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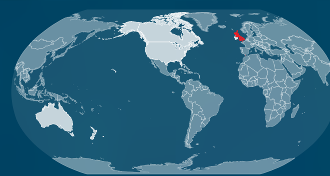
Lessons from the Anglosphere



Response to the Financial Crisis
In the United Kingdom

Daniel Mahoney

November 2017

MLI
True North in
Canadian public policy

True North in
Canadian public policy


SIR JOHN A. MACDONALD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Foreword

–Graham Brady, MP, Altrincham and Sale West.

I have read this essay collection – including the excellent essay by the Centre for Policy Studies (CPS) economist Daniel Mahoney on Britain's ongoing battle with its budgetary deficit – with great interest. The lessons from across the Anglosphere should not only catalyse a fiscal policy debate in Washington but also in our own countries.

As deputy chairman of the CPS, chairman of the parliamentary group of the UK Conservative Party, a Member of Parliament, and someone who has long fought for responsible spending and balanced budgets, I certainly hope it does.

The case for deficit reduction and sound public finances can never be neglected or taken for granted. It is so easy to find voices for more spending and budgetary deficits. Unfortunately there are too few for spending within our means or thinking about future generations. These essays can serve as such a voice now and into the future.

The United Kingdom's experience over the past two decades or so can be a case study in this regard. When I was elected for the first time in 1997 the national debt was roughly 38 percent of GDP. It now exceeds 85 percent. It does not take long to make a "fiscal mess" as I described it in the 2014 Keith Joseph Memorial Lecture at the CPS.

What happened? Mahoney's essay provides a useful primer on the conditions and choices that led to such a mess. But it is not really that complicated. The previous government increased government spending as a share of GDP by 10-percentage points in roughly 12 years. It was able to do so through large-scale deficit spending. The annual budgetary deficit reached over 10 percent by 2009-10. The incoming chief secretary to the Treasury in 2010 was given a note by his Labour predecessor that simply read "I'm afraid that there's no money."

> *"The case for deficit reduction and sound public finances can never be neglected or taken for granted."*

It was a daunting challenge. I am pleased that we were up to it. The government from the Prime Minister to the backbench was committed to cleaning up the mess that we had inherited. It involved tough choices. This should not be diminished. Containing spending is never easy. The critics can be loud. But we did not flinch. The entire Conservative Party was committed to what we said in the 2010 Queen's Speech: "The first priority is to reduce the deficit and restore economic growth."

The good news is that there has been important progress on this score. The deficit as a share of GDP has been cut by three quarters. It is soon projected to fall below 1 percent of GDP for the first time since the start of this century. UK economic growth has been among the fastest in the industrialized world for the past few years. Male employment is at a level not seen since 1991. Female employment is at the highest rate since 1971. We are making progress on the goal set out when we were first elected.

I would be remiss if I did not point out that this progress stands in stark contrast to the doomsday scenario that the International Monetary Fund (IMF) warned about when we launched on our deficit reduction agenda. We were told that we were "playing with fire." The fund's advice was to "loosen the fiscal straitjacket" that the government was purportedly imposing on the UK economy.

But the facts speak for themselves. The IMF and other critics had underestimated how our debt and deficits were undermining investor and consumer confidence and acting as a drag on the UK economy. The IMF has since had to admit it was wrong. Christine Lagarde, its managing director, conceded in 2014: "We got it wrong. We acknowledged it. Clearly the confidence building that has resulted from the economic policies adopted by the government has surprised many of us."

What does this mean for my US counterparts? There are, in my view, a few key lessons to be derived from our experience.

The first is not to listen to the naysayers. The voices in favour of more spending and higher deficits are loud and well-organized but ultimately wrong. A government cannot spend its way into prosperity. It can only ultimately spend its way into a fiscal mess. It requires political commitment and a clear vision to resist these voices. I say tune them out. We have the evidence on our side.

The second is that politicians must be honest and transparent with the voting public about their intentions and plans. The public is more attuned to the need for governments to spend within their means than the pundits and commentators give credit. People get it more than some politicians think. But they expect us to be plain about what we are doing and why we are doing it. It is why for instance I said in my 2014 speech that "the road to be walked by the next government and the one after that may involve just as many tough choices as have been faced in this parliament." There is no point in sugar-coating it. Honesty and transparency is by far the best way to achieve and sustain public support for fiscal reform.

The third is to stay the course. Stopping before the job is done risks undoing public support and eroding economic confidence. Now, of course, it does not mean that there is no room for refinement or improvements. Our government has made some useful tweaks that have strengthened our fiscal reforms. But flinching due to political timetables or other considerations would put any progress at risk. No one is better off in such a scenario in the short- or long-term.

I have been proud of our government's efforts to clean up the United Kingdom's fiscal mess. It remains an ongoing project but the progress is undeniable. We are making a difference – including for future generations who for too long had been voiceless in UK fiscal policy.

I am confident that my US counterparts can achieve similar progress with a firm commitment, clear vision, and sensible plan. It starts by listening to the right voices. I hope that these lessons and the details set out in this essay collection can help.

Introduction

Politics in the United Kingdom is currently focused on a debate between so-called "austerity" and public investment. It was a theme that was highly prevalent in the 2017 election and helped to shape our politics in the years that preceded it.

Of course, this debate is partly driven by ideological differences and political preferences. But it also reflects competing views about the relationship between government spending and economic and social outcomes. Some believe that disciplined spending and strong public finances are a key component of a pro-growth policy agenda. Others believe that activist government and high levels of spending are important for economic growth and positive outcomes – particularly for low-income citizens.

This is far from a theoretical debate. The past seven years or so provide a case study on the economic and social effects of spending and deficit reductions. The doomsday scenario described by critics of the government's fiscal policy has failed to materialize. A reduction in the UK government's deficit since 2010 has been associated with a relatively strong economic performance.

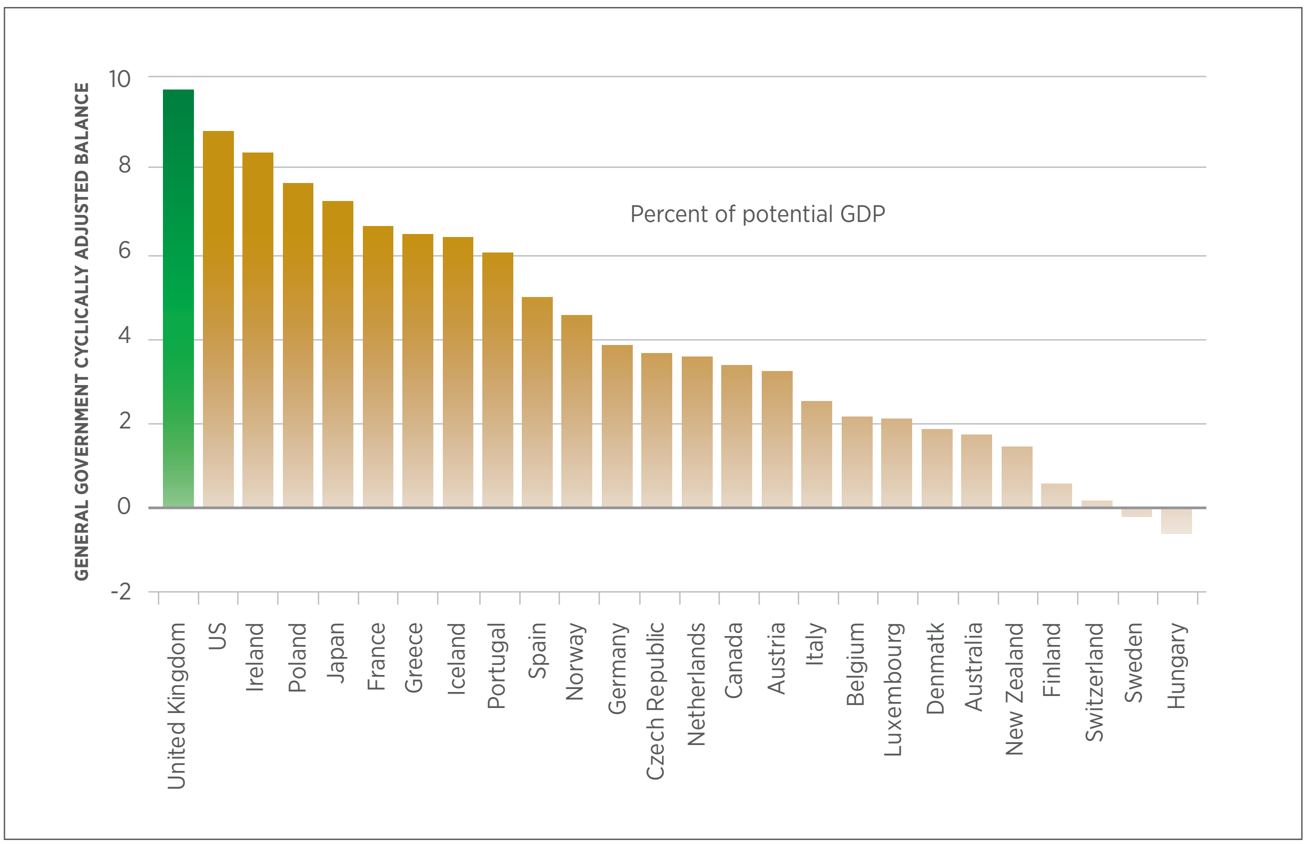
The purpose of this essay, then, is to bring some evidence to bear to this on-going debate. It draws on the circumstances that led to fiscal reform beginning in 2010 and details how these reforms were implemented and their outcomes thus far. The goal is to not only inform the UK debate, but also to share this experience with a US audience as policymakers there grapple with how best to deal with Washington's growing budgetary crisis.

Why Fiscal Reform?

The UK's budget deficit

The UK's fiscal budget deficit – as measured by public sector net borrowing – reached 10.1% of GDP in 2009-10 (Office for Budget Responsibility 2016, November). On some measures, it was forecast that the UK's public borrowing was the highest in the G20 and that the UK's structural budget deficit, which cannot be eliminated through economic growth, was the largest among all OECD countries (HM Treasury 2010) (see Figure 1). This was viewed as a major threat to the UK's economic security, prompting the Conservative-Liberal Democrat Coalition government – elected in May 2010 – to pledge a "significant acceleration in the reduction of the structural deficit" (HM Government 2010).

FIGURE 1: Structural budget deficit in OECD countries, 2010



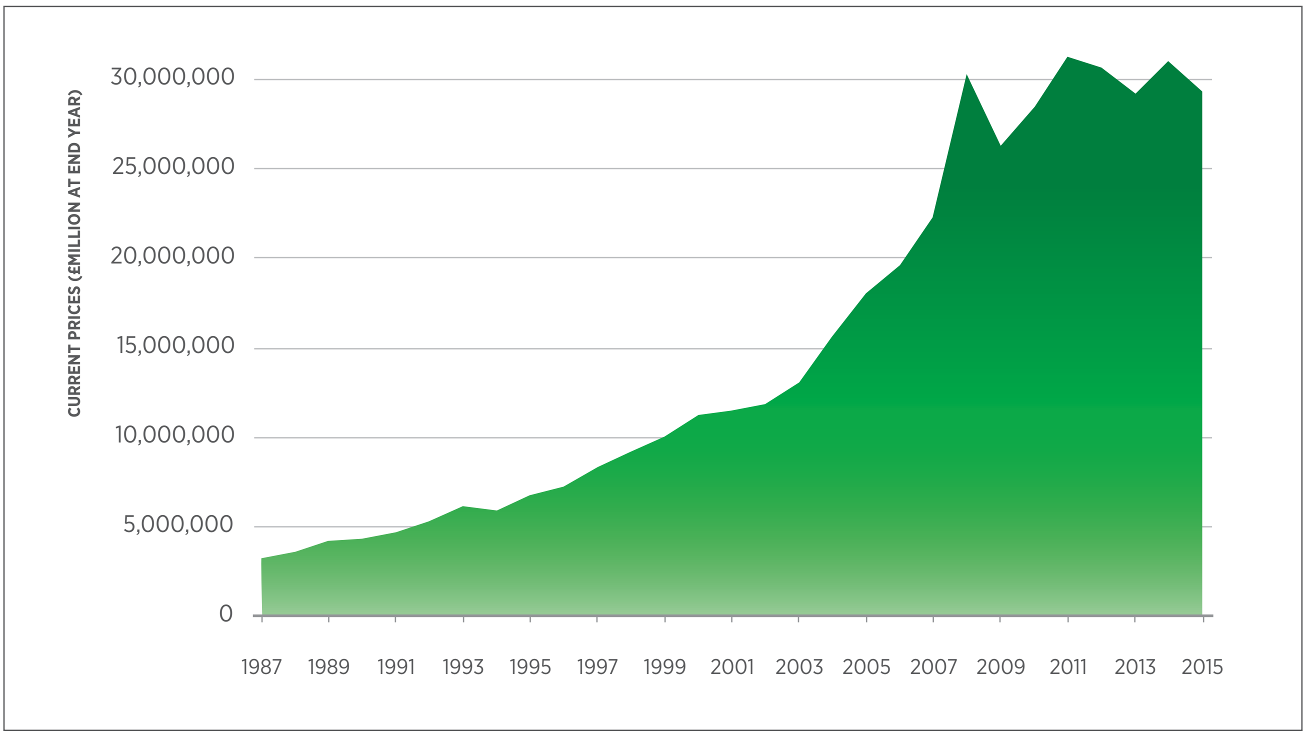
Source: OECD Economic Outlook, May 2010 (reported in HM Treasury's Budget 2010).

The global financial crisis

The UK's substantial budgetary deficit came about largely as a result of the global financial crisis in 2008. Due to its trade and financial openness, the UK economy is highly exposed to foreign economic developments. World shocks have accounted for around two-thirds of the weakness in UK economic growth since the financial crisis of 2008, according to the Bank of England (Barnett et al. 2014).

In proportionate terms, the UK has the largest financial sector of any major economy (Cuthbert 2014). The UK's finance sector saw huge growth in the lead-up to the global crisis, with its financial asset value rising by more than a factor of six from 1987 to 2008 (see Figure 2). This, of course, offered the UK economy substantial macroeconomic benefits over this period. Gross Value Added from the financial and insurance services sector doubled in real terms in the decade from 1997 (Tyler 2017, March 31), and by 2007 the finance sector was contributing nearly 14 percent of all the UK government's tax receipts (PWC 2015). However, it also meant the UK's economy became increasingly exposed to global exogenous shocks, particularly those related to the financial system.

FIGURE 2: Total financial assets in the UK



Source: National Balance Sheet, Office for National Statistics.

Note: The large increase in total financial assets from 2007 to 2008 was mostly accounted for by a growth in derivatives from £2,826,135m to £9,616,082m.

The Labour Party's spending splurge

Although the global financial crisis was crucial in contributing to the UK's precarious fiscal position in the late 2000s, the Labour government's fiscal policies prior to the financial crisis exacerbated the UK's economic problems.

In the Labour Party's first term in office (1997-98 to 2000-01), Gordon Brown, then Chancellor of the Exchequer, decided to pursue the spending plans that the party had inherited from the previous Conservative government, leading to public expenditure as a percentage of GDP continuing to fall. However, public expenditure as a proportion of national income subsequently rose dramatically, climbing from a low of 34.5 percent of GDP in 2000-01 to 41 percent of GDP in 2007-08 when the financial crisis hit the UK economy (HM Treasury, undated) (see Table 1). This spending increase meant the UK's Labour government entered the financial crisis with one of the largest structural budget deficits in the industrialized world, having done less to reduce both debt and, in particular, borrowing than most Organization for Economic Co-operation and Development (OECD) countries since 1997 (Chote, Emmerson, and Tetlow 2009).

TABLE 1: UK Government spending over the Labour Party's term in government

Financial year	Government spending (£bn)	% of GDP
1997-98	322.0	38.2
1998-99	330.9	37.2
1999-00	342.9	36.3
2000-01	341.5	34.5
2001-02	389.2	37.7
2002-03	420.9	38.5
2003-04	455.2	39.3
2004-05	492.5	40.5
2005-06	523.7	41.2
2006-07	550.2	40.9
2007-08	583.7	41.0
2008-09	630.8	44.5
2009-10	671.5	47.7

Source: HM Treasury, undated.

The Labour government's initial response to the financial crisis was to initiate a fiscal stimulus plan in 2008, which was valued at around £20 billion (The Economist 2008, November 27). This included measures such as a temporary reduction in the rate of VAT from 17.5 to 15 percent and bringing forward capital expenditures.

Following the first fiscal stimulus plan, it was widely reported that Gordon Brown, who had become prime minister by this time, was seeking to implement a second fiscal stimulus plan the following year. In response, Mervyn King, the Governor of the Bank of England, took the unprecedented step of warning against further significant spending to stimulate the economy, arguing that the UK's fiscal position would not allow for this. In an appearance before the Treasury Select Committee, he said: "I think the fiscal position in the UK is not one where we could say, well, why don't we just engage in another significant round of fiscal expansionism" (BBC News 2009).

As governor of the independent Bank of England, King's intervention effectively vetoed Gordon Brown's proposed second fiscal stimulus plan. This unprecedented action further highlights how dangerous the UK's fiscal position had become by the end of 2009.

Summary

In summation, the UK's large budget deficit, brought about by the global financial crisis and, to some extent, the Labour Party's dramatic increase in public spending, was the primary factor behind the UK's fiscal consolidation plan from 2010 onwards. Along with other countries, including Germany and the Netherlands, the consolidation program was pre-emptive in the sense that it sought to send a message to markets that the UK understood the fiscal predicament that it was in, and that the government was willing to address long-term sustainability issues (OECD 2011).

The Composition of Fiscal Reform

The situation hit a critical juncture in 2010 with the election of a new UK government that was a coalition between the Conservative Party and the Liberal Democratic Party. An agreement on the need for fiscal reform was one of the areas that formed the basis of the coalition arrangement. A fiscal consolidation plan designed to restrain spending and reduce the government's budget deficit was implemented soon after the election.

Spending cuts formed the majority of the fiscal consolidation

The UK's fiscal consolidation plan to reduce the budget deficit was initially due to take place over the course of six financial years, lasting from 2010-11 to 2015-16. Restraint in spending was planned to form a rising part of the fiscal consolidation program, increasing from 59 percent in 2010-11 to 76 percent in 2015-16 (HM Treasury 2011) (see Table 2).

TABLE 2: UK consolidation plans, 2010-16

Composition of consolidation	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Total discretionary consolidation (£bn)	9.4	41	61	88	110	126
Spending share (£bn)	5.5	22	38	59	80	95
Taxation share (£bn)	3.8	20	23	29	30	30
Spending share of consolidation (%)	59	53	62	67	73	76

Source: HM Treasury 2011, March 23.

Note: Spending consolidation is attributable to three factors. Reductions in departmental expenditure limits (DEL) are calculated by assessing the nominal DEL totals against a counterfactual of growing DELs in line with general inflation in the economy. The reduction in annually managed expenditure (AME) is the net effect of AME policy changes announced since the June 2010 budget. Finally, the spending reduction also includes estimated debt interest savings updated for Budget 2011 debt interest forecast assumptions.

However, weaker than expected economic growth in the early part of this decade meant the fiscal consolidation period was extended until 2020-21. Subsequent analysis suggests that around 90 percent of the UK's fiscal consolidation will derive from spending restraint while just 10 percent will come from tax increases in 2020-21, meaning that the spending component of the consolidation will have gone from 59 percent in 2010-11 to around 90 percent in 2020-21.

The fiscal consolidation was somewhat softened towards the end of 2015, with George Osborne reversing cuts to tax credits and allocating an additional £12 billion to infrastructure sending (Chan 2015). Moreover, since Brexit, the fiscal consolidation program has been marginally scaled back with, for example, the *Autumn Statement 2016* announcing policy decisions that will add £7 billion to UK borrowing in 2020-21 (HM Treasury 2016). However, it remains clear that the restraint in spending will form a majority of the UK's fiscal consolidation in every financial year up to 2020-21, and that spending restraint has become, and will continue to be, an increasing proportion of the fiscal consolidation.

Spending has remained static in real terms

The UK's fiscal consolidation plan over the course of this decade will comprise a 1.2 percent net tax increase of national income and a net spending cut of 9.5 percent of national income (Emmerson and Tetlow 2015), according to the Institute of Fiscal Studies (IFS). The figures produced by the IFS are relative to a counterfactual. This assessment method essentially aims to compare current tax and spending to what would have been the case in the absence of any new policy announcements at the

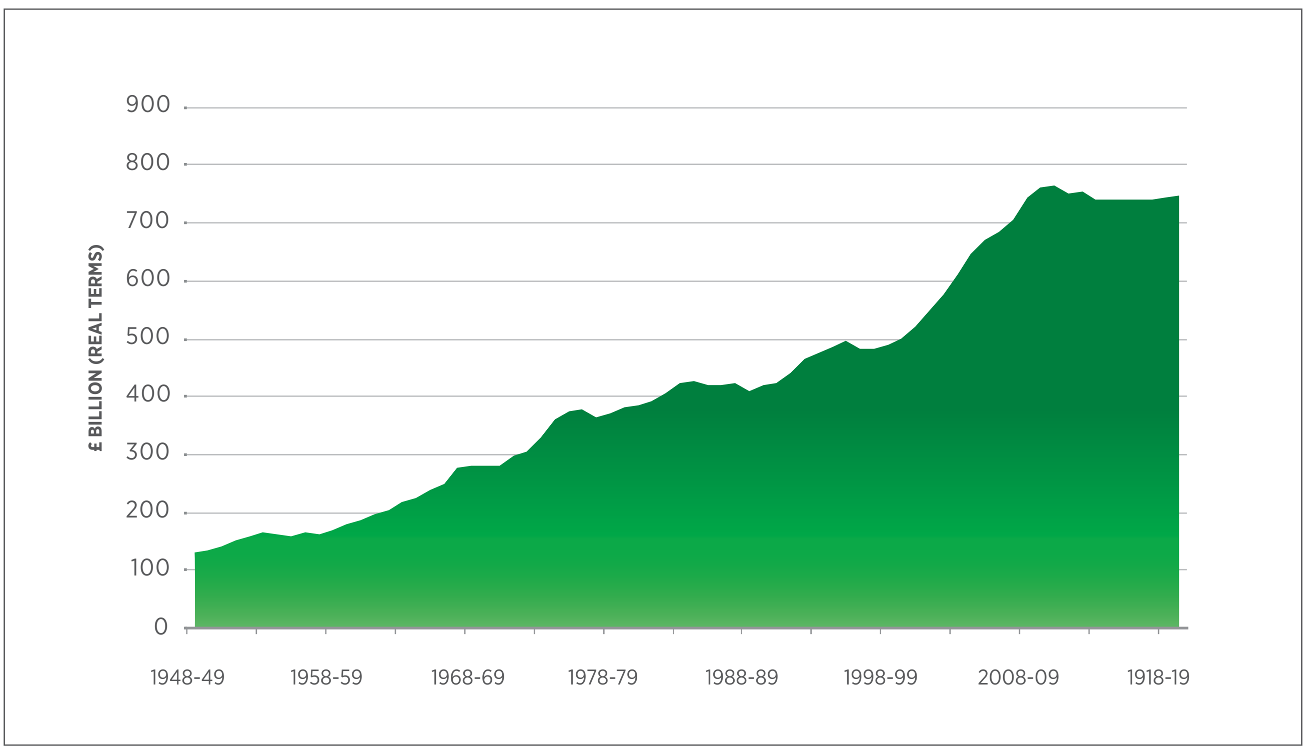
March 2008 Budget (before the financial crisis). They do not, therefore, represent changes in spending or tax in real terms. In fact, over the fiscal consolidation period, the government's Total Managed Expenditure has effectively remained static in real terms (see Table 3 and Figure 3) – although spending as proportion of GDP has been falling since 2010, and will continue to do so.

TABLE 3: Total Government Spending (former, current, and projected)
Figures in 2015-16 prices

Financial year	Total managed expenditure (IFS measure)	Spending as a % of GDP
2011-12	£751.3bn	43.4%
2012-13	£754.0bn	43.3%
2013-14	£740.4bn	41.7%
2014-15	£742.4bn	40.6%
2015-16	£742.3bn	39.6%
2016-17	£742.0bn	38.7%
2017-18	£741.9bn	37.8%
2018-19	£743.0bn	37.0%
2019-20	£746.8bn	36.3%

Source: Data from IFS 2015, September 25.

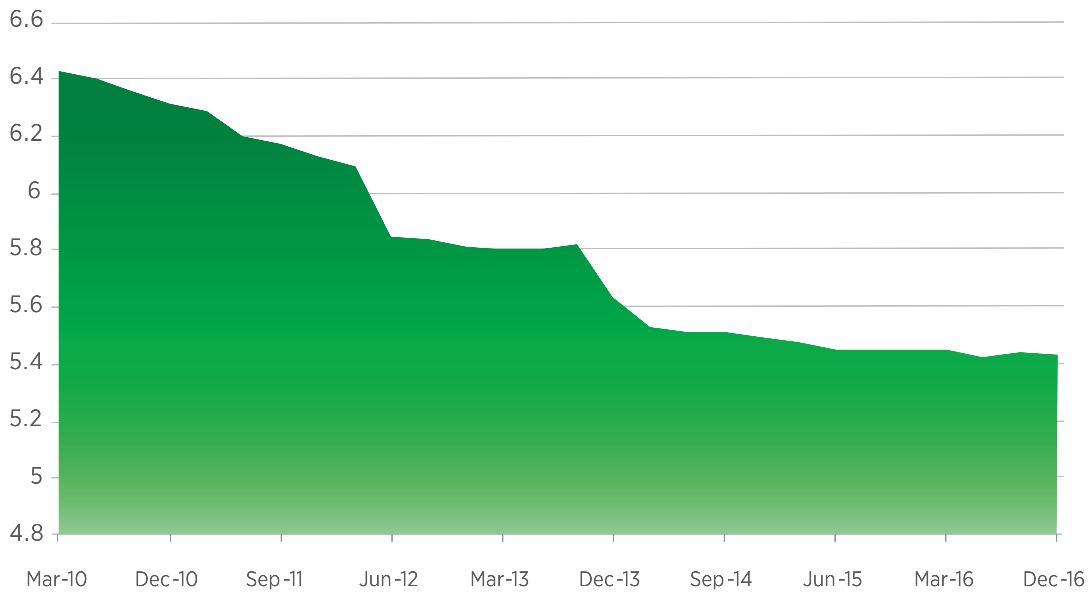
FIGURE 3: Total Government Spending (former, current, and projected)
Figures in 2015-16 prices



Source: IFS 2015, September 25.

Unbalanced nature of spending restraint

FIGURE 4: UK public sector employment, March 2010 to November 2016



Source: ONS 2017a, March 15.

Note: Some estimates suggest that the loss in public sector jobs has been more modest. For example, public sector workforce headcount excluding nationalized corporations has fallen by around half a million since 2010 (see Cribb 2017).

The UK's fiscal consolidation program has seen a large reduction in public sector employment, which has fallen by approximately one million since March 2010 (see Figure 4). Employment in central government has remained fairly constant over this period, while employment in local government has seen a dramatic decline (ONS 2017).

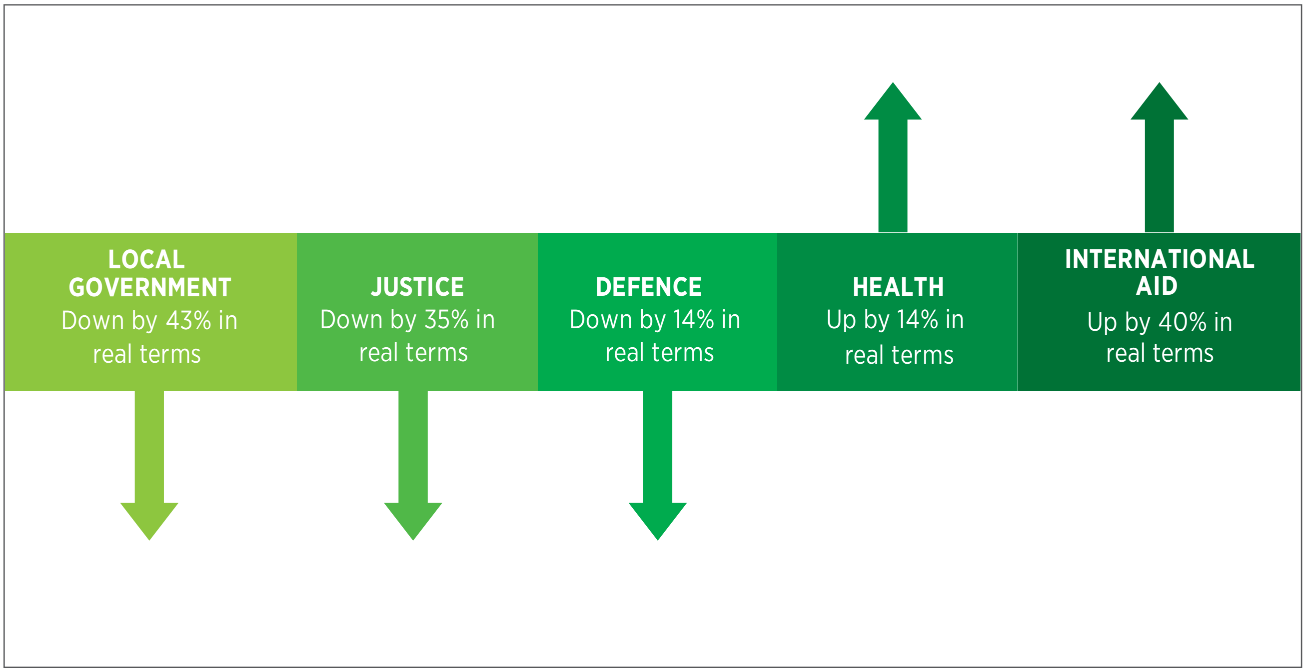
However, changes in departmental expenditure have been unbalanced in nature. Spending has been protected in the National Health Service, schools, and overseas aid budgets, which collectively accounted for half of departmental spending in 2015-16 (Johnson and Chandler 2015). From 2011-12 to 2019-20, the NHS will be allocated nearly £20 billion of additional funds (in 2015-16 prices) while the international aid budget will have risen by nearly 40 percent in real terms.[1]

The policy of protecting benefits for pensioners from any cuts has also burdened the Exchequer with significant costs, particularly the policy of raising the state pension by the highest of earnings, inflation, or 2.5 percent every year. If, instead, state pensions had been raised by average earnings since the election of the Coalition in 2010, the government would have saved £11.4 billion a year by 2016-17 (Mahoney 2017).

At the same time, the Coalition government implemented a series of measures to curtail working age benefits. According to analysis from the Institute for Fiscal Studies, the overall benefit changes from 2010-11 to 2015-16 have led to savings of £16.7 billion per annum (Browne and Elming 2015 23). From 2015 onwards, the Conservative Party Manifesto pledged an addition £12 billion of welfare savings, which will mostly come from working age benefits.

Various departmental budgets have also seen a dramatic squeeze on their annual expenditure. For example, from 2011-12 to 2019-20, the Department for Communities and Local Government will see a 42 percent fall in annual spending in real terms, the Justice department will fall by 35 percent, and the Defence budget will fall by 14 percent (see Figure 5).

FIGURE 5: The Big Changes in Departmental Spending, 2011-12 to 2020-21



Source: HM Treasury 2016, July 21: table 1.13, p. 30.

Unbalanced nature of tax changes

As previously noted, the tax component of the fiscal consolidation will represent only around 10 percent of the fiscal consolidation by 2020-21. However, there have been some significant changes in various areas of taxation – both upwards and downwards.

THE KEY DECLINES IN THE TAX BURDEN
Personal allowance, the basic rate of corporation tax, and freezing fuel duty

The most expensive tax change has been the increase in the personal allowance, which is the level of income that workers can earn without being taxed. This amount will have increased from £6,475 in 2010-11 to £12,500 in 2020-21. Families have also benefited from the freeze on fuel duty for seven years in a row (BBC News 2016) – compared to Labour's plans to increase it year over year.

On the business side, corporations have benefited from major cuts in the corporation tax rate, and will continue to do so. The rate has fallen from 28 percent in 2010-11 to 19 percent in 2017-18 with further declines leading to a rate of 17 percent in 2020-21, giving the UK the most competitive corporation tax rate in the G7.

THE KEY INCREASES IN THE TAX BURDEN
Higher rate band, capital gains tax, VAT, stamp duty
Higher rate taxpayers have seen many of their taxes increase. The threshold for the top rate of tax – usually referred to as the 40p rate – is on course to be £50,000 by 2020-21. However, this increase has not been kept in line with inflation, meaning that more people are now being captured by the 40p

rate (the problem of so-called "fiscal drag"). Had the higher rate tax band increased in line with inflation since 2010 – as measured by the Consumer Price Index – it would be £50,500 in 2015-16 (PFC Undated). At the beginning of the consolidation period in 2010-11, capital gains tax (Seely 2016) was also increased for higher rate earners from 18 percent to 28 percent.

Some indirect taxes have also been increased. For example, Value Added Tax (a sales tax) was hiked by 2.5 percentage points at the beginning of the fiscal consolidation period in 2011-12, and this increase is likely to be sustained for the duration of this decade. Furthermore, a succession of changes has been made to UK stamp duty, which disproportionately targets higher value property (Stamp Duty Rates 2017).

No wobble on fiscal consolidation…

Weaker than expected economic growth at the beginning of the decade led to calls for the government to abandon the fiscal consolidation plan and pursue a so-called "Plan B." This was at its height in 2013 when the ratings agency Moody's downgraded the UK's government bond rating (Moody's 2013), which was followed by the International Monetary Fund (IMF) claiming that fiscal consolidation was hurting economic growth (IMF 2013).

The muted economic growth in 2012 meant more borrowing than expected. In response, the government took no immediate action, sticking to the initial fiscal consolidation plan. However, further spending cuts were pencilled in for the next Parliament – although, as stated, some of these plans have been marginally watered down following the UK's decision to leave the European Union.

Economic and Social Outcomes of Fiscal Reform

Was the government correct to ignore the warnings from the IMF and others? The evidence certainly suggests so.

Question 1: Did fiscal consolidation lead to market confidence?

One of the key objectives of the government's fiscal consolidation program was to reassure markets that it acknowledged the scale of the UK's poor fiscal position in 2010 (OECD 2011). On some measures, the UK had the largest budget deficit in the OECD in 2010. This large fiscal deficit needed to be financed through the issuance of UK government bonds (gilts), and it was vital that yields on gilts were low enough to ensure that borrowing costs remained affordable for the UK Treasury.

Borrowing costs did remain affordable, with 10-year bond yields averaging 3.14 percent in 2011.[2] Evidence also suggests that markets saw the UK's fiscal consolidation program as more credible than those by the majority of OECD countries. This is illustrated Figures 6, 7, 8 and 9.

In 2011, the UK's budget deficit as a percent of GDP was one of the highest in the developed world, and its national debt as a percent of GDP was above the average for developed nations. You would therefore expect markets to have a relatively negative reaction to the UK economy's prospects. So, *ceteris paribus*, the cost of servicing government debt, as measured by bond yields, should be higher than the average for developed economies, and you would anticipate expectations of a UK government default – as represented by credit default swaps – also to be higher than average.

However, this was not the case. Figures 6 and 7 show that the level of the UK's credit default swaps and bond yields in 2011 are well below what would be expected given its budget deficit as a percent of GDP. The same is true for the UK's national debt as a percent of GDP (see Figures 8 and 9).

Of course, the Bank of England's Quantitative Easing Program, which bought a substantial number of gilts, may have helped keep borrowing costs low. However, the lower than expected level on credit default swaps suggests that the fiscal consolidation program also commanded confidence from the market, helping to keep the UK's borrowing costs down and reducing prospective debt interest payments.

FIGURE 6: OECD countries budget deficits vs. credit default swaps, 2011

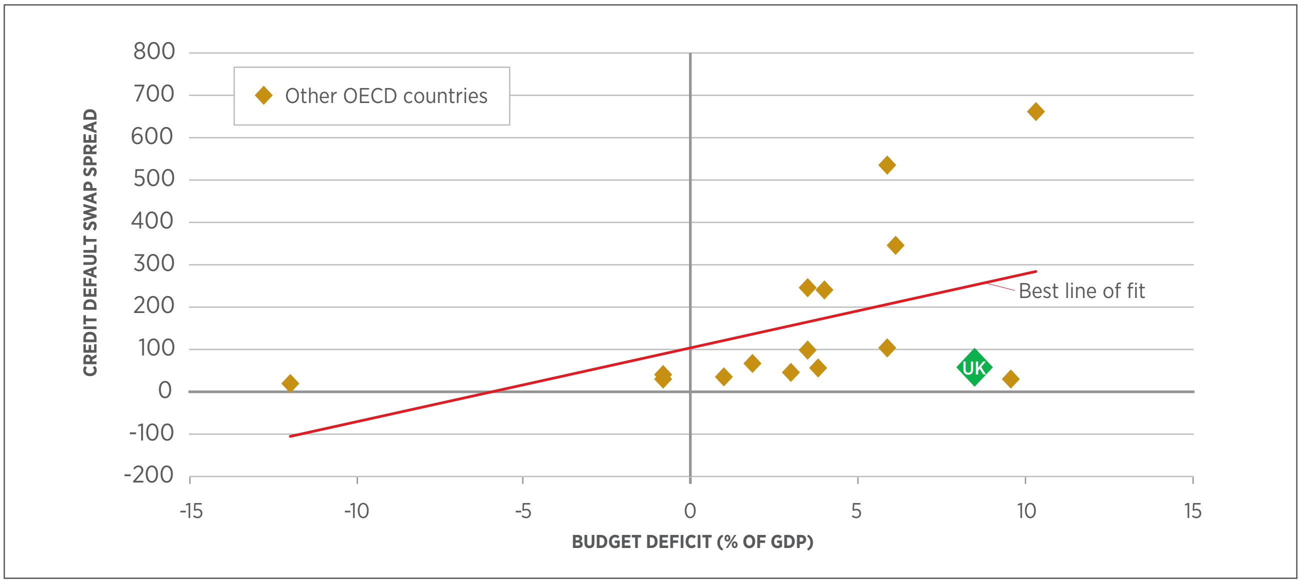


FIGURE 7: OECD countries budget deficits vs. bond yields, 2011

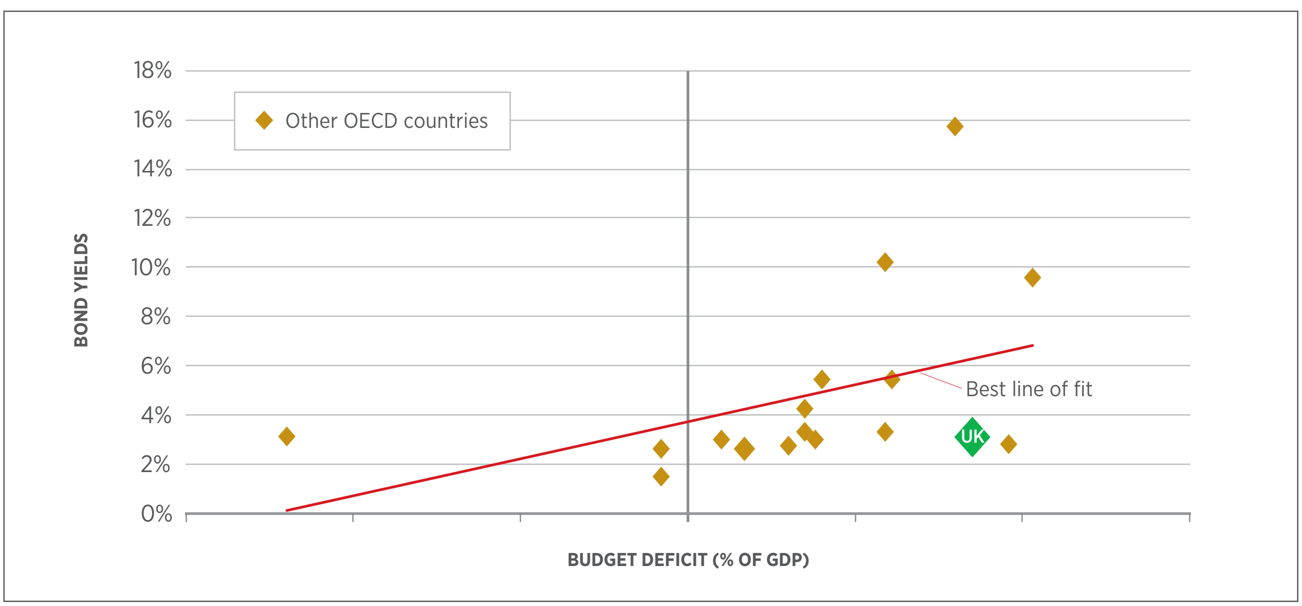


FIGURE 8: OECD countries national debt vs. credit default swaps, 2011

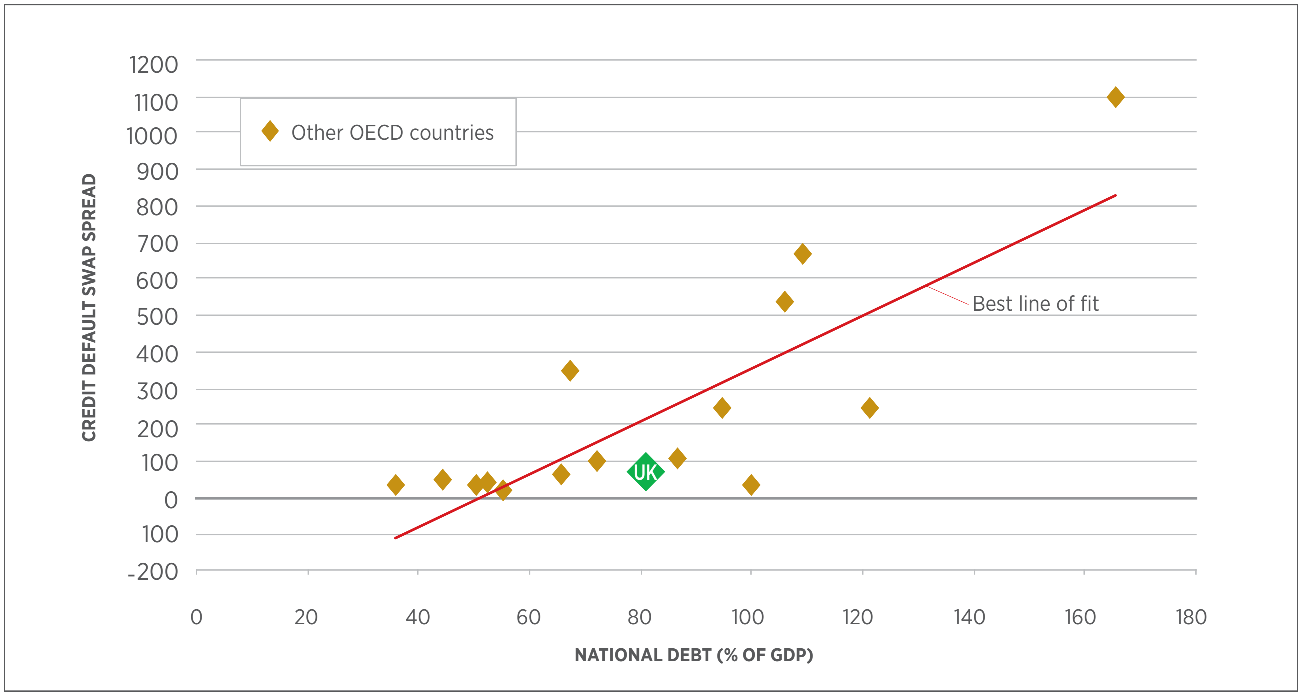
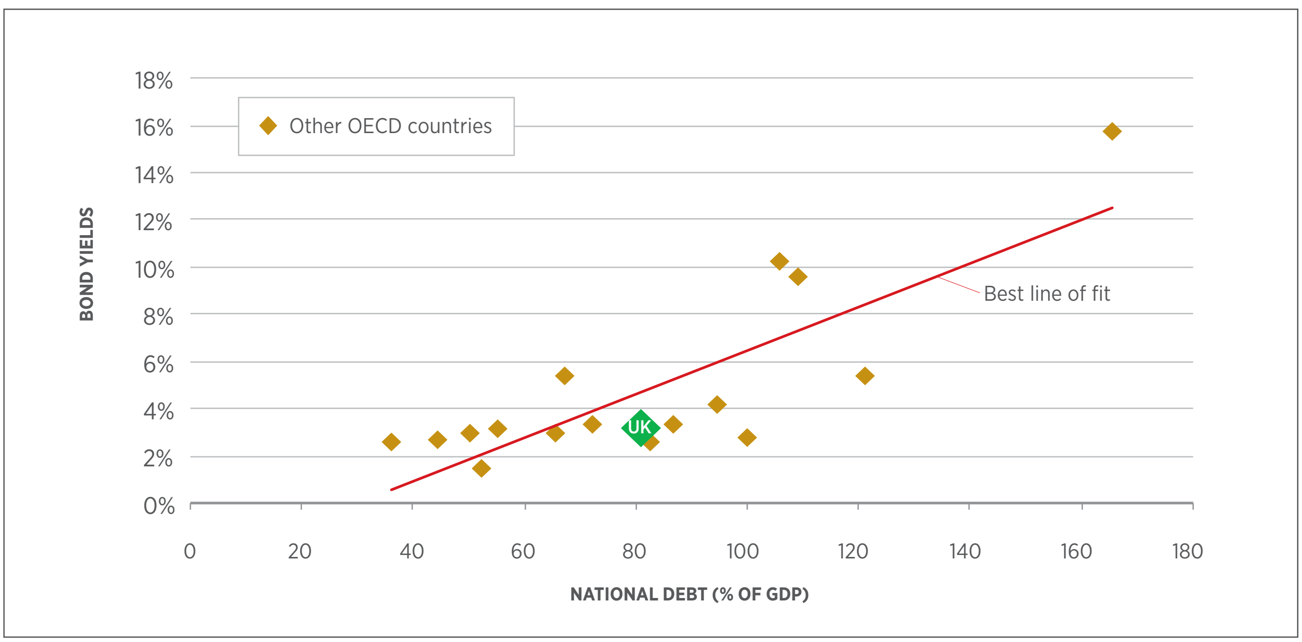


FIGURE 9: OECD countries national debt vs. bond yields, 2011



Note 1: Budget deficit and national debt data for 2011 comes from the IMF's World Economic Outlook Database: September 2011. Budget deficit is denoted as "Government net borrowing" and the national debt is denoted as "government gross debt." Datasets from other sources may vary slightly. Dataset was accurate as of May 12, 2017.

Note 2: Bond yield data comes from the Federal Reserve Bank of St Louis and the Credit Default data comes from Bilicka, Devereux, and Fuest (2012).

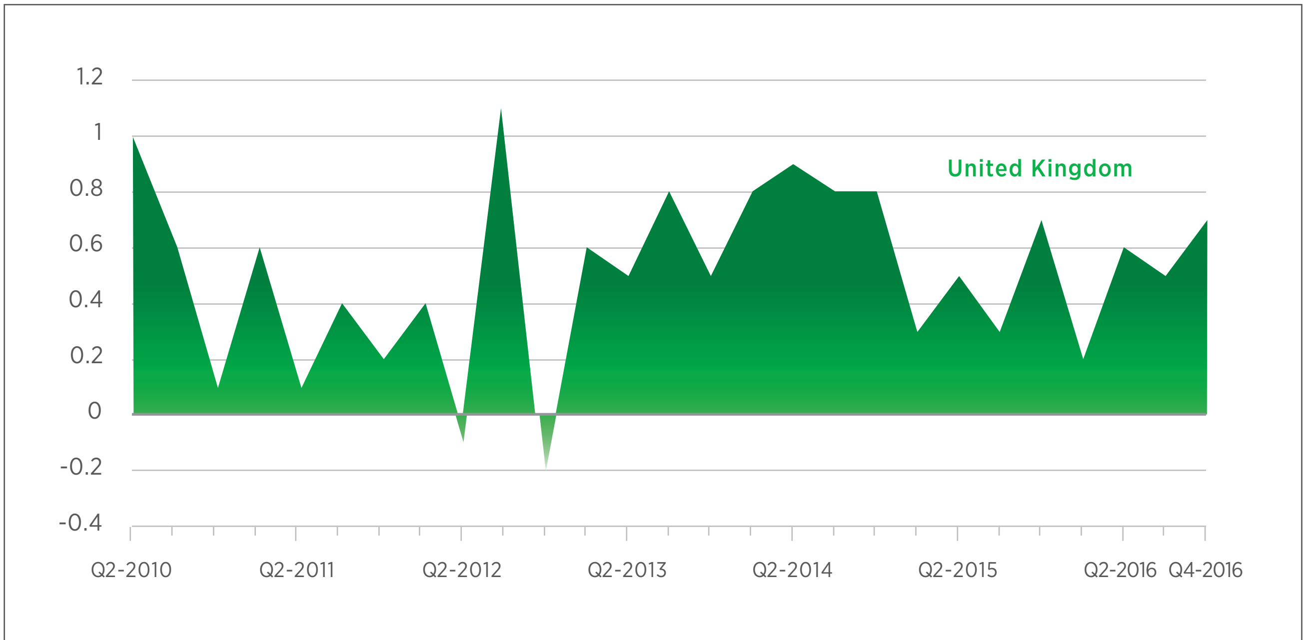
Note 3: In all of the graphs, the large green diamond represents the UK plot. In every case, the UK plot lies below the best line of fit.

Note 4: Gold diamonds denote various other OECD countries.

Question 2: Did fiscal consolidation have an adverse impact on economic growth?

In the early part of this decade, the UK's economy saw a slowdown. In June 2012, the Office for National Statistics (ONS) revealed that the UK had gone into "double dip recession" – that is, the UK had repeated periods of two consecutive quarters of negative growth (ONS 2012). Since then, however, it has been established that 2012 saw flat growth, rather than a return to recession. The UK then went on to achieve very strong rates of economic growth, particularly in 2014 and 2016 (see Figure 10).

FIGURE 10: UK growth rate from 2010 to present



Source: OECD 2017.

Note: Figures correct as of May 2017.

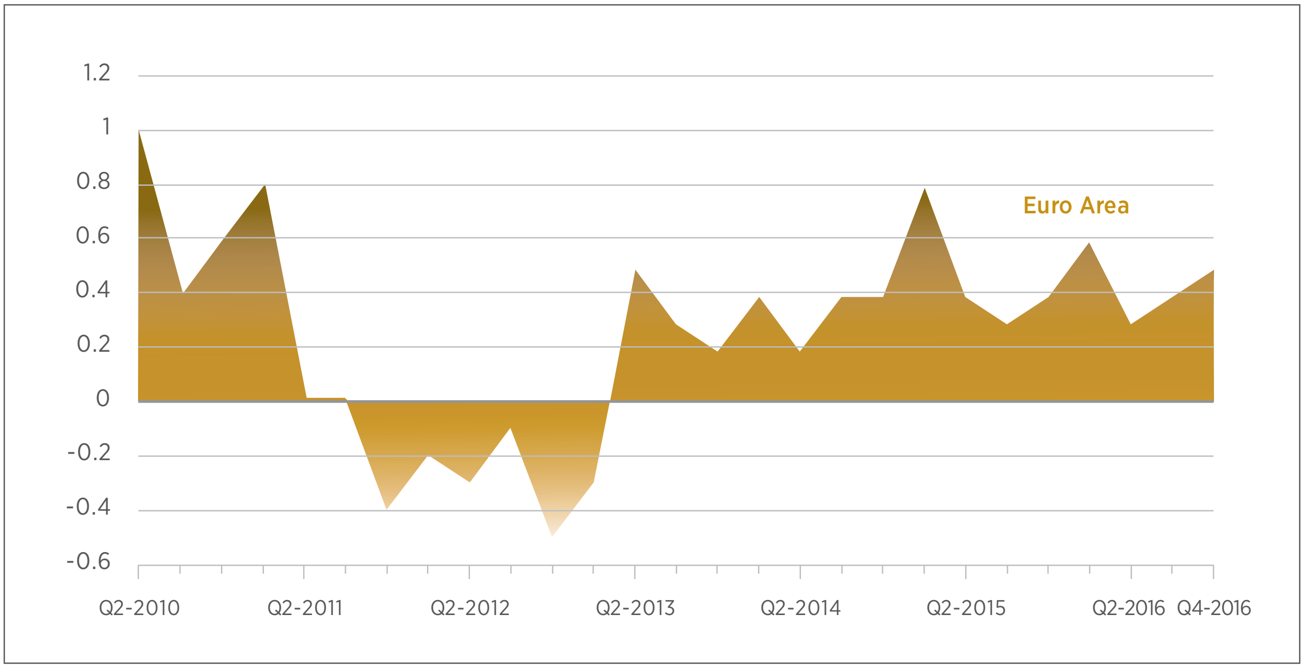
In any case, the timing of the slowdown in growth was significant, given that it came just after the Coalition government instigated its fiscal consolidation program. An important question to address is whether the UK's fiscal consolidation was a significant factor in the slowing of growth between 2010 and 2012, and whether this affected long-term borrowing.

In 2013, the International Monetary Fund made an assessment of the UK that was widely viewed as a criticism of the Coalition government's fiscal consolidation plan. It argued that the UK's "newly elected government embarked on a large, front-loaded fiscal consolidation" and that there was a need for "a multi-pronged approach to guide the economy to greater and more balanced growth" (IMF 2013). Other analysts have since claimed that the scale of the consolidation did, indeed, affect growth in the early part of this decade. The London School of Economics, for example, claimed that the UK's growth underperformed that of the US and Japan, which they viewed as a relevant comparison due to both of these developed economies having independent currencies (Van Reenan 2015).

However, the weight of evidence suggests that external shocks, rather than the fiscal consolidation, were responsible for the slow growth. During this period the UK suffered from a series of exogenous shocks, including the Eurozone crisis, tightness of credit conditions, and high commodity prices (Johnson and Chandler 2015).

The Eurozone crisis led to stagnant growth in the Euro area, which observed six consecutive quarters of negative growth from late 2011 to early 2013 (see Figure 11). The UK was particularly exposed to the Eurozone's woes because there was a high level of economic integration, with nearly half of the UK's exports going to the EU in 2011. However, other developed nations, such as the United States and Japan, were far less exposed to the Eurozone's failings. At the time, the US exported only 8.4 percent of its total exports to the EU and the equivalent figure for Japan was 9.1 percent (see Table 4). This may explain why the US and Japanese economies outperformed the UK in 2011 and 2012.

FIGURE 11: Eurozone quarterly growth



Source: OECD 2017.

Note: Figures correct as of May 2017.

TABLE 4: Percent of total exports going to the European Union, 2011

United Kingdom	48.7%
United States	8.4%
Japan	9.1%

Source: See appendix for calculation.

Moreover, the IMF's view of fiscal consolidation changed in 2014. While in 2013 the IMF argued for the UK to soften its fiscal consolidation plan, the organization made a volte-face the following year, claiming that "fiscal policy [in the UK] is appropriate for the immediate term. The measures budgeted for this year strike an appropriate balance by strengthening the public finances without creating drag on growth" (IMF 2014). Furthermore, the UK's independent Office for Budget Responsibility has claimed that the UK government's fiscal consolidation did not seem to be the most likely explanation for the weaker than expected growth (Office for Budget Responsibility 2013).

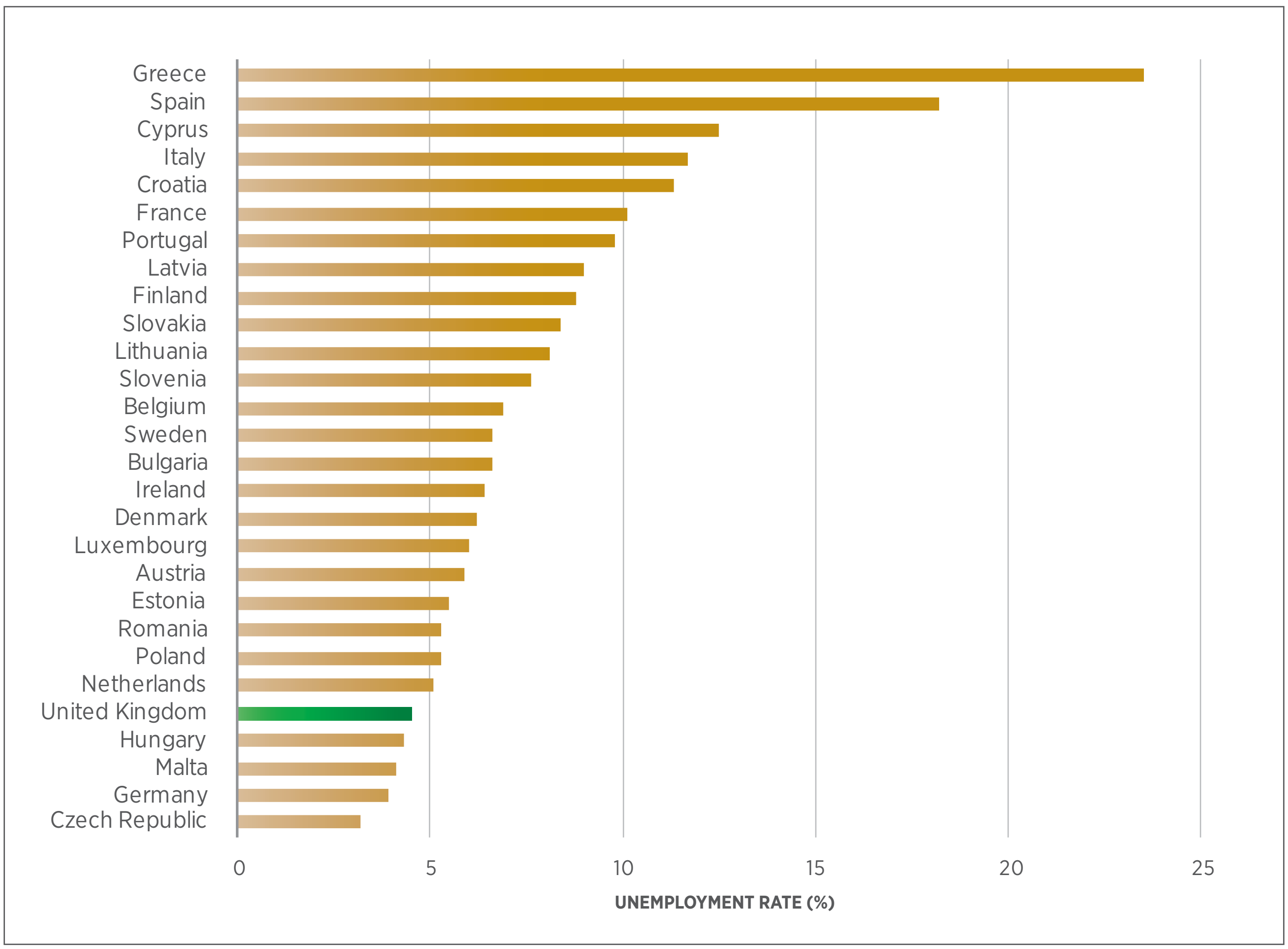
It is also notable that a relaxation of the fiscal consolidation may have, in fact, led to a negative reaction from the markets, leading to higher borrowing costs and potentially lower growth prospects. Academic literature argues that there were five key reasons why the UK's consolidation program was expansionary: the deficit was high, the government was strongly committed to consolidation, more weight was put on spending cuts, the consolidation was large, and the pound depreciated.[3] Two of these factors would have been hampered by a softening of the consolidation program.

It is also dubious to assume that relaxation of the fiscal consolidation program would have been viewed as credible (Fender 2012). This is especially the case as a major fiscal stimulus had already been implemented in previous years. Even a small probability of a default would lead to a negative market reaction, meaning that relaxation could have been quite risky for the UK to pursue.

Question 3: What has been the impact on employment, productivity, and living standards?

The economic orthodoxy in the early part of this decade was that the government's fiscal consolidation plan would lead to increased unemployment. One former member of the Monetary Policy Committee, David Blanchflower, even suggested that unemployment could reach 5 million (Wardrop 2009), and the former leader of the Labour Party, Ed Miliband, predicted that one private sector job would be lost for every one public sector job (Nelson 2015). In fact, from June 2010 to December 2016, although there are nearly one million fewer public sector jobs, 3.5 million jobs were added to the private sector,[4] leaving the UK with one of the lowest unemployment rates in Europe (see Figure 12).

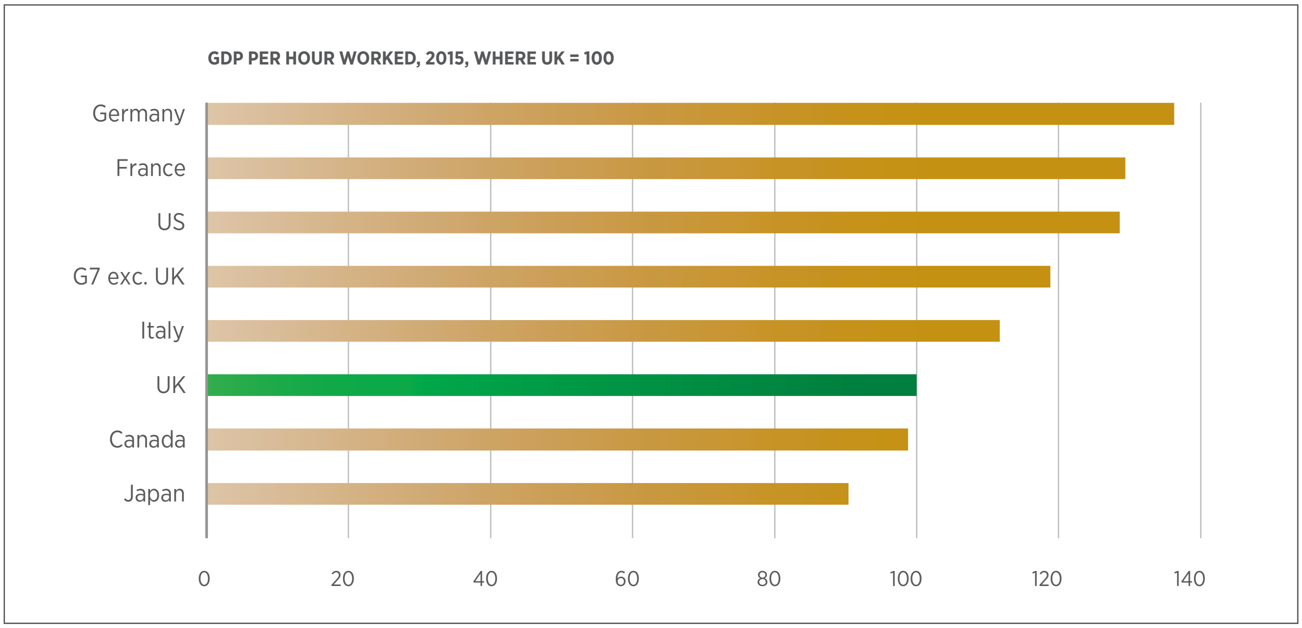
FIGURE 12: Unemployment rate by EU country, February 2017



Source: Eurostat 2017.

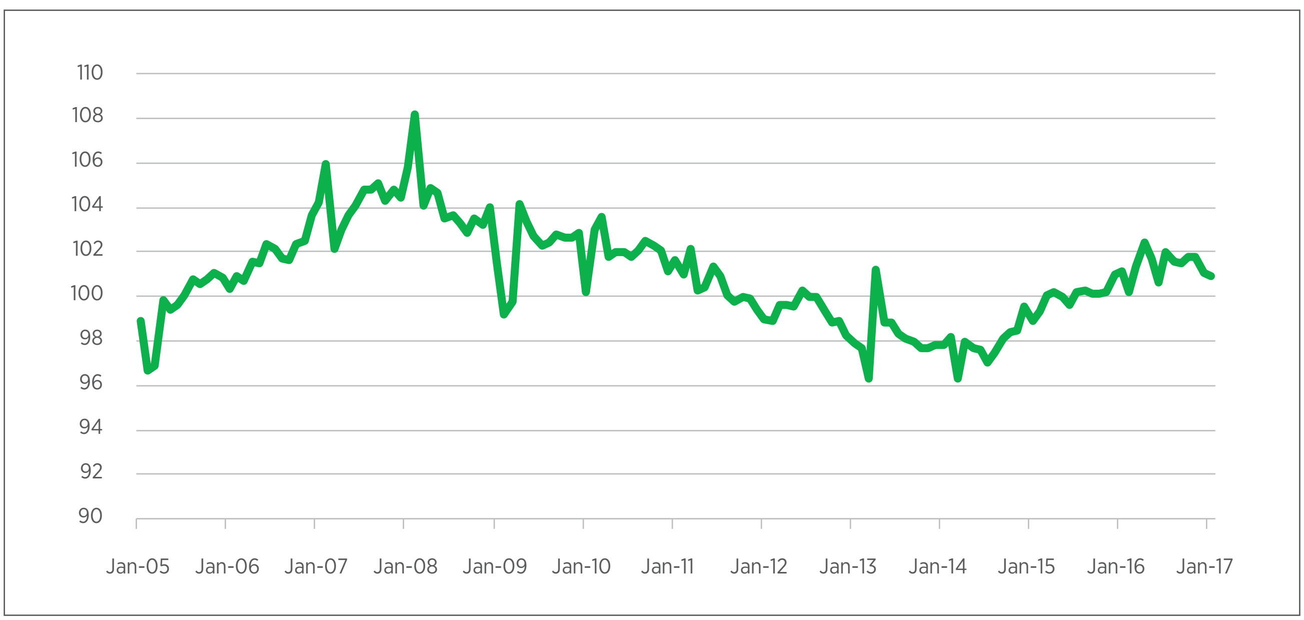
While the government's record on employment is impressive, the UK's economy has fared less well in terms of productivity and earnings growth. Since the 2007-08 financial crisis, labour productivity in the UK has been particularly weak compared to most other advanced economies. Historically, labour productivity in the UK has grown at around 2 percent per year, but in the eight years since the financial crisis it has effectively stagnated (Harari 2017). This has left the UK with a labour productivity that is nearly 20 percent less than the average for G7 countries (see Figure 13). It has also been a key factor behind the disappointing trajectory of real earnings, which have effectively stagnated over the last decade (see Figure 14) (ONS 2017c).

FIGURE 13: GDP per hour worked, 2015



Source: Harari 2017.

FIGURE 14: UK real average weekly earnings, 2015=100



Source: ONS Statistics 2017c.

The UK's lagging productivity is often referred to as the "Productivity Puzzle." However, in 2014 the Bank of England attempted to highlight some of the fundamental causes behind this trend (Barnett et al. 2014). One of the cyclical reasons behind disappointing productivity, the bank's analysts argue, is that employment in the UK has been very buoyant since the financial crisis. This has been supported by many economic commentators who claim that UK employment has expanded at the expense of capital stock,[5] leading to a low ratio of capital to labour. Record levels of immigration are likely to have exacerbated this trend, with a Bank of England study arguing that a 10 percentage point increase in the proportion of immigrants is associated with a 2 percent reduction in pay in the semi/unskilled sector (Nickell and Saleheen 2015).

> *"Employment in the UK has been very buoyant since the financial crisis."*

There are also, of course, more persistent factors that may be behind lagging productivity. The proportion of loss-making firms has increased significantly since the financial crisis (Barnett et al. 2014). Policy decisions, such as loose monetary policy, could therefore be leading to more unproductive firms remaining in existence.

Moreover, mismeasurement of productivity could be a contributing factor to the UK's poor performance – although it is important to stress that this is unlikely to account for the full underperformance. The Bank of England, for example, suggests that measurement issues could only account for up to four percentage points of the productivity gap (Barnett et al. 2014).

It is unlikely that fiscal consolidation has made any material impact on the UK's low productivity rate. A more likely explanation is that the UK's strong record on employment – which has largely come about due to the UK's relatively flexible labour market – has had a dampening effect on productivity and wage growth. In essence, low levels of unemployment and, to some extent, high levels of immigration have come at the expense of lower productivity and lower wages than would otherwise be expected.

Question 4: Has fiscal consolidation led to growing income inequality?

The IFS has previously estimated that the tax and benefit reforms from 2010-11 to 2015-16 led to an average loss for households of £489 per year. As shown in Figure 15, the IFS estimates that low-income working-age households have been proportionally hit the hardest by these changes.

However, the IFS's report emphasizes that there are some important caveats to this static analysis. One of the caveats is that the analysis assumes that households do not change their behaviour in response to tax and benefit changes.

When examining changes to households' real disposable incomes over this time period – which accounts for the large increase in employment – the results are strikingly different. In fact, there has been little change in the disposable incomes of the five income quintiles (see Table 5). The poorest quintile's average disposable income has effectively remained flat, the 2nd, 3rd, and 4th quintiles have seen modest gains, while the richest quintile has seen a modest loss.

These small changes have led to a marginal decrease in income inequality in the five years since the start of the fiscal consolidation, according to the most commonly used Gini coefficient (see Table 6).

FIGURE 15: Direct impact of tax and benefit reforms, May 2010 to May 2015

Source: Browne and Elming 2015.

TABLE 5: Changes in disposable income by quintile, 2010-11 to 2014-15

Financial year	1st	2ND	3rd	4th	5th	Average
2010-11	11,911	18,813	24,891	34,251	64,098	30,793
2011-12	11,897	18,603	24,557	33,209	60,095	29,672
2012-13	11,552	18,431	24,369	32,986	61,539	29,775
2013-14	11,440	18,927	24,972	33,742	60,317	29,879
2014-15	11,883	19,251	25,833	35,012	62,499	30,895
% change (10-11 to 14-15)	-0.24	2.33	3.78	2.22	-2.49	0.33

Source: ONS 2017e.

TABLE 6: Gini coefficient since 2010/11

Year	All households
2010/11	33.7
2011/12	32.3
2012/13	33.3
2013/14	32.4
2014/15	32.6

Source: ONS 2017f.

Question 5: Was the breakdown of fiscal consolidation right?

The government's approach to fiscal consolidation has been correct in many respects. The primary emphasis on spending restraint rather than tax increases was the right way to proceed with fiscal consolidation. Academic literature suggests that cuts to spending – particularly cuts in public sector employment – help make fiscal consolidations expansionary for the economy. Cuts in public sector employment were particularly necessary as the head count grew by well over one million under the Labour government's tenure (ONS 2017a). Moreover, the fears about wide scale job losses were unfounded. For every one job lost in the public sector, 3.5 have been created in the private sector.

> *"The government's approach to fiscal consolidation has been correct in many respects."*

There have also been some pro-growth measures, which have yielded significant benefits for the UK economy. This is especially the case with cuts to the basic rate of corporation tax, which has fallen from 28 percent in 2010 to 19 percent in 2017-18. Further cuts are planned to take the rate down to 17 percent in 2020-21.

Cuts in the basic rate of corporation tax since 2010 – as part of a raft of measures to increase competitiveness – have led to strong economic growth and higher profitability for companies. According to the Office for National Statistics, the net rate of return on capital for UK private non-financial corporations was estimated to be 12.2 percent in Q3 2016, which is up from 10.2 percent in Q2 2010 (ONS 2017b). This, in turn, has led to buoyant corporation tax receipts, with onshore receipts growing by 44 percent since 2011-12 (see Table 7).

TABLE 7: Corporation tax receipts and headline rate of corporation tax

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Onshore tax receipts (£m)	36,176	34,290	36,070	36,771	40,932	43,872	49,434
Total tax receipts (£m)	43,040	43,130	40,482	40,327	43,005	44,410	49,772
Corporation tax rate	28%	26%	24%	23%	21%	20%	20%

Source: HMRC 2017.

Note 1: These figures exclude the Bank Levy and the Bank Surcharge.

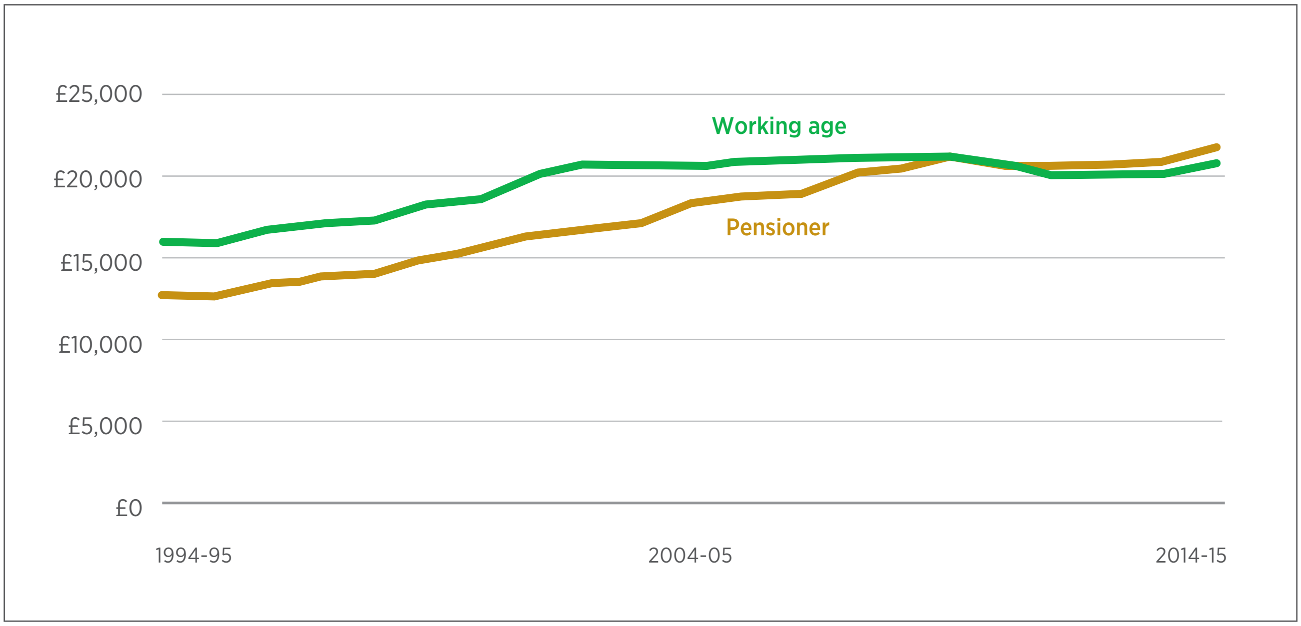
Note 2: Total tax receipts have seen a more modest rate of growth than onshore receipts due to the collapse in tax revenues from offshore North Sea oil and gas.

There have, however, been problems associated with two aspects of the fiscal consolidation. The first is that placing some government departments off limits and protecting them from any cuts has led to perverse outcomes. While certain departments, such as the NHS and international aid, have received large increases in spending in real terms, other departments have seen swingeing cuts. Cuts to the Department for Communities and Local Government, for example, have led to an average 27 percent cut in spending for local authorities in real terms since 2010/11 (Hastings et al. 2015). One of the results has been an underfunded social care sector, which could, perhaps, have been avoided had cuts in spending been more evenly distributed across departments.

Of course, protecting large areas of public expenditure has also reduced the scope for growth-promoting tax cuts. This is particularly concerning given that the Office for Budget Responsibility is projecting that the tax burden on British households and businesses will climb to a 40-year high by 2020, owing to an aging population and slower growth (Chan 2017, March 12).

The way welfare reform has been carried out would also appear to be unsustainable in the long run. The primary focus of the government's welfare changes has been on the working age population. While most of these savings have been necessary, pensioner benefits have been effectively protected during this period. This has led to the extraordinary situation whereby typical pensioner incomes after housing costs are now higher than those of a typical working-age household (see Figure 16).

FIGURE 16: how incomes for people on a pension compare with working-age people, comparison of median disposable income after housing costs



Source: Resolution Foundation and Wilson 2017.

Conclusion

The fiscal position that the Coalition government inherited in 2010 was a major threat to the UK's long term economic security. On some measures, it was forecast that the UK's structural budget deficit was the highest in the OECD. The UK required a credible fiscal consolidation plan to ensure that the UK's borrowing could be financed. This was achieved, with markets viewing the UK's fiscal consolidation plan as more credible than those of its OECD competitors, meaning that borrowing costs were lower than would have otherwise been the case.

George Osborne, the Chancellor of the Exchequer from 2010 to 2016, faced considerable pressure to soften the fiscal consolidation in the early part of this decade. He resisted this pressure and was right to do so. The weight of evidence suggests that the decision to stick with Plan A was not the primary cause of slow growth in 2012 and a softening of consolidation may have, in fact, led to a negative market reaction, potentially posing significant risks for the UK economy.

The fiscal consolidation plan has not had an adverse impact on unemployment. In fact, despite predictions to the contrary, for every job lost in the public sector there have been 3.5 new jobs created in the private sector. Of course, the UK does have issues with poor productivity and earnings growth. This is, however, likely to be as a result of a trade-off with low unemployment, rather than as a result of the fiscal consolidation.

Although a static analysis of tax and benefit changes would suggest that lower income households have suffered from fiscal consolidation, the large increase in employment has offset these impacts. Income inequality has fallen since 2010.

The primary emphasis on spending restraint rather than tax increases was the right way to proceed with fiscal consolidation. Academic literature suggests that cuts to spending – particularly cuts in public sector employment – help make fiscal consolidations expansionary for the economy. There have also been some pro-growth measures, which have yielded significant benefits for the UK economy, particularly the decision to cut the basic rate of corporation tax.

> *"The fiscal consolidation plan has not had an adverse impact on unemployment."*

There have, however, been two key issues with the fiscal consolidation program. The first is that the protection of some government departments has led to perverse outcomes. Some government departments have seen large increases in spending while others have observed swinging cuts. The policy of saving some departments from cuts has also reduced the scope for allowing growth-promoting tax cuts.

Moreover, the way welfare reform has been carried out would appear to be unsustainable in the long run. While most of the savings in working age benefits have been necessary, pensioner benefits have been effectively protected during this period. This has led to the extraordinary situation where typical pensioner incomes after housing costs are now higher than those of a typical working age household.

About the Author

Daniel Mahoney is Deputy Director and Head of Economic Research at the Centre for Policy Studies (CPS), where he is responsible for producing reports across a range of economic policy areas for distribution to the press and parliamentarians. Before joining the CPS, he worked in research roles for a former Chancellor of the Exchequer and to an MP who is a current-serving Cabinet Minister.

His publications at the CPS include "Who will fix London's housing crisis?", *The Great Overtake – How the UK will be the biggest and best in Europe* and *Manufacturing: How to Fuel the Fire?*. He writes for the *Daily Telegraph* and *CapX* on a regular basis, and advocates CPS policy positions on a number of media outlets including Sky News and the BBC.

Appendix

EU trade with Japan

EU Imports from Japan (2011): €70,583 (Based on data published by the European Commission) (http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113403.pdf)

UK Imports from Japan (2011): £12,485m (Based on data (Annual UK Trade Exports and Imports by country 1999 to 2015) published by the Office for National Statistics—https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/adhocs/006034annualuktradeexportsandimportsbycountry1999to2015) => €14,946.73m (Using 2011 Exchange Rates) (http://fxtop.com/en/currency-converter-past.php?A=12485&C1=GBP&C2=EUR&DD=31&MM=12&YYYY=2011&B=1&P=&I=1&btnOK=Go%21)

EU Imports from Japan (2011) (exc UK): €55,636.27m
€55,636.27 = $71,987.77m ($71.98777 billion)

Total Japanese Exports (2011): $788 billion (Based on data published by The Economic Department) (http://www.export.gov.il/files/economy/factsheet11/japan.pdf)
71.98777/788 = 9.13%

EU trade with US

EU Imports from US (2011): €194,233 (Based on data published by the European Commission—http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113465.pdf)

UK Imports from US (2011): £48,582m (Based on data published by the Office for National Statistics— https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/adhocs/006034annualuktradeexportsandimportsbycountry1999to2015) => €58,161.14m (Using 2011 Exchange Rates)

EU Imports from US (2011) (exc UK): €136,071.86m
€136,071.86 = $176,063.28m ($0.176063 trillion)

Total US Exports (2011): $2.10 trillion (Based on data (U.S. Export Fact Sheet) published by the International Trade Administration—https://www.trade.gov/press/press-releases/2012/export-factsheet-february2012-021012.pdf)
0.176063/2.10 = 8.38%

Sources: United States, Census Bureau. 2017. *Trade in Goods with European Union*. Government of the United States. Available at https://www.census.gov/foreign-trade/balance/c0003.html

US exports to the EU:

United States, Census Bureau. Undated. *Top Trading Partners – December 2011*. Government of the United States. Available at https://www.census.gov/foreign-trade/statistics/highlights/top/top1112yr.html

US exports to the UK:

Office for National Statistics (ONS). 2016. *Annual UK Trade Exports and Imports by Country 1999 to 2015.* Office for National Statistics. Available at https://www.ons.gov.uk/economy/nationalaccounts/balanceofpayments/adhocs/006034annualuktradeexportsandimportsbycountry1999to2015.

References

Barnett, Alina, et al. 2014. *The UK Productivity Puzzle.* Quarterly Bulletin Q2. Bank of England, Monetary Analysis Directorate. Available at http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q201.pdf.

BBC News. 2009. "King Warns Against More Spending." *BBC News*, March 24. Available at http://news.bbc.co.uk/2/hi/business/7961900.stm.

BBC News. 2016. "Fuel Duty Frozen for Seventh Year in a Row." *BBC News*, November 23. Available at http://www.bbc.com/news/business-38080622.

Bilicka, Katarzyna Anna, Michael P. Devereux, and Clemens Fuest. 2011. *Will Fiscal Consolidation Drive the UK Economy Back into Recession?* Oxford University, Centre for Business Taxation. Available at https://www.sbs.ox.ac.uk/sites/default/files/Business_Taxation/Docs/Publications/Policy_Papers/Fiscal-consolidation.pdf.

Bilicka, Katarzyna Anna, Michael P. Devereux, and Clemens Fuest. 2012. "The Effects of Fiscal Consolidation on Short-Term Growth: A Review and Implications for the UK." In Julian S. Alworth and Giampaolo Arachi. *Taxation and the Financial Crisis.* Oxford Scholarship Online. Available at http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199698165.001.0001/acprof-9780199698165-chapter-10.

Browne, James, and William Elming. 2015. *The Effect of the Coalition's Tax and Benefit Changes on Household Incomes and Work Incentives.* Institute for Fiscal Studies, January 23. Available at https://www.ifs.org.uk/uploads/publications/bns/BN159.pdf.

Chan, Szu Ping. 2015. "Autumn Statement 2015: Osborne Uses £27bn Windfall to Ease Austerity." *Daily Telegraph*, November 26. Available at http://www.telegraph.co.uk/finance/autumn-statement/12017096/George-Osborne-uses-27bn-windfall-to-put-brake-on-austerity.html.

Chan, Szu Ping. 2017. "UK Tax Burden Set to Keep Rising over the Next Decade to Its Highest in 40 Years by 2025." *Daily Telegraph*, March 12. Available at http://www.telegraph.co.uk/business/2017/03/12/budget-2017-tax-burden-course-climb-40-year-high/.

Chote, Robert, Carl Emmerson, and Gemma Tetlow. 2009. *The Public Finances under Labour.* Institute for Fiscal Studies. Available at https://www.ifs.org.uk/budgets/gb2009/09chap2.pdf.

Chowla, Shiv, Lucia Quaglietti, and Łukasz Rachel. 2014. *How Have World Shocks Affected the UK Economy?* Bank of England, International Economic Analysis Division. Available at http://www.bankofengland.co.uk/publications/Pages/quarterlybulletin/2014/qb14q2prereleasearticleworldshocks.aspx.

Cribb, Jonathan. 2017. *Public Sector Pay in the Next Parliament*. IFS Briefing Note BN210. Institute for Fiscal Studies. Available at https://www.ifs.org.uk/uploads/publications/bns/BN210.pdf.

Cuthbert, Jim. 2014. *How Serious a Threat is the UK's Financialised Economy?* Jimmy Reid Foundation. Available at https://www.bl.uk/collection-items/how-serious-a-threat-is-the-uks-financialised-economy.

The Economist. 2008. "Farewell, New Labour." *The Economist*, November 27. Available at http://www.economist.com/node/12689686.

Eurostat. 2017. *Unemployment Rates, Seasonally Adjusted, February 2017 (%).* Web figure. Eurostat. Available at http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Unemployment_rates,_seasonally_adjusted,_February_2017_(%25)_F2.png.

Emmerson, Carl, and Gemma Tetlow. 2015. *Public Finances under the Coalition. Institute of Fiscal Studies.* Available at https://www.ifs.org.uk/uploads/gb/gb2015/ch1_gb2015.pdf.

Federal Reserve Bank of St. Louis (FRED). Undated. *Long-Term Government Bond Yields: 10-year: Main (Including Benchmark).* FRED. Country-specific data available from https://fred.stlouisfed.org/categories/32268.

Fender, John. 2012. "In Partial Defence of Fiscal Austerity." *Royal Economic Society Newsletter* 159: 15-17 and 22, October. Available at http://www.res.org.uk/view/article5Oct12Feature.html.

Financial Times. 2017. "How Wages Fell in the UK While the Economy Grew. *Financial Times*, March 2. Available at https://www.ft.com/content/83e7e87e-fe64-11e6-96f8-3700c5664d30.

Harari, Daniel. 2017. *Productivity in the UK.* Briefing Paper number 06492 (September). House of Commons Library. Available at http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN06492#fullreport.

Hastings, Annette, Nick Bailey, Glen Bramley, Maria Gannon, and David Watkins. 2015. *The Cost of the Cuts: The Impact on Local Government and Poorer Communities.* Joseph Rowntree Foundation. Available at https://www.jrf.org.uk/sites/default/files/jrf/migrated/files/Summary-Final.pdf.

HM Government. 2010. *The Coalition: Our Programme for Government*, May. Government of the United Kingdom. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78977/coalition_programme_for_government.pdf.

HM Revenue and Customs (HMRC). 2017. *HMRC Tax & NIC Receipts: Monthly and Annual Historical Record*, April. Government of the United Kingdom. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/609972/Mar17_Receipts_NS_Bulletin_Final.pdf.

HM Treasury. 2011. *Budget 2011*, March 23. Government of the United Kingdom. Available at https://www.gov.uk/government/publications/budget-2011.

HM Treasury. 2010. *Budget 2010*, June 22. Government of the United Kingdom. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/248096/0061.pdf.

HM Treasury. 2016. *Autumn Statement 2016*, November 23. Government of the United Kingdom. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/571559/autumn_statement_2016_web.pdf.

HM Treasury. 2016. *Public Expenditure: Statistical Analyses 2016*, July. Government of the United Kingdom. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/539465/PESA_2016_Publication.pdf.

HM Treasury. Undated. Public Finances Database. 1963-64 to 2009-10. Government of the United Kingdom. Available at https://www.theguardian.com/news/datablog/2010/apr/25/uk-public-spending-1963#data.

Institute of Fiscal Studies (IFS). 2015. *Total UK Public Spending*, September 25. Web page. Institute of Fiscal Studies. Available at https://www.ifs.org.uk/tools_and_resources/fiscal_facts/public_spending_survey/total_public_spending.

International Monetary Fund (IMF). 2013. *United Kingdom: 2013 Article IV Consultation*, July. Country Report no. 13/210. International Monetary Fund. Available at https://www.imf.org/external/pubs/ft/scr/2013/cr13210.pdf.

International Monetary Fund (IMF). 2014. *United Kingdom: 2014 Article IV Consultation*—Staff Report, Press Release, and Statement by the Executive Director for the United Kingdom, July. IMF Country Report no. 14/233. International Monetary Fund. Available at https://www.imf.org/external/pubs/ft/scr/2014/cr14233.pdf.

International Monetary Fund (IMF). 2011. *World Economic Outlook Database: September 2011 edition.* IMF. Available at https://www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx.

Johnson, Paul, and Daniel Chandler. 2015. "The Coalition and the Economy." In Anthony Seldon and Mike Finn (eds.). *The Coalition Effect, 2010–2015. Cambridge University Press*. Available at https://www.ifs.org.uk/publications/7618.

Mahoney, Daniel. 2017. *Did Clegg Create Conditions for Corbyn? How the Triple Lock has Hamstrung the Government Since 2010*, October. Centre for Policy Studies. Available at http://www.cps.org.uk/files/reports/original/171018171514-DidCleggcreatetheconditionsforCorbyn.pdf.

Moody's. 2013. *Moody's Downgrades UK's Government Bond Rating to Aa1 from Aaa; Outlook is Now Stable*, February 22. Global Credit Research. Moody's Investors Service. Available at https://www.moodys.com/research/Moodys-downgrades-UKs-government-bond-rating-to-Aa1-from-Aaa--PR_266844.

Nelson, Fraser. 2015. "A Jobs Miracle Is Happening in Britain, Thanks to Tax Cuts. Why Don't the Tories Say So?" *The Spectator*, March 21. Available at https://www.spectator.co.uk/2015/03/the-coalitions-jobs-record-is-miraculous-why-wont-they-talk-about-it/.

Nickell, Stephen, and Jumana Saleheen. 2015. *The Impact of Immigration on Occupational Wages: Evidence from Britain.* Staff Working Paper number 574 (December). Bank of England. Available at http://www.bankofengland.co.uk/research/Documents/workingpapers/2015/swp574.

OECD. 2011. "Fiscal Consolidation: Targets, Plans and Measures." *OECD Journal on Budgeting* 11, 2: 15-67. Available at http://dx.doi.org/10.1787/budget-11-5kg869h4w5f6.

OECD. 2017. *Quarterly National Accounts: Quarterly Growth Rates of Real GDP, Change over Previous Quarter.* OECD.stat. Available at https://stats.oecd.org/index.aspx?queryid=350, as of May 2017.

Office for Budget Responsibility. 2013. *Forecast Evaluation Report*, October 9. Office for Budget Responsibility. Available at http://budgetresponsibility.org.uk/fer/forecast-evaluation-report-october-2013/.

Office for Budget Responsibility. 2016, November. *Data. Key Sources:* Public Finances Databank. Downloadable Excel sheet. Office for Budget Responsibility. Available at http://budgetresponsibility.org.uk/data/.

Office for National Statistics (ONS). 2012,. *Quarterly Annual Accounts, Q1 2012* June 28. Office for National Statistics. Available at http://webarchive.nationalarchives.gov.uk/20160107193231/http://www.ons.gov.uk/ons/rel/naa2/quarterly-national-accounts/q1-2012/index.html.

Office for National Statistics (ONS). 2017a. *Public Sector Employment, UK: Dec 2016*, March 15. Statistical Bulletin. Office for National Statistics. Available at https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/bulletins/publicsectoremployment/dec2016.

Office for National Statistics (ONS). 2017b. *Profitability of UK companies: July to Sept 2016*, January 12. Statistical Bulletin. Office for National Statistics. Available at https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/bulletins/profitabilityofukcompanies/julytosept2016.

Office for National Statistics (ONS). 2017c. *Dataset EARN01: Average Weekly Earnings*, October 18. Office for National Statistics. Available at https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/averageweeklyearningsearn01.

Office for National Statistics (ONS). 2017d. *Public Sector Employment, UK: Dec 2016*, March 15. Statistical Bulletin. Office for National Statistics. Available at https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/bulletins/publicsectoremployment/dec2016.

Office of National Statistics (ONS). 2017e. *The Effects of Taxes and Benefits on Household Income*, April 25. Office for National Statistics. Available at https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/datasets/theeffectsoftaxesandbenefitsonhouseholdincomefinancialyearending2014.

Office of National Statistics (ONS). 2017f. *Household Disposable Income and Inequality in the UK: Financial Year Ending 2016*, April 25. Statistical Bulletin. Office for National Statistics. Available at https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householddisposableincomeandinequality/financialyearending2016.

Pension & Financial Consultants Limited (PFC). Undated. *A £50,000 Higher Rate Tax Threshold?* PFC. Available at http://www.pfc.co.uk/wp-content/uploads/pfc-A-%C2%A350000-higher-rate-tax-threshold.pdf.

PWC. 2015. *Total Tax Contribution of UK Financial Services, Eighth Edition.* City of London Corporation. Available at https://www.cityoflondon.gov.uk/business/economic-research-and-information/research-publications/Pages/Total-Tax-2015.aspx.

Seely, Antony. 2016. *Capital Gains Tax: Recent Developments*, April 8. Briefing Paper number 05572. House of Commons Library. Available at http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN05572.

Stamp Duty Rates. 2017. *History of Stamp Duty Taxes.* Web page. StampDutyRates.co.uk. Available at http://www.stampdutyrates.co.uk/historic-rates.html. Historic

Tyler, Gloria. 2017. *Financial Services: Contribution to the UK Economy*, March 31. Briefing Paper number 6193. House of Commons Library. Available at http://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN06193.

Van Reenen, John. 2015. *Austerity: Growth Costs and Post-Election Plans.* Paper EA020. London School of Economics and Political Science, Centre for Economic Performance. Available at http://cep.lse.ac.uk/pubs/download/ea020.pdf.

Wardrop, Murray. 2009. "Tory Public Spending Cuts 'Could Push Unemployment to 5 Million.'" *The Telegraph*, September 24. Available at http://www.telegraph.co.uk/news/politics/georgeosborne/6224723/Tory-public-spending-cuts-could-push-unemployment-to-5-million.html.

Wilson, Bill. 2017. "Pensioner Incomes 'Outstrip Those of Working Families', February 13." BBC News. Available at http://www.bbc.com/news/business-38948369.

Endnotes

1 HM Treasury 2016, July 21. Data from Table 1.13: Total Managed Expenditure by Departmental Group and Other Expenditure In Real Terms, 2011-12 to 2019-20, p. 30.

2 Data from Federal Reserve Bank of St Louis (FRED Undated).

3 See, for example Bilicka, Devereux, and Fuest 2011; and Bilicka, Devereux, and Fuest 2012.

4 Data comes from ONS 2017a, March 15.

5 See, for example, *Financial Times* 2017.

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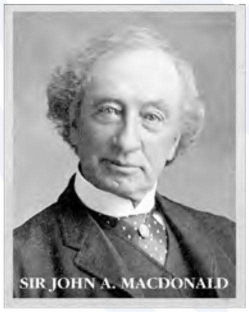

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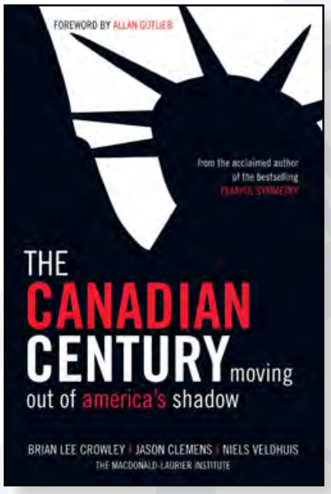

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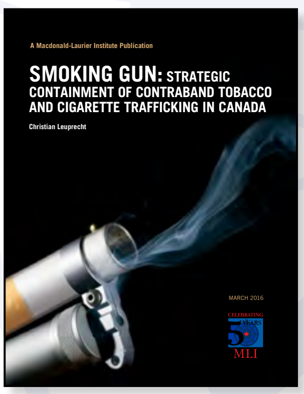

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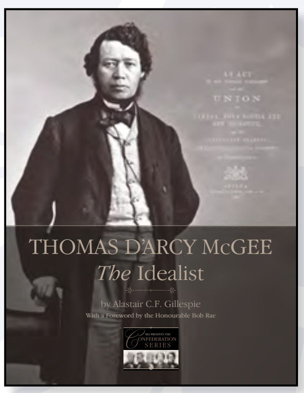

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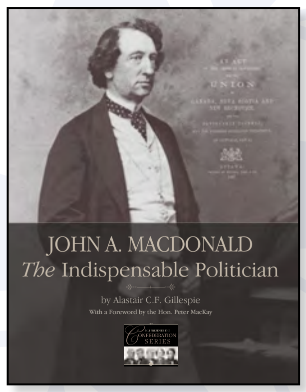

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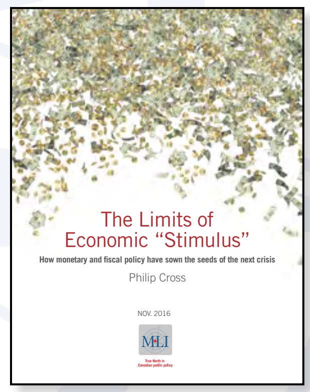

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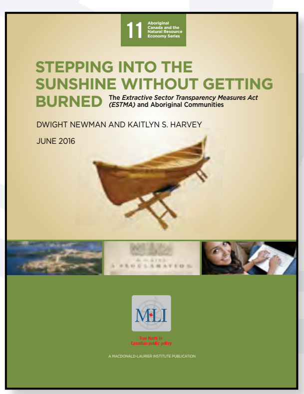

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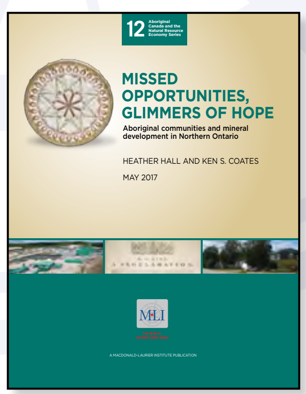

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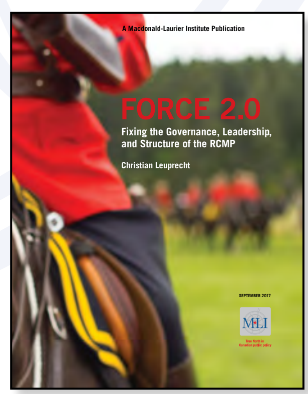

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