US air defence. Catalonia and Flanders do not have similar issues

3.4. *Energy*

In terms of energy, we see no major issue as in these four cases national/international energy markets are regulated by various mechanisms. It would be surprising to see Russian type behaviour, where energy is used as leverage when interacting with past members of the USSR (see the section on Energy by McEwen for further discussion of this issue in a Scottish context).

3.5. *Currency*

The choice of currency post secession is subject to similar issues in Québec and Scotland. Both are in a bilateral monopoly situation with a larger economy (4-1 for Québec, 10-1 for Scotland) and little leverage. In the case of Québec the intent has always been to use the Canadian \$, with or without participation in the management of the Bank of Canada. The idea of a separate currency has no traction while that of using the US\$ has been mooted. In the case of Scotland, using the £ appears to be the preferred option, with a distinct currency in second place and the euro a distant third. One point to note is that the Scottish financial institutions are bigger than those of Québec and more active in the UK than those of Québec are in Canada, being more local in nature (the largest is a federation of credit unions). In the case of both Catalonia and Flanders, the euro is the currency of choice.

3.6. *Debt*

After secession, the national debt will need to be divided between the new entity and the previous country. In the case of Québec, the share of the national debt that it would need to assume ranges from 17% to 30% accord-

ing to the various possible assumptions. Using population shares would yield 23% before possible out migration. An associated issue is the cost of such debt; evidence in Somers and Vaillancourt (2014) shows that the threat of secession increased the interest rate on the debt of Québec. In all three other cases the same issue will arise.

3.7. *Market access*

Interruption/cessation of market access is a threat often used by those objecting to secession; leave us and trade shall cease. In the 1980 Québec referendum, this threat was often made in terms of access to the Canadian market; in the 1995 referendum, this threat was made in terms of access to the North American market then integrated under NAFTA. In the current debates in Scotland and Catalonia, access to the European market is seen as endangered by secession since secession would lead to the need to reintegrate with Europe. The key issue is why would past trade partners want to break up trade that by definition was advantageous to both parties, especially if doing so would leave a hole in a well-functioning trade area, impoverish the seceding state with no gains to those impoverishing it, and with a risk that this could backfire by generating social unrest spilling beyond the borders of the seceded state. Put differently, how could anyone conclude that any of the three European regions examined here are less worthy of membership than Greece?

3.8. *Migration*

Out-migration from the seceding region may occur after secession. This is most likely for Québec where there is still an important English-language minority. It seems less likely in the three European regions particularly for Flanders where the rich larger region is the seceding one.

4 Conclusion

The information provided above shows that each of the four regions has a unique set of drivers of their secession movement. In the case of Québec, the main driver is the status of its francophone majority as a minority in Canada and North America and an economically dominated group in Québec. This has caused it to fear assimilation in the anglophone group and thus to take various measures, even though secession would cost it a drop in federal transfer of about 3% of GDP, higher interest payments of perhaps 1% of GDP, a drop in GDP due to out-migration of anglophones and most likely a drop of GDP at least temporarily due to the disruption of some trade flows. This is

clearly different from Catalonia and Flanders that would gain economically from secession by ceasing to be a net contributor to the central government, and more similar to the case of Scotland that benefits from the Barnett formula but with the caveat that North Sea oil may mitigate this.

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Fiscal Alternatives to Independence

David Eiser and David Bell

1 Introduction

In the case of a No vote in September's Referendum there is likely to be significant demand for further tax and spending devolution to the Scottish Parliament. Indeed, polls suggest that, although a no vote at the referendum is the most likely outcome, a majority of Scots believe the Scottish Parliament should have greater tax powers than it does presently. As a result of the recently passed Scotland Act, we already know that the Scottish Parliament will gain new tax powers in 2016. And all major Union parties have published proposals for further tax devolution to the Scottish Parliament in the case of a No vote. This chapter looks at the proposals for further fiscal autonomy of the Scottish Parliament that have been made to-date.

2 Fiscal autonomy and the Scotland Act

The Scottish Government faces a mismatch between its spending and revenue responsibilities. Its expenditure budget of £34 billion (in 2012/13) is financed primarily from a block grant from the UK government. Only two relatively small property taxes are devolved to Scotland, Council Tax and Business Rates, both of which raised around £2 billion in 2012/13. This mismatch between spending and revenue raising responsibilities is known as a 'vertical fiscal imbalance'.

Scotland's high vertical fiscal imbalance is seen as a disadvantage because it reduces the accountability of the Scottish Government to its electorate. The Calman Commission, established by the Unionist parties to review the financial accountability of the Scottish Parliament argued that: *"Funding by block grant alone means that while the Scottish Parliament is completely accountable for the spending of its budget, it is not accountable for the total of that budget or how it is raised; it has no fiscal powers that can be used as policy instruments and it does not have a direct financial stake in the performance of the Scottish economy"* (Commission on Scottish Devolution, 2009, para 3.87).

The Calman Commission's recommendations were largely enacted through the Scotland Act 2012. The main proposal in the Scotland Act is the establishment of a 'Scottish Rate of Income Tax' (SRIT). From April 2016, the basic, higher and top rates of income tax levied on earned income by the UK Government in Scotland (currently 20p, 40p and 45p) will be reduced by 10p (to 10p, 30p and 35p). Simultaneously, the value of the Scottish

Government's block grant will be reduced to reflect the loss of revenue to the UK Exchequer from this tax rate reduction. It will then be up to the Scottish Government to determine the SRIT, a flat rate tax set at the same rate for each (UK government-determined) income tax band. The income from the SRIT will form part of the Scottish budget. If the Scottish Government chooses to set the SRIT at 10p, the basic, higher and top rates of income tax in Scotland will remain at the same levels as in the rest of the UK. If the SRIT is set at 9p, then the tax rates paid in Scotland at the basic, upper and additional levels would be 19p, 39p and 44p (Figure 1).

Together with the already devolved council tax and business rates and some smaller taxes that will also be devolved to Scotland through the Scotland Act (landfill tax and stamp duty), the Scottish Government will be responsible for taxes equivalent to around 27% of its spending, (assuming it sets a SRIT of 10p). Perhaps more importantly, it will gain the ability to vary its budget at the margin. For example, increasing the SRIT from 10p to 11p (so that the tax rates paid by basic, upper and additional rate payers in Scotland were 21p, 41p and 46p respectively) would increase the Scottish Government's budget by around 1.25%.

As a flat tax (giving the Scottish Government no authority to vary thresholds, or rates individually), the structure of the SRIT means that the UK government keeps to itself control over the rate of progression of income tax. Thus although it does increase the accountability of the Scottish Government from the perspective of its vertical fiscal deficit, it does not give the Scottish Government any powers to influence the income distribution. Given the significance that has been attached to income inequality during the referendum debate (see the chapter on Inequality), and the oft-repeated argument that Scots prefer a more social democratic approach to distribution than those in rUK, this may undermine the extent to which the Scotland Act proposals really do meet the desire for greater fiscal policy autonomy.

The remainder of the Scottish Government's budget will continue to be funded through a block grant from Westminster. The value of the grant will be linked to the growth in income tax revenues in the rest of the UK (rUK). If tax revenues grow more rapidly in rUK than in Scotland, then the reduction in the Scottish Government's grant will not be fully compensated for by increased revenues from the SRIT. If however tax revenues grow more rapidly in Scotland than in rUK, then the growth in the Scottish Government's tax revenues will be greater than the grant reduction.

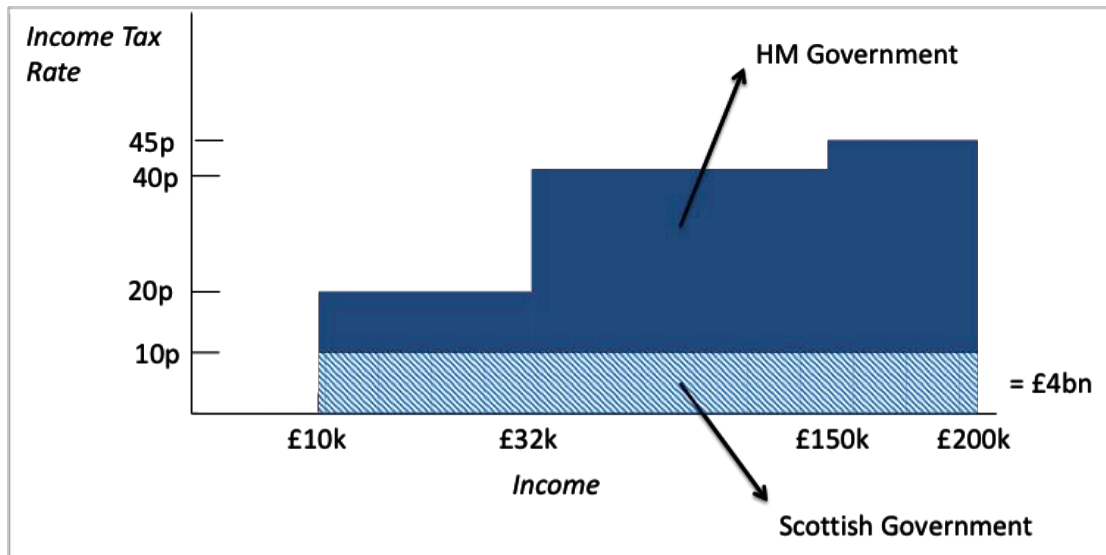


Figure 1: Income tax arrangements under the Scotland Act

3 Options for further fiscal devolution

There is already significant debate around what further fiscal devolution to the Scottish Parliament should take place in the event of a no vote at next September's referendum. Much of this debate has focussed on the scope for revenue (i.e. tax) devolution, given the desire to reduce the Scottish Parliament's vertical fiscal deficit. Each of the main pro-Union political parties has announced specific tax devolution proposals, as have two high-profile think-tanks.

These proposals are summarised in Table 1. If the proposals have anything in common, it is a view that income tax is the most appropriate candidate for devolution. This reflects the view that its revenues are relatively stable over time, it is visible to the electorate, its burden falls largely on those who benefit from devolved services, and it is relatively easy to collect. DevoMore (Trench, 2013), DevoPlus (Reform Scotland, 2012), the Liberal Democrats (Home Rule and Community Rule Commission, 2014) and Conservatives (Scottish Conservatives, 2014) all propose essentially 'full' devolution of income tax with the Scottish Government being given powers to vary tax rates and thresholds (although in most cases income tax on unearned income - investments, dividends and savings - remains reserved at Westminster given the scope for cross-border avoidance, and the Conservatives recommend that Westminster should continue to set the personal allowance). The Labour Party's proposals (Scottish Labour Devolution Commission, 2014) are somewhat more modest, amounting to an extension to the Scotland Act, so

that the devolved part of income tax increases from 10p at each rate to 15p. The Labour Party's proposals also allow the Scottish Government to vary the progressivity of income tax, albeit it in a fairly restrictive way (the Scottish Government would be able to increase the progressivity of income tax rates relative to those in rUK, but not to reduce the progressivity).

The next most significant tax in revenue terms is the sales tax, VAT. A number of the proposals (including DevoMore and the Conservatives) argue that this is theoretically a suitable tax for devolution, but highlight that it is impossible to devolve within the UK because of EU law. As a consequence, DevoMore recommends that half of the VAT revenues raised in Scotland should be assigned¹ to the Scottish Parliament, a proposal which the Conservatives support in principle. The debate is whether such assignment provides the Scottish Parliament with sufficient revenue control to justify the exposure to revenue risk.

National Insurance Contributions (NICs) act like a tax on earnings, but their payment entitles individuals to certain 'contributory' social security benefits that are paid at UK level. Because of this link between NICs and benefit entitlement, most proposals for tax devolution argue that NICs should remain reserved. However, the connection between NICs and entitlement has weakened over time, and there is some disagreement over whether this contributory argument is a strong one mitigating against devolution of NICs, or whether NICs should be aligned with income tax and treated as such.

Beyond the big three taxes, (and given that property taxation, the most obvious candidate for decentralisation to a sub-national government is already devolved), there is not a very close correspondence between the proposals.

- Corporation Tax has been proposed for devolution by DevoPlus on the basis that economic development is a devolved policy area, although most proposals argue that corporation tax is unsuitable for devolution given the risk that the high mobility of the tax base may trigger tax competition.
- Proposals to devolve alcohol and tobacco duties are based on the fact that these 'sin' taxes have a clear link to devolved health policy, but there are serious practical difficulties in devolving these taxes given that they currently operate as a tax on production rather than consumption (Trench

¹ Assignment is where the revenues raised from a tax in Scotland are allocated to the Scottish Government, but the Scottish Government has no powers to vary the tax rate, thresholds, or base.

2013), and some fears that differential rates might result in ‘illicit trafficking’ (Scottish Conservatives, 2014).

- In terms of smaller taxes, there is some consensus that Air Passenger Duty should be devolved given that it is a place-based tax, but less consensus exists on the suitability of devolving wealth taxes such as Capital Gains and Inheritance tax, which are low-visibility and low-yielding.

What emerges from this discussion is that, with the possible exception of income tax on earned income, there are no obvious candidates for further tax devolution to the Scottish Parliament. The various proposals vary substantially in the proportion of the Scottish Parliament spending that would be covered by taxes raised in Scotland, from just under one third under Labour’s proposals to 55% under the Lib Dem proposals, and around two-thirds under the DevoMore and DevoPlus proposals. What also emerges from Table 1 (overleaf) is that the tax base for several of the taxes proposed for devolution is lower in Scotland than in rUK. We return to this point subsequently.

Table 1: Proposals for tax devolution

	£m (2012/13)	Index of revenues p.c. rela- tive to UK	Devo- More	DevoPlus	Scottish Conserva- tives	Scottish Liberal Democrats
Income tax	10,865	-12%	✓	✓	✓ (personal allowance reserved)	✓
VAT	9,347	0%	Shared		Potentially shared	
National insurance contributions	8,521	-2%	Devolved longer term			
North Sea revenue (geographic share)	5,581	909%		Devolved longer term		
Corporation tax (excl North Sea)	2,872	0%		✓ (thresholds reserved)		Shared
Fuel duties	2,258	2%		Devolved longer term		
Council tax	2,006	-5%	Already devolved			
Non-domestic rates	1,981	-8%	Already devolved			
Tobacco duties	1,128	41%	Devolved longer term			
Other taxes, royalties and adjustments	1,082					
Alcohol duties	980	16%	Devolved longer term			
Vehicle excise duty	481	-4%		Devolved longer term		
Stamp duties	472	-38%	Devolved through Scotland Act			
Capital gains tax	292	-11%	Devolved longer term	✓		✓
Other taxes on income and wealth	271	4%				
Inheritance tax	243	-8%		✓		✓
Air passenger duty	234	0%	✓	✓	✓	✓
Insurance premium tax	207	-18%		✓		
Betting and gaming duties	120	17%		Partially devolved		
Landfill tax	100	7%	Devolved through Scotland Act			
Climate change levy	62	14%				
Aggregates levy	45	107%	✓	✓		

Notes: Scottish Labour proposals are not shown as they relate mainly to income tax.

4 Further spending devolution

Spending on welfare benefits is currently reserved to the UK Government². This includes virtually all cash transfer benefit payments associated with low income, unemployment and disability, as well as the State Pension and other old age benefits. Spending on these benefits amounted to £16 billion in 2011/12, representing half the value of the Scottish Government's existing devolved budget.

As well as debate around revenue devolution, there is also debate around which aspects of welfare benefit spending might be devolved to the Scottish Parliament. Whilst we cannot review all such proposals here, those most often cited as candidates for devolution include:

- Housing Benefit (HB, a benefit to support those on low incomes with housing costs) has been proposed for devolution by Labour and DevoMore. It is a significant benefit in cash terms, accounting for £1.7 billion. The argument for devolving it is that it is linked to various areas of devolved policy, including social housing and planning. Furthermore, as a place-related benefit, Housing Benefit rates vary according to local conditions, and it is also reasonably stable over the business cycle.
- Attendance Allowance (AA) has been proposed for devolution by Labour, DevoMore and DevoPlus. AA is a benefit that is intended to help with personal care for those aged 65 or over who are physically or mentally disabled. The rationale for devolving it is that Scotland already has a distinct policy with regards to elderly care, with the result that the UK and Scottish systems overlap. The same considerations apply to Disability Living Allowance (DLA) paid to pensioners, though none of the political parties appear to have noticed this. Together these benefits were worth over £1bn in Scotland in 2012-13.
- DevoMore and DevoPlus have also proposed devolving the Work Programme. The Work Programme is the UK Government's flagship programme for supporting the unemployed into work. The rationale for devolving it is that the Scottish Government has responsibility for skills and training policy.

However, the case for devolving aspects of welfare spending is arguably more difficult to make than the case for devolving tax responsibilities, for both reasons of principle and practicality.

² Spending on defence and foreign affairs is also reserved, but there are no proposals for these to be devolved.

In terms of principles, most proponents of further fiscal devolution have also been keen to stress the importance of maintaining the UK's social welfare union. The UK welfare state is seen as the key element in the risk sharing and resource pooling mechanisms that are seen as a defining characteristic of the Union.

In this context, it is unclear to what extent welfare devolution – which would presumably result in different benefit conditions in different parts of the Union – is compatible with these principles.

In terms of practicalities, one issue is that the UK Government is currently in the process of combining Housing Benefit into a new benefit, Universal Credit, which brings together six existing means tested benefits for those on low incomes. The rationale for Universal Credit is to simplify the benefit system and avoid the current situation whereby benefit claimants sometimes face particularly high work disincentives as different benefits are withdrawn simultaneously. Devolving HB will almost certainly negate the proposed advantage of UC, namely the advantage that arises from receiving one benefit from one agency, rather than overlapping benefits from different agencies that tends to result in high benefit withdrawal rates.

In summary, it is difficult to envisage meaningful devolution of welfare spending in a way that does not threaten the notion of there being some social welfare union that enshrines rights to fundamental welfare services across the UK. Because of this, there is arguably more contentiousness around welfare spending devolution than there is around revenue devolution. Furthermore, devolution of welfare spending risks accentuating the issues around the vertical fiscal imbalance that the Scottish Government already faces.

5 The Scottish proposals in an international context

There is often a perception in the UK debate that Scotland has far less fiscal autonomy than decentralised regions in federal countries. It is useful to consider how the proposals described previously would, if implemented, alter these comparative statistics.

Figure 2 compares fiscal decentralisation ratios in selected OECD countries with the proposals for further fiscal devolution to the Scottish Parliament. The horizontal axis plots the share of sub-central government (SCG) expenditure in total government spending, and the vertical axis plots the share of SCG tax revenue in total government revenues. For the UK as a whole, SCG

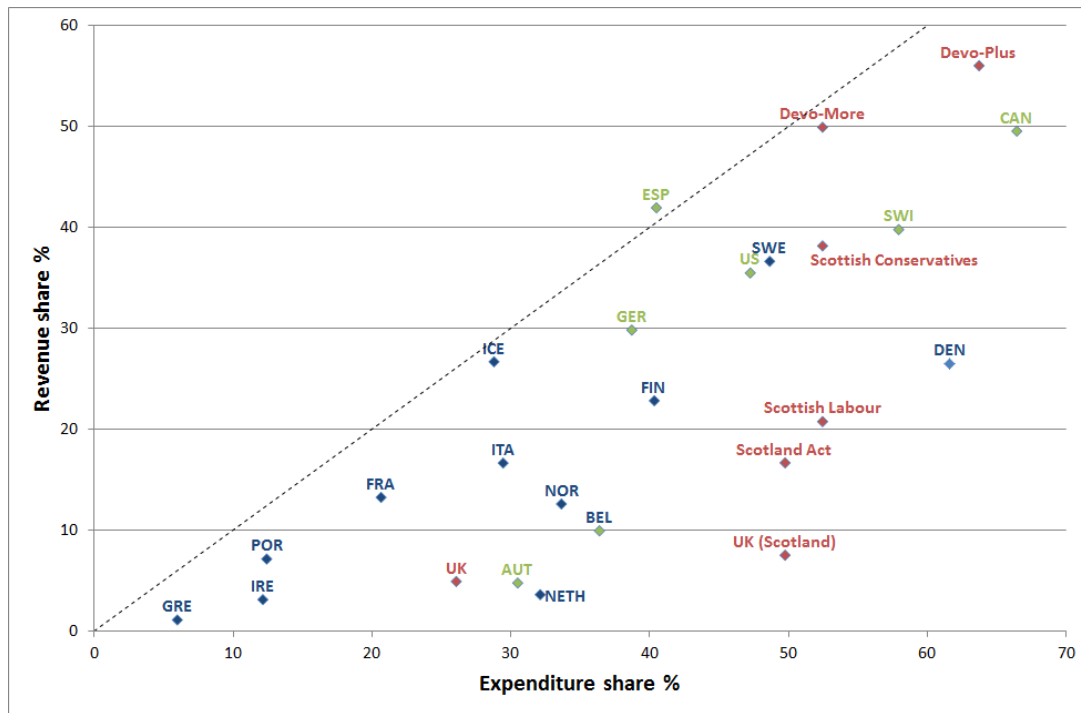
(i.e. local authorities in England and the three devolved governments) account for 27% of total expenditure but only 5% of total revenues. However, the asymmetric nature of devolution in the UK means that this statistic is not particularly meaningful when considering devolution in Scotland specifically. Instead, it is more relevant to consider the SCGs (i.e. Scottish Government and local authorities) share of all revenues and spending in Scotland. On this basis³, SCG accounts for 50% of all public spending but only 8% of total tax revenues in Scotland, shown by the point 'UK (Scotland)'.

The Scotland Act proposals result in the Scottish Government's revenue share increasing to 17%, whilst the Scottish Labour proposals would increase both the revenue and expenditure decentralisation ratios slightly further (the expenditure share increases because of the proposal to devolve expenditure on housing benefit to Scotland).

The Devo-More and Devo-Plus proposals result in radical increases to the Scottish Government's revenue share. When fully implemented, the Devo-More proposals bring the Scottish Government's revenues into line with spending (although this is achieved in part through the assignment of some VAT revenues). The Devo-Plus proposals, when fully implemented, would see the Scottish Government responsible for 65% of all public spending in Scotland and 56% of all revenues raised. The Devo-More and Devo-Max proposals, fully implemented, would effectively imply that the Scottish Government is one of the most fiscally autonomous sub-central governments in the world.⁴

³ We allocate to Scotland per capita shares of UK spending on debt interest, non-identifiable public services such as defence and foreign affairs, and a geographical share of tax revenues from North Sea production.

⁴ Some other countries also have asymmetric decentralisation settlements which are not reflected in this chart. In Spain for example, the Basque and Navarre regional governments operate under the Devo-Max model, and thus have a higher level of fiscal autonomy than the Scottish Government would under either Devo-More or Devo-Plus. Similarly, Quebec has a higher level of fiscal devolution than other Canadian provinces.

Figure 2: Decentralisation ratios in OECD countries (2010)⁵

6 Conclusions

It is clear that a 'No' vote at September's referendum will be followed by debate around which taxes might reasonably be devolved to the Scottish Parliament, with current consensus emerging that income tax is the prime candidate for further devolution. We may also begin to see decentralisation of some of the expenditure functions that are traditionally assumed to protect citizens against social risks. Some of the fiscal devolution proposals, if fully implemented, would result in Scotland becoming one of the most fiscally autonomous regional governments among developed countries (with the exceptions of Quebec in Canada and Basque or Navarre in Spain).

But designing devolution proposals in theory is relatively straightforward. In practice, it is not easy to devolve enough taxes to the Scottish Government for it to eliminate even half of its vertical fiscal deficit. There is perhaps a danger that Unionist parties are raising expectations beyond what will actually be met, certainly in the short term. Linked to this, there is an assumption in the Unionist proposals that greater fiscal autonomy can be achieved without reducing the importance of the risk pooling and sharing functions that the Union provides. This promise might be difficult to sustain

5. Source: OECD and author analysis. Federal countries are plotted in green, unitary countries in blue.

if expenditure devolution moves significantly into traditionally reserved spheres of welfare policy.

Another important issue which we have not had space to address in detail is how Scotland's block grant might change in future. There is likely to be increased pressure to reform the existing Barnett formula mechanism for grant allocation as tax devolution increases, and if that occurs, Scotland's overall budgetary position may deteriorate (given that the Barnett Formula provides a relatively generous grant to Scotland, and that Scotland's tax capacity is lower than the UK's for many of the taxes proposed for devolution).

A no vote will almost certainly lead to further fiscal autonomy for the Scottish Government, although the precise direction and timescales for reforms are subject to great uncertainty. Some would argue that greater fiscal autonomy within the Union is the preferred outcome for Scotland over 'full' independence, raising the accountability and incentives of Scottish politicians, without the risks of different currencies or regulatory arrangements that independence implies. However, it may also imply greater uncertainty of the Scottish Government's budget on an annual basis, and perhaps also a decline in the spending power of the Scottish Government if fiscal devolution is combined with grant reform.

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