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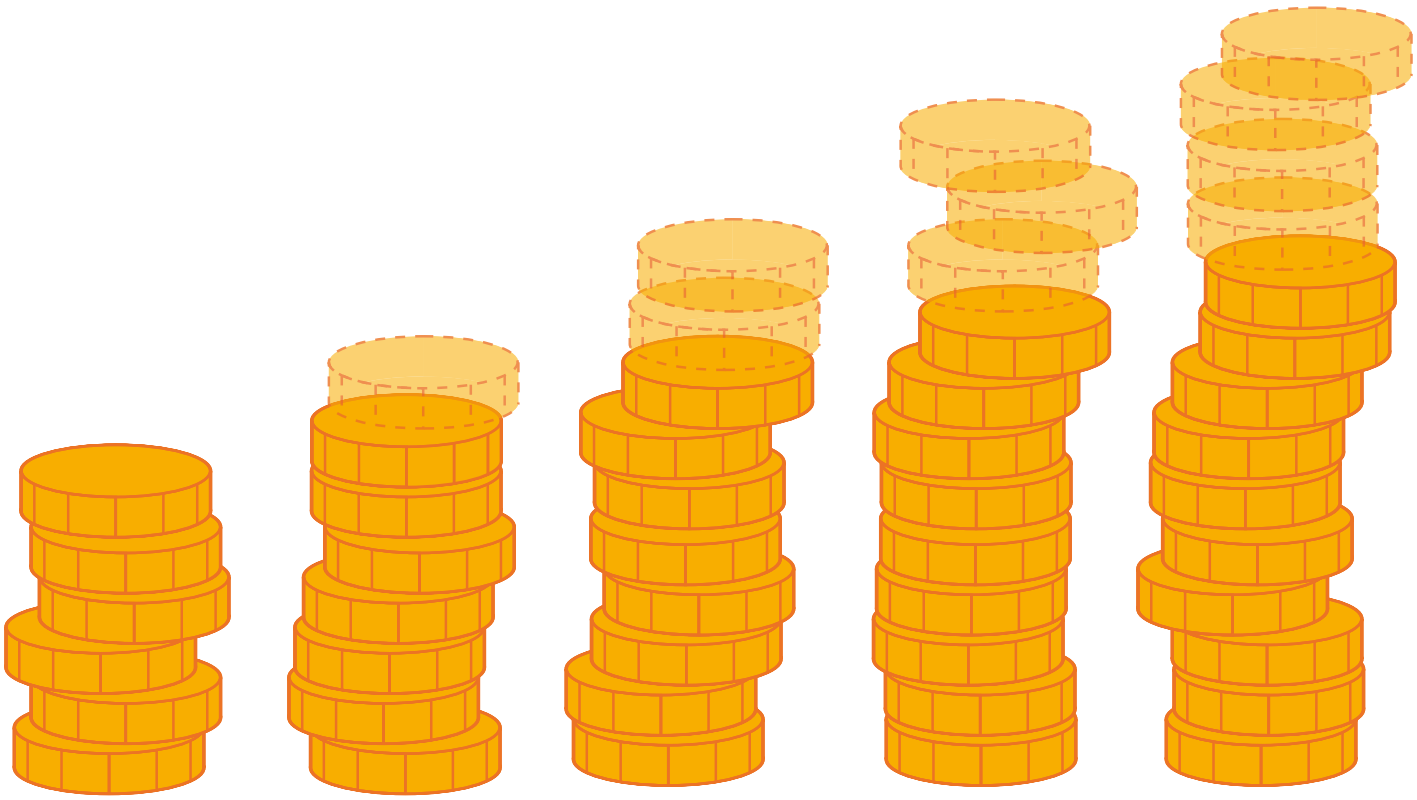

SCOTLAND'S MISSING PAY GROWTH

THE ECONOMIC AND FISCAL IMPACTS OF WEAK WAGES SINCE THE FINANCIAL CRISIS

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and Alfie Stirling

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Institute for Public Policy Research

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SUMMARY

While pay has performed better in Scotland than in the rest of the UK over the last five years, Scottish workers in both the public and private sectors have not been spared from the trend of below-inflation increases in earnings, with pay growth underperforming relative to expectations.

Aside from its obvious impact on household incomes and working poverty, the weakness of earnings growth has led to a smaller Scottish economy, and lower tax receipts collected in Scotland, than would have resulted from pay keeping pace with either inflation or expectations for earnings growth.

Given that the Scottish government, as a result of the Scotland bill, is set to gain greater control over income tax on earnings, how pay performs over the next five years and beyond will have an impact on the resources available to Scottish policymakers. Furthermore, in their role as setters of public sector pay, there is greater potential for some of the costs of increasing public sector pay to be offset by increased tax revenues.

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Pay growth in Scotland has outperformed the rest of the UK over the last five years. This pattern was particularly noticeable in the private sector, and was driven by productivity increases in Scotland relative to the rest of the UK, and a stronger link between productivity and median pay in Scotland. However, both Scotland and the UK underperformed relative to both inflation and expectations for earnings growth.

- Median gross weekly pay rose by 8 per cent in Scotland between 2009 and 2015, with growth of 7 per cent in Scotland's private sector, and 10 per cent in the public sector.
- However, prices have risen by 20 per cent over the same period (by both the RPI and CPI measures), which implies a fall in real wages of approximately 12 per cent.
- Equally, at the time of the March 2011 budget, the Office for Budget Responsibility (OBR) forecast average earnings growth of 21 per cent between 2009 and 2015.
- The subsequent weak performance of earnings relative to the forecasts means that wages in Scotland are currently 13 per cent lower in the private sector, and 10 per cent lower in the public sector, than it was predicted five years ago that they would be.

The OBR has projected strong wage growth over the next few years, with their forecast suggesting that average earnings growth will reach 3.9 per cent annually by 2020.

If wage growth were to undershoot again, however, it would not just have a negative impact on Scottish households and the size of Scotland's economy – it would also have a sizable impact on government tax revenues in both the UK and Scotland, particularly in light of the devolution of new powers over income tax and other tax revenue streams coming to Scotland over this period.

To assess the potential impacts of future disappointing wage growth, we have looked at the effect that the wage forecast undershoot has had on the Scottish economy over the last five years, and have found the following macroeconomic effects.

- If the OBR's 2011 wage forecast had been met, Scotland's economy would today be £11.6 billion, or 8.2 per cent, larger than it is, assuming that other economic factors had performed as they have since 2011.
- If only private sector wages had met projections, the Scottish economy would be £8.8 billion, or 6.2 per cent, larger.
- The equivalent figures for Scotland's public sector are £2.8 billion and 2.0 per cent respectively.

Higher private sector pay would also have led to a sizable fiscal return.

- If private sector wage growth had met the OBR's 2011 expectations, it would have led to a fiscal return totalling £2.9 billion, with £2.7 billion in additional income tax receipts, national insurance contributions and expenditure taxes, and almost £200 million of reduced benefit expenditure.
- Under the powers devolved in the Scotland bill, approximately £1.4 billion of that £2.7 billion fiscal return would directly benefit the Scottish government (as a result of the devolution of control over the income tax on earnings and the assignation of the first half of VAT revenue to the Scottish government).

One barrier to higher public sector pay has been, and will continue to be, the fiscal climate facing the Scottish government. However, with devolution of further powers to the Scottish parliament comes greater potential for some of the costs of increasing public sector pay to be offset by increased tax revenues (which will flow to the Scottish parliament rather than the UK Treasury), and for the benefits of increased pay in both the private and public sectors to be felt more directly within Scotland.

- The gross cost (before considering tax and benefit implications) of raising public sector pay in Scotland by 10 per cent would come to £1.9 billion.
- After factoring in a full suite of offsetting tax revenues to both the UK and Scottish governments, this falls to a net cost of £1.1 billion.
- By far the largest offsetting revenue increase would come from the soon-to-be-devolved income tax on earnings – at £600 million, it would mean that the net cost to the Scottish government would total £1.3 billion.

1. INTRODUCTION

One of the most striking UK-wide labour market trends in recent years has been the poor performance of earnings. Against all expectations, earnings grew more slowly than inflation in every year between 2009 and 2013. Even though real earnings rebounded in 2014 and 2015, this was primarily due to a fall in rates of inflation rather than large increases in the rate of nominal earnings growth.

While Scottish workers, whose median hourly pay overtook that of their English counterparts in 2014, may have fared relatively well, they have not been immune to this UK-wide pattern of weak earnings growth (D'Arcy and Kelly 2016). Real hourly pay in Scotland in 2015 was still 8 per cent lower than its 2009 level, and at current rates of increase will not attain pre-crisis levels until 2017 (ibid).

Looking ahead, the UK government's fiscal watchdog the Office for Budget Responsibility (OBR) expects pay growth to return in a big way, forecasting growth in average earnings of 3.6 per cent in 2020, up from 1.5 per cent in 2014 (OBR 2015). Others, looking at data from human resources surveys and on pay settlements, consider this forecast optimistic, and believe that a 'new normal' of 2 per cent wage growth may be here to stay (Blanchflower and Machin 2016).

If this latter thesis is correct, an undershoot relative to the OBR's expectations on this scale will have enormous implications not only for household incomes but also for the fiscal position of the Scottish government and the performance of Scotland's economy. Given that Scotland is set to gain full control over income tax on earnings, the link between weak earnings growth and public spending in Scotland will become more direct. This means that, looking ahead, the risk of low earnings growth must be considered and planned for by Scottish policymakers.

Scotland also needs to consider how earnings perform in the rest of the UK (rUK). Because of the interaction between public spending in the rUK and the Scottish government's block grant, slow earnings growth elsewhere may reduce rUK spending and, therefore, the block grant – thus generating an additional factor affecting the Scottish government's spending power.[1]

Finally, in its role as the setter of public sector pay limits, the Scottish government can play a direct role in providing pay increases for a significant proportion of Scottish workers, which will potentially have offsetting effects through increased tax revenues.

This report analyses the fiscal and macroeconomic impacts of Scotland's weak pay growth in both the private and public sectors. It uses data from the IPPR Scotland tax–benefit model, which allows us to measure the impact of changes in pay in Scotland on both household incomes and tax receipts in Scotland. It also considers the cost to the Scottish government of a range of increases in public sector pay levels.

1 It should, however, be noted that the recently agreed fiscal framework contains provisions for adjusting the block grant to take account of changes in relative rates of population and tax receipts growth. This will insulate Scotland from changes to devolved tax receipts in the rest of the UK, although whether or not it fully compensates Scotland will be determined by the final method agreed for calculating the adjustment.

Its structure is as follows. First, we analyse the recent performance of nominal weekly pay in Scotland's private and public sectors relative to inflation, to UK-wide measures of weekly pay, and to the forecast for average earnings growth that the OBR made in its 2010 forecasts.

We then analyse how much larger Scotland's economy would now be had earnings growth followed the OBR's forecast, including the direct impact of higher incomes as well as the knock-on impact that extra consumer and government spending would have on earnings and incomes, providing separate results for both the public and private sectors.

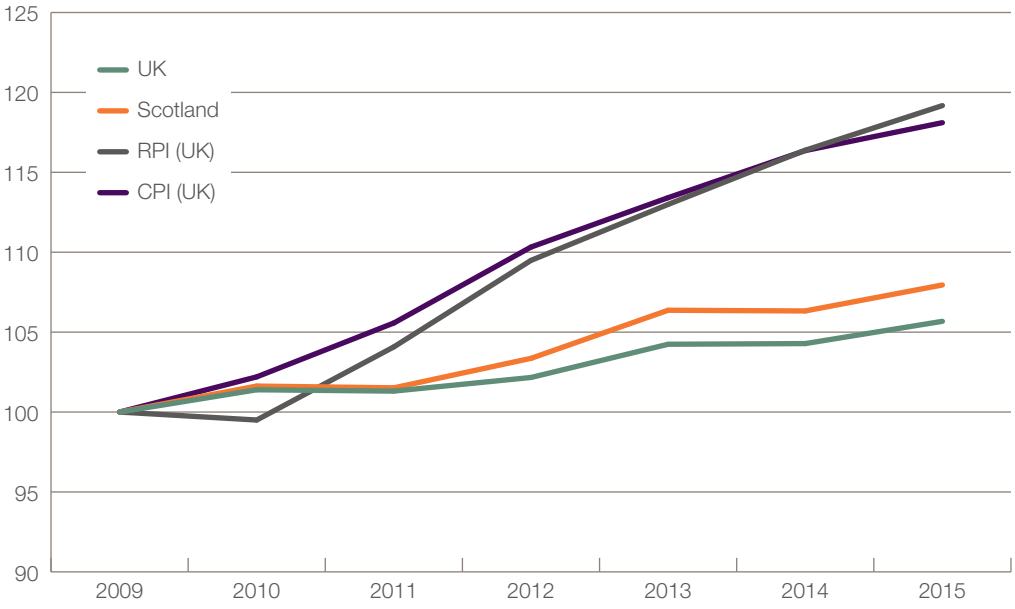
Next, we look at the cost, in terms of 'lost' income tax receipts, of lower-than-expected earnings growth in the public and private sectors over recent years.

Finally, we focus on public sector pay in particular, analysing the potential costs to the Scottish government of increasing public sector pay, factoring in both the gross costs of increasing the public sector pay bill, and the net costs after accounting for extra income tax and VAT receipts.

2.
PAY GROWTH IN SCOTLAND SINCE THE RECESSION

In the years since the financial crisis, pay growth in Scotland has not kept pace with inflation. Between 2009 and 2015, gross weekly earnings for Scottish employees rose by 8 per cent, versus an increase of close to 20 per cent in both the retail and the consumer price indices (at the UK level), leading to a decline in real wages of approximately 12 per cent. Across the UK as a whole, pay growth has been even weaker than in Scotland, at just 6 per cent in nominal terms.

Figure 2.1
Scotland's pay growth, while stronger than the UK's, has been far outpaced by inflation
Growth in average nominal gross weekly wages and inflation indices, Scotland and UK, 2009–2015 (2009 = 100)



Sources: ONS 2016a and OBR 2015

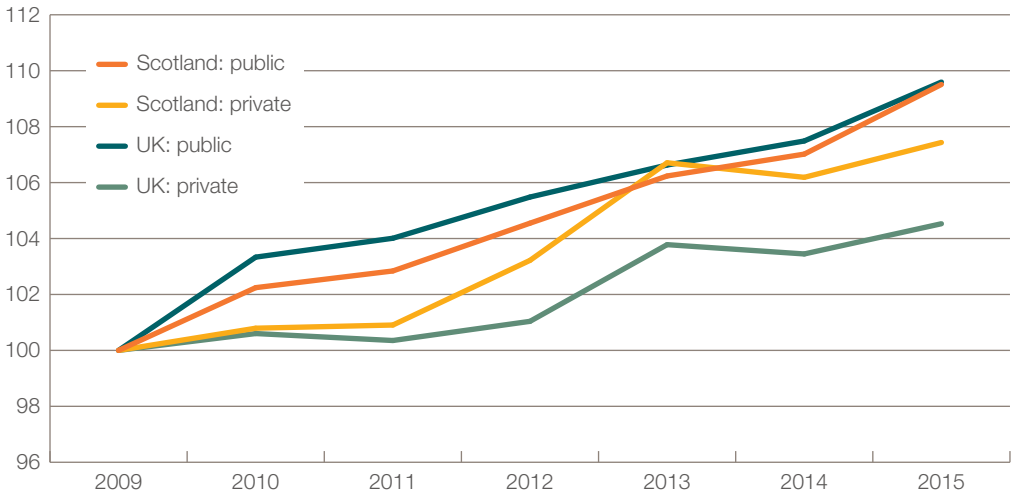
Scotland's relatively strong pay growth relative to the UK as a whole is entirely due to the private sector; public sector pay growth in Scotland matched the UK average (see fig 2.2 below).

Why did private sector pay hold up better in Scotland? Previous research has suggested that it is down to Scotland's much lower unemployment rate throughout the 2000s, combined with its higher-than-average union density (D'Arcy and Kelly 2016). However, the former doesn't help to explain Scotland's pay growth performance *post*-recession, during which time unemployment rates have been higher, and the employment rate lower, in Scotland than in England.

Another possible explanation is that Scotland's private sector has developed in a different way to that of the rest of the UK. Scotland's performance on productivity (the amount of economic output produced per hour worked) relative to England is instructive here. Productivity actually grew in real terms in Scotland between 2010 and 2013, whereas it remained largely flat in England. Furthermore, the gap between productivity (measured in terms of output per hour) and real median pay growth was, in 2013, much smaller in Scotland in 2013, at around 5.9 per cent, than in England, which showed a 14.2 per cent gap (ibid).

As has been mentioned, public sector pay growth has been muted in Scotland, matching UK-wide increases in public sector pay of approximately 10 per cent between 2009 and 2015 (ONS 2016a). While across the UK as a whole public sector pay has risen more quickly than that in the private sector, it has nevertheless grown far slower than consumer prices by either measure, with a gap of almost 10 per cent between pay growth and growth in both RPI and CPI between 2009 and 2015 (ibid).

Figure 2.2
The relative strength of Scotland's pay growth is entirely due to the private sector
Growth in average nominal gross weekly wages, 2009–2015, UK and Scotland, private and public sectors (2009 = 100)



Source: ONS 2016a

Contributing to this picture is the fact that the Scottish government has held public sector basic pay increases to 1 per cent or lower in each of the last six years, and expects to do so again in 2016/17, which would mean a cumulative increase between 2010/11 and 2016/17 of 5.1 per cent. This compares to expected and forecast cumulative rises in retail prices of 23.3 per cent, and in consumer prices of 16.2 per cent, over the same period (Scottish Government 2016).[2]

Not only has Scottish pay growth underperformed against inflation, as it has in the rest of the UK, it has also underperformed relative to expectations. At the time of the March 2011 budget, the OBR forecasted that pay growth across the UK would average 3.5 per cent between 2011 and 2015, with growth of 2.0 per cent in 2011

2 Public sector basic pay increases in Scotland being held at a cumulative 5.1 per cent between 2010/11 and 2016/17 is consistent with public sector weekly pay growth of 10.0 per cent over that period. This is likely to be because of changing hours worked, compositional shifts in the public sector workforce away from lower-paying and towards higher-paying roles; because the Scottish government has included provisions for minimum pay uplifts for lower-paying roles and a Scottish living wage policy; and because a number of public sector bodies continue to allow progression up pay spines.

rising to 4.5 per cent in 2015. This implied a forecast increase in UK earnings of 21 per cent between 2009 and 2015. Against actual RPI and CPI inflation observed between those years, earnings growth of 21 per cent would have led to real pay increases for workers (OBR 2011).

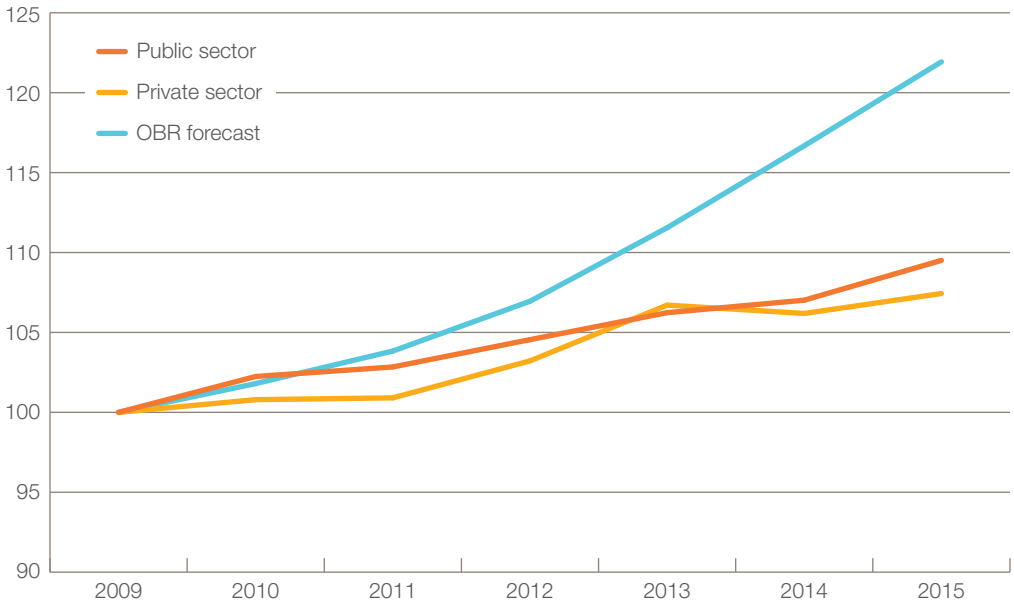
Table 2.1
Public sector pay limits (% annual increase) in Scotland, and RPI and CPI inflation, 2010/11–2016/17

	Public sector pay limits Scotland	RPI	CPI
2010/11	1%	5.0%	3.5%
2011/12	0%	4.8%	4.3%
2012/13	0%	3.1%	2.6%
2013/14	1%	2.9%	2.3%
2014/15	1%	2.0%	1.0%
2015/16	1%	1.2%	0.2%
2016/17	1%	2.3%	1.3%
Cumulative	5.1%	23.3%	16.2%

Sources: Scottish Government 2016 and OBR 2015

Against this, cumulative pay growth in Scotland of 10 per cent in the public sector[3] and 7 per cent in the private sector (see figure 2.2) implies a 'pay gap' between forecast and actual pay growth of 10 per cent in the public sector, and 13 per cent in the private sector, in 2015.

Figure 2.3
There is a sizeable 'pay gap' between forecast and actual pay growth
Forecast and actual nominal pay growth in Scotland, 2009–2015 (2009 = 100)



Sources: OBR 2015 and ONS 2016a

Clearly, the weak performance of pay growth relative to expectations has had a huge impact on Scotland's economy. Because of the link between pay and tax receipts, it will also have had an impact on revenues collected within Scotland. The next sections explore the scale of these effects in further detail – firstly for the private sector, and then for the public sector.

3 See the previous footnote.

3.
THE MACROECONOMIC IMPACT OF WEAK PRIVATE AND PUBLIC SECTOR PAY GROWTH IN SCOTLAND

The weak performance of Scottish earnings relative to expectations over the last five years has undoubtedly resulted in a Scottish economy that is smaller than it would otherwise be. In order to measure the scale of this impact, we have calculated how much larger we would expect the Scottish economy to be now had pay grown in line with expectations across both the public and private sectors.

Higher pay would benefit (and would have benefitted) the Scottish economy through four mechanisms.

1. Higher net incomes among public sector workers in and of itself implies a larger economy with higher output.
2. The government would be able to afford higher spending as a result of higher direct and indirect tax receipts and lower means-tested benefit expenditure, so long as the government chose to spend these extra resources in the same year in which they were raised rather than delaying the spending to a subsequent year or using any savings for other purposes, such as paying down debt.
3. As workers see an increase in their incomes they are likely to spend more. This extra spending generates additional economic output and jobs, which in turn also generates greater output and more jobs, and so on. This is known as the 'multiplier effect'.
4. Additional government spending would have a similar multiplier effect, generating economic output above and beyond the initial injection of government spending in the economy.

In addition, there are further benefits to higher pay levels that are harder to measure and not modelled in this paper, but which are nonetheless important to note. These include the impact of higher pay on employment, increasing the return to individuals of being in work, and therefore the labour supply of individuals; and the impact of higher wages on organisational performance and productivity, through reduced turnover, greater employee morale and loyalty, and higher effort levels among workers (Katz 1986).

We have used the IPPR Scotland tax–benefit model to analyse the impact of the four mechanisms set out above. In order to simulate higher pay levels (relative to the actual pay increases observed over that period), we assume in the first instance that pay growth in Scotland's public and private sectors matched the OBR's March 2011 forecast for UK-wide pay growth.

The IPPR Scotland tax–benefit model uses Family Resources Survey data covering 2011–2013 (DWP et al 2014). We first increased all workers' pay to 2015 levels, in line with observed average weekly earnings growth data. This provided our baseline estimate of current pay levels in Scotland. We then created an alternative scenario in which the pay of private sector workers is 13 per cent higher, and the pay of public sector workers 10 per cent higher, in line with the 'pay gap' estimates discussed above. By comparing this alternative scenario to our baseline estimate, we were then

able to estimate the macroeconomic and fiscal impacts of higher private sector pay. We also adjusted for growth in the private sector workforce between 2011–2013 and 2015, and a decline in the public sector workforce, using the ONS Labour Force Survey for each year (ONS 2016b).

The OBR estimates a set of multipliers, which vary depending on the origin of an increase in demand (see Reed 2014). Generally, the OBR estimates that the multiplier on changes to individual incomes is lower than the multiplier on government spending, because individuals tend to spend only a portion of any extra income they receive, and save the rest. It estimates that the multiplier effect from tax cuts will be either 0.30 (for changes to income tax or national insurance) or 0.35 (for changes to expenditure taxes). Expenditure taxes have a higher multiplier because changes in VAT or similar taxes have a greater impact on those on low incomes, who are more likely to spend extra income. Changes to income tax or national insurance, by contrast, tend to have a greater impact on those higher up the earnings distribution, who are likely to save a higher proportion of any extra income. We use the 0.30 multiplier here on the assumption that an increase in earnings has a distributional impact more similar to a cut in income tax than to one in VAT (Reed 2014).

Table 3.1 below quantifies each of the four economic impacts described above for a scenario in which private sector pay has increased by an additional 13 per cent, and public sector pay by an additional 10 per cent, between 2009 and 2015. By far the largest is the initial impact on the net incomes of workers, which would have increased the size of the Scottish economy by £4.5 billion. Extra government spending would have added £3.5 billion to the Scottish economy, and the combined multiplier effects would amount to £3.4 billion.

Taken together, these estimates suggest that the Scottish economy would have been £11.6 billion larger in 2015 if private and public sector pay growth had followed the OBR's expectations as stated in its March 2011 forecast. This is equivalent to an increase of over 8 per cent in the size of the Scottish economy.

Table 3.1
Scotland's economy would have been £11.6 billion larger in 2015 if pay growth had met expectations
Macro-economic impact (£bn, 2015/16 prices) of a 13 per cent increase in private sector pay and a 10 per cent increase in public sector pay between 2009 and 2015

	Private sector pay (+13%)	Public sector pay (+10%)	Combined
Higher net incomes	£3.4bn	£1.1	£4.5bn
Higher government spending	£2.6bn	£0.9	£3.5bn
GDP multiplier from higher net incomes	£1.0bn	£0.3	£1.3bn
GDP multiplier from higher government spending	£1.5bn	£0.6	£2.1bn
Total economic impact	£8.8bn	£2.8bn	£11.6bn
Total economic impact (per cent of Scottish GDP)	6.2%	2.0%	8.2%

Source: IPPR Scotland tax–benefit model

4.
THE FISCAL IMPACT OF WEAK PRIVATE AND PUBLIC SECTOR PAY GROWTH IN SCOTLAND

One of the key ways in which earnings influence the economy is through their impact on the level of resources available to government, with which it can fund public services and investment. The relationship between the two has been particularly important in recent years, during which time the Scottish government has had to make sizable cuts to public spending in Scotland as a result of spending decisions made at a UK level which have been driven in part by weak growth in income tax receipts. Indeed, due to a combination of weak earnings growth and income tax cuts, UK income tax receipts in 2014/15 were £163 billion – 16 per cent lower than the £195 billion forecast at the time of the 2011 budget. This £32 billion gap accounts for a third of the 2014/15 deficit (Thompson 2015): poor earnings growth explains a great deal of the UK government's inability to meet its deficit reduction targets.

Looking forward, the prospect of a similar undershoot of earnings growth relative to expectations in both the UK as a whole and in Scotland specifically will have a more direct impact on the level of funding available to the Scottish government, for three reasons.

- First, this is because the Scottish government is set to assume control of all rates and bands of income tax on earnings and associated revenue (other than the level of the tax-free personal allowance), which means that fluctuations in workers' earnings will have a direct impact on Scottish government resources.
- Second, the Scottish government will be assigned half of VAT revenue collected in Scotland, a revenue stream which is similarly sensitive to fluctuations in household earnings and incomes.
- Finally, the differential rate of growth in devolved tax receipts per capita between Scotland and the rest of the UK will have an impact on the size of the adjustment applied to the block grant in the years after tax receipts are devolved. If earnings and tax receipts grow faster per head in the rest of the UK than in Scotland, the block grant will be smaller, which makes it even more important to ensure that earnings growth in Scotland keeps pace with that of rUK.

4.1 The fiscal impact of higher private sector pay

If private sector pay had met the expectations that the OBR had at the time of the 2011 budget, Scottish public sector finances would, by 2015, have benefitted from higher tax receipts and (to a lesser extent) lower benefit expenditure totalling £2.9 billion.

Breaking down the fiscal impact of private sector pay growth (see table 4.1 below), we find that, in the first instance, the largest return is generated from income tax, which would have been £1,440 million greater. Employee and employer national insurance contributions (NICs) receipts would be £940 million greater in total, and spending on means-tested benefits would have been £180 million lower. Through

the multiplier effect, expenditure taxes would increase by £90 million, with an additional income and earnings tax impact of £260 million.

Table 4.1
The fiscal impact (£m, 2015/16) of a 13 per cent increase in private sector pay between 2009 and 2015

	Size of effect
Income tax	£1,440m
Employee NICs	£350m
Employer NICs	£590m
Means-tested benefits*	£180m
Expenditure taxes	£90m
Additional multiplier taxes	£260m
Total	£2,920m

Source: IPPR calculations using IPPR Scotland tax–benefit model
***Note: refers to savings realised through lower spending on means-tested benefits.**

A large proportion of this revenue would accrue to the UK government, given that half of VAT revenue, and all NICs revenue and means-tested benefit spending (and hence savings), is reserved, and that there are no plans to devolve responsibility for these to the Scottish government. In terms of revenue that would accrue to the Scottish government, around 57 per cent of the additional revenue generated would be from income tax and Scotland's half of VAT, both of which are soon to be devolved to the Scottish parliament.[4] Depending on how the fiscal framework operates in practice, increases in income tax paid per head on earnings in Scotland, over and above increases seen in the rest of the UK, should see the full amount of increased revenue being retained in Scotland. Putting these into context, the additional £1.4 billion in Scottish income tax revenue in 2015 that would have resulted from private earnings growing in line with expectations since 2009, if received by the Scottish government through increased tax revenues, would be equivalent to a 5 per cent increase in the total Scottish government budget.

4.2 The fiscal impact of higher public sector pay

Higher public sector pay would not result in the same level of fiscal gains, since the government would have to pay the initial gross cost of increasing pay among public sector workers. We estimate that this initial cost would total £1.9 billion for a 10 per cent increase, in line with meeting the OBR's expectation for economy-wide pay growth made at the 2011 UK budget.

Nonetheless, the gross costs of raising public sector wages would be reduced substantially by the extra direct and indirect tax revenue generated. We estimate that, after taking into account the immediate impact through income tax, national insurance and reduced means-tested benefits, that the cost of raising public sector wages by 10 per cent would fall from £1.9 billion to £1.1 billion.

Additional savings would be generated as a result of the multiplier effect, both through additional expenditure-tax receipts, and through further tax receipts and reduced benefit spending as a result of the employment-generating impact of higher net incomes. This would reduce the overall cost of a 10 per cent public sector pay rise further, from £1.1 billion to £0.9 billion. However, it should be noted that some offsetting income would go to the UK government (reduced benefit spending, for example) and some of it to the Scottish government (such as through increased income tax revenues on earnings) (see table 4.2).

4 Under the Scotland bill, Scotland will receive all revenue from income tax on earnings, and gain control over all income tax rates and thresholds (other than the tax-free personal allowance), and the first 10 per cent of VAT will be assigned (although the Scottish government will not be able to change any of the rates of VAT).

Table 4.2

The fiscal impact (£m, 2015/16) of a 10 per cent increase in public sector pay[5]

	Size of effect
Gross cost	£1,880m
Income tax	£600m
Employee NICs	£160m
Means-tested benefits*	£60m
Expenditure taxes	£25m
Additional multiplier taxes	£80m
Net cost	£950m

Source: IPPR calculations using IPPR Scotland tax–benefit model
*Note: refers to savings realised through lower spending on means-tested benefits.

Further estimates of the gross and net fiscal costs of a 1, 2 and 3 per cent increase in public sector pay are set out below.

Table 4.3

Gross and net fiscal costs (£m, 2015/16 prices) of public sector pay increases in Scotland, by size of increase

	1 per cent	2 per cent	3 per cent
Gross public cost	£190m	£380m	£560m
Net cost (after initial taxes and benefits)	£110m	£210m	£320m
Net cost (after multiplier taxes and benefits)	£100m	£190m	£290m

Source: IPPR calculations using IPPR Scotland tax–benefit model

5 We do not consider employer NICs here, as this would simply entail a transfer from one part of the public sector to HM Revenue and Customs.

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