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Growth up, wages down: something has to give

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Summary

The OBR will publish its latest assessment of the UK's economic and fiscal outlook alongside this week's Autumn Statement. Following a raft of positive economic indicators and signs that recovery is at long last gaining momentum, we can expect the picture to look significantly rosier than the one set out at the time of the Budget. When it projected growth in 2014 to stand at 1.8 per cent (back in March), the OBR was more or less in line with the average recorded among independent forecasters: today those same forecasters put the figure at 2.3 per cent.

Despite the improving fortunes of national output however, many are yet to feel the benefit in their pay packets and bank balances. With average wages failing to keep pace with inflation and with austerity measures continuing to bite, the hit to living standards is now into its fifth year. Yet the nascent recovery has been driven in no small part to date by a pick-up in household consumption, begging the question of just how sustainable this renewed growth can be in the absence of a significant upturn in incomes.

Just as important as this week's headline projection for GDP growth then will be the range of forecasts the OBR sets out for the various elements that underpin output. In this note we consider the relationship between growth, consumption, investment, incomes and earnings in order to ascertain just how far wage growth might need to rise in order to set the economy back on track.

For the purposes of illustration we consider the magnitude of wage growth that might be required to return GDP growth to its historic trend through to 2018. Our findings – which are indicative not definitive and by no means constitute a prediction – suggest that average earnings would need to rise by more than 2 per cent a year in real terms from 2015. This is lower than the growth achieved during the late 1990s (2.8 per cent a year), but higher than that experienced during the early-to-mid 2000s 1.7 per cent a year).

The findings point to the need for focusing attention on restoring healthy wage growth, but also on the need for a more balanced economic recovery. Dis-saving, borrowing and a reduction in future savings — measured by a decline in the household saving ratio — may play some role by helping to support consumption even as incomes remain flat. Indeed, post financial liberalisation, it may be that the saving ratio is likely to stay lower for longer than was the case in earlier decades. But there is likely to be limited scope for further falls given how highly leveraged the household sector remains as a result of the debts built up in the pre-crisis years. Even though net worth has risen at the aggregate level, the unequal distribution of wealth — which has become even more skewed over the course of the downturn — means that the option of running down assets can only take us so far.

Instead, sustainable growth is likely to be reliant on an above-trend contribution from gross capital formation. There are signs that housing investment has helped to boost the capital figures over the course of 2013 and there may be more to come but, with the Bank of England already intervening to prevent any over-heating in that sector, longer term pick-up in capital is likely to rest instead on strong growth in business investment. Whether this is forthcoming is one of the key questions hanging over the recovery.

The composition of recovery

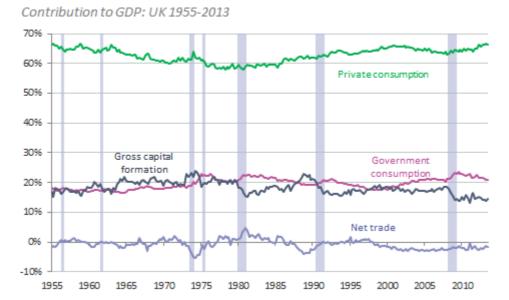
In this briefing note we consider the historic contributions made to economic growth by private (household and non-profit institutions serving households) consumption and by gross capital formation (covering private and public sector investment) in order to understand the role these elements might play in the current recovery. By further considering the link between consumption, incomes and earnings, we are able to produce some indicative numbers for the magnitude of increases in wages that might be required to restore the economy to a sustainable growth trajectory.

Consumption matters for growth...

As Figure 1 shows, private (primarily household) consumption has become a steadily more important component of overall GDP growth over the past three decades, accounting for around two-thirds of the total in 2013.

During recessions (shown as shaded areas on the chart) the functioning of the automatic stabilisers mean that government consumption tends to rise. At the same time, the share of GDP accounted for by private consumption generally holds up but gross capital formation (which covers capital spending by the public and private sectors) typically falls. Coming out of these recessionary periods, private consumption often leads the recovery, with an upturn in capital formation coming later.

Figure 1: Contribution of expenditure components to GDP: UK 1995-2013

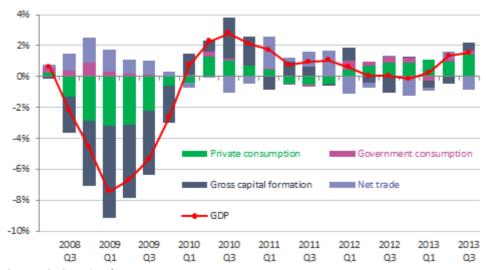


Source: ONS, National Accounts

Figure 2 details the composition of year-on-year growth in GDP since the start of the 2008 recession. Over the past six quarters, the extent to which private consumption has again driven the nascent recovery is obvious, consistently outperforming the other expenditure elements of GDP. Government consumption has provided a small positive contribution, while net trade and gross capital formation (public and private sector capital spending) have made negative contributions in the main.

Figure 2: Contribution of expenditure components to year-on-year growth in GDP: UK Q2 2008 – Q3 2013

Contribution to year on year change in GDP: 2008-2013



Source: ONS, National Accounts

Though business investment must play its part in economic recovery too...

With austerity set to continue well into the next parliament, economic expansion will rest most heavily on the non-government sector. And, with net trade rarely making a significant contribution to GDP, this points in truth to just two sources: capital formation and private consumption.

Coming out of both the 1980s and 1990s recessions, gross capital formation contributed around one-third to growth over the first five years of the recovery. We might expect it to play a similar role this time around. Encouragingly, gross capital formation contributed 0.6 per cent of the overall 1.5 per cent annual growth recorded in Q3 2013.

However, Figure 3 reveals an imbalance within this total, with the positive contribution being due entirely to businesses stockpiling output. In contrast, gross fixed capital formation (which is where business investment sits), continued to act as a drag on growth.

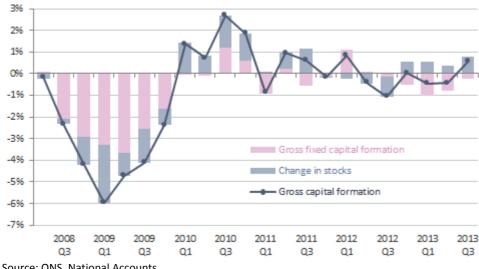
Looking more closely at the gross fixed capital formation element, Figure 4 shows that business investment accounts for around half of the total; a share that has declined over time. Investment in private sector dwellings (including improvements to existing property as well as new dwellings) and government and public corporation investment have instead formed an increasing share of the total.

As Figure 5 shows, business investment has continued to fall in recent quarters. In Q3 2013, it was 3.8 per cent down year-on-year. In contrast, investment in private sector dwellings was 9.5 per cent up year-on-year.

To the extent that capital formation has played its part in the recent improvement in the UK's economic fortunes then, it appears to have been driven by a build-up of unsold stocks within firms and by developments in the housing market.

Figure 3: Contribution to year-on-year growth in gross capital formation: UK Q2 2008 – Q3 2013

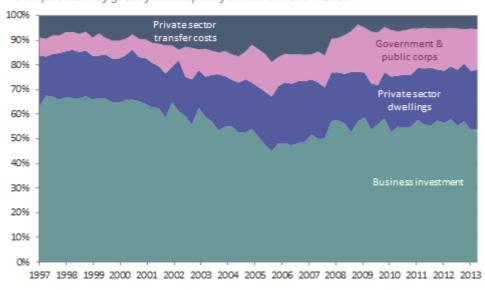
Contribution to year on year change in gross capital formation: 2008-2013



Source: ONS, National Accounts

Figure 4: Contribution of investment components to gross fixed capital formation: UK Q2 2008 -Q3 2013

Composition of gross fixed capital formation: 1997-2013



Source: ONS, National Accounts

That's not to say that other forms of capital formation won't soon follow, and a range of positive indicators from business surveys mean that we should expect projections for a rebound in investment from the OBR this week. The independent forecasters have an average 6 per cent annual rise in place for gross fixed capital formation in 2014, though there is significant variation, with projections ranging from 1.5 per cent to 11.1 per cent.

Figure 5: Indices of growth in elements of gross fixed capital formation: UK Q1 2008 – Q3 2013

130 120 110 public corps 100 90 dwellings 20 70 Business investment 60 Private sector 50 transfercosts 40 30 2008 2008 2009 2009 2010 2010 2011 2011 2013 2013 2012 2012

Q3

Elements of gross fixed capital formation: 2008-2013, Q2 2008 = 100

Source: ONS, National Accounts

Q3

Q1

Q3

Q1

Q1

But household spending will continue to be the most important single factor...

Q1

There is a closer consensus around consumption. On this measure, the forecasters project an average 2 per cent year-on-year growth, with the spread ranging from 0.9 per cent to 3.8 per cent.

Q3

Q1

Q3

Q1

Q3

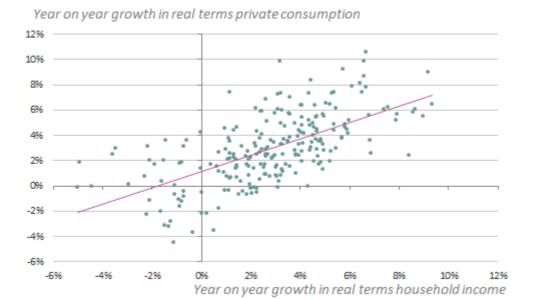
Whatever the prospects for investment, our reliance on consumption means that it is inevitable that household spending will have a key role to play in underpinning any robust recovery. Looking again at the first five years of economic expansion that followed the early 1980s and early 1990s recessions, we see that consumption contributed around 60 per cent of GDP growth on both occasions.

Meaning incomes need to rise too...

And for consumption to grow at a significant and sustainable rate, so too must household incomes.

As Figure 6 confirms there is, unsurprisingly, a strong positive correlation between household income growth and consumption. As a rough rule of thumb, the annual growth rate for consumption is around 0.6 percentage points for every 1 percentage point annual increase in household income. Measured in terms of cash values, the relationship is – unsurprisingly – closer to 1:1.

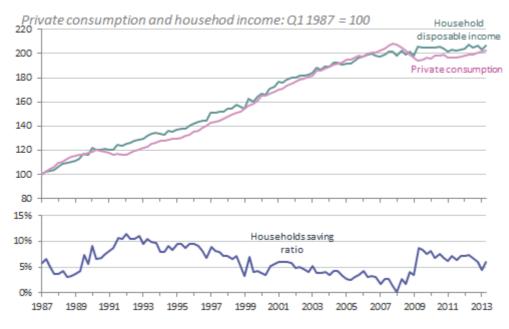
Figure 6: Year-on-year growth rates in household income and private consumption: Q1 1956 - Q2 2013



Source: ONS, National Accounts

As Figure 7 makes clear however, this relationship tends to vary over time. For example, consumption growth outstripped income growth over the course of the early-to-mid 2000s, fuelled by a steady fall in the saving ratio. In the immediate aftermath of the financial crisis, consumption fell sharply and the saving ratio rose correspondingly. But since then the saving ratio has started to fall once more and consumption is again growing more swiftly than household incomes.

Figure 7: Indices of income and consumption and households saving ratio: Q1 1987 - Q2 2013



Source: ONS, National Accounts

Dis-saving can provide a temporary boost at best...

In theory, there is room for a further fall in the savings ratio such that this trend could be sustained in the short-to-medium term. If we were to assume that the long-term relationship between consumption and income held, with spending increasing by roughly 0.6 percentage points for every 1 percentage point of household income growth, then the average 2 per cent rise in private consumption forecast for 2014 would imply a 3.3 per cent increase in incomes. In fact, the average growth rate among the independent

forecasters is just 1.4 per cent, implying a general assumption that the saving ratio will indeed continue to fall.

The room for further dis-saving is dictated to some extent by the level of net worth held by households. Figure 8 shows that net financial balance (financial assets less liabilities) fell between 2007 and 2008 but subsequently rebounded to its pre-crisis level of 280 per cent of disposable household income. Similarly, overall net worth (including the value of physical assets such as property) recovered somewhat between 2008 and 2012, standing at 711 per cent of income at the end of the period.

While the overall level of net worth has improved however, there has been a shift in the extent to which this wealth has been shared across households in recent years, calling into question just how broad-based any extended period of dis-saving could be.

Balance of assets less liabilities as a share of household disposable income 800% 700% Net worth 600% 500% 400% Net financial balance 300% 200% 100% 1987 1989 1991 1993 1995 1997 1999 2001 2003

Figure 8: Net worth and net financial balance ratios: UK 1987-2012

Source: ONS, National Accounts

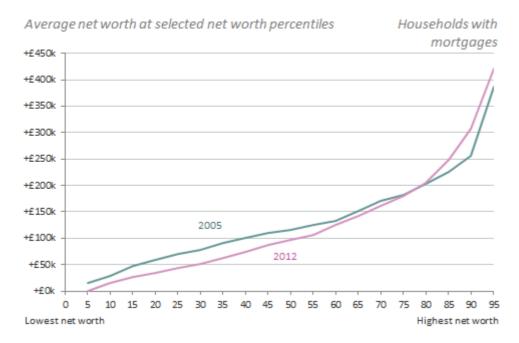
Among households with mortgages, Figure 9 shows that the bottom three-quarters of the wealth distribution experienced a reduction in net worth between 2005 and 2012, while the position of the top 25 per cent improved. This is likely to reflect developments in the housing market with highly leveraged newer entrants effectively transferring wealth to those higher up the ladder.

A similar pattern holds for renter households though, as Figure 10 shows. The distribution of net worth again became more unequal over this period, with sizeable improvements in net worth at the top being counter-balanced by deteriorations for the majority. Net worth was thus negative for the entire bottom half of renters.

So, while aggregate net worth may have recovered, it appears to have been increasingly concentrated in the hands more affluent (and most likely older) households. Those with the highest marginal propensities to consume – families with children and those on lower incomes – appear less likely to have the necessary reserves to fall back on in order to fuel spending.

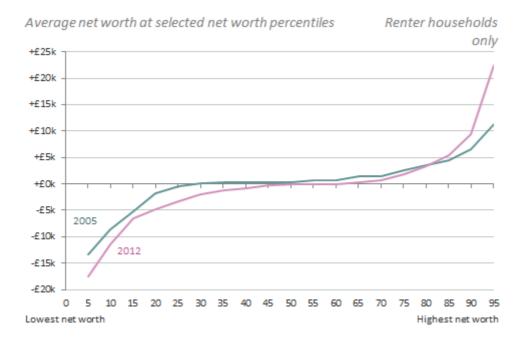
Add in the fact that millions of households remain exposed to growing debt repayment burdens as interest rates start to rise, and a generalised revival in consumption beyond 2014 starts to look unlikely in the absence of sustained income growth.

Figure 9: Average net worth across the (mortgagor) household net worth distribution: 2005 & 2012



Source: Bank of England, NMG Survey 2012

Figure 10: Average net worth across the (renter) household net worth distribution: UK 2005 & 2012



Source: Bank of England, NMG Survey 2012

And recall that income growth has proved elusive...

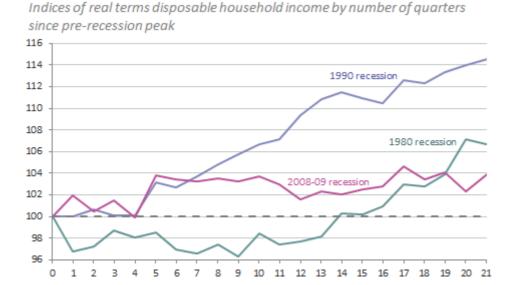
As of yet, household incomes haven't recovered in a meaningful way since the onset of the financial crisis in 2008. Figure 11 details the contrast between the current broadly flat trajectory and the post-recession responses in the early 1990s (when incomes rose rapidly after the first year) and early 1980s (when incomes initially fell but were on a strong upward curve by this stage of the recovery).

It is also worth noting that the gap between the RPI measure of inflation and the GDP deflator (used in this chart) is significantly larger in the current context than in either of the previous two downturns.

Switching to a consumer deflator to better reflect the cost of living squeeze would make the current situation look worse still.

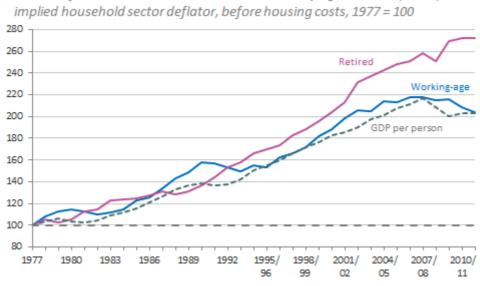
And it is worth drawing a generational distinction and switching to a median income measure in order to consider the impact on typical households. Figure 12 shows that retired households have continued to experience real terms gains in incomes over most of the downturn but that working-age households have suffered a sharp fall which has come on top of several years of stagnation. Sustaining consumption growth is likely to require a recovery in incomes across the board.

Figure 11: Indices of growth in household disposable income after selected recessions: UK 1980, 1990 and 2008-09



Source: ONS, National Accounts

Figure 12: Indices of growth in median disposable income by household age: UK 1977-2010/11



Growth of real-terms median household income by age and GDP per capita:

Source: ONS, Living Costs and Food Survey

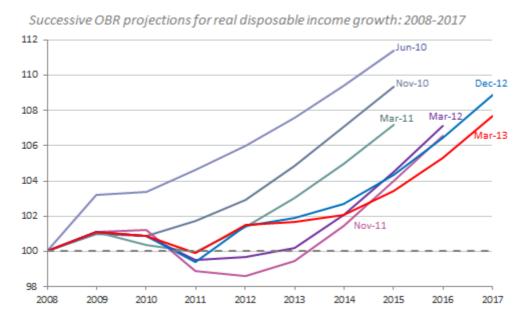
We can expect this week's OBR projections to point towards an improvement in this picture. Though, as Figure 13 shows, we should bear in mind that we've been here before. With each successive projection for

the future trajectory of real disposable income, so the OBR has downgraded its previous assessment. In its last projection, it anticipated income rising from its starting point in 2008 by just under 8 per cent by 2017; in its first outlook in June 2010, it projected that this level would be reached in 2013. That said, there is a stronger case now than at recent fiscal events for thinking that incomes will indeed start recovering in the near future.

With average earnings having a lot of ground to make up...

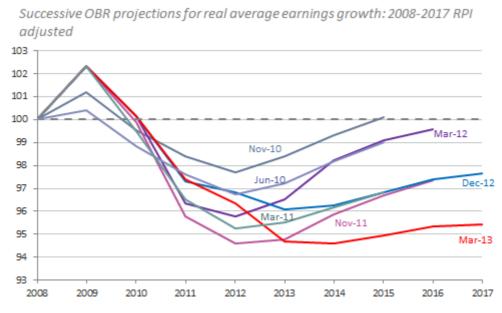
Key to understanding the absence of recovery in household incomes – particularly those of working-age households – is the trend in earnings. While employment levels have out-performed expectations, average wages have fallen consistently in real terms over the past four years. Again, the OBR has been forced to push its projections further and further back, as shown in Figure 14.

Figure 13: OBR projections for real disposable household income growth: UK 2008-2017



Source: OBR, Economic and Fiscal Outlook

Figure 14: OBR projections for real average earnings growth: UK 2008-2017



Source: OBR, Economic and Fiscal Outlook

There is good reason to suspect that average earnings growth will at least stop falling in 2014, with pay increases at last matching inflation. However, there is a lot of lost ground to make up. Mean hourly wages fell by 4.1 per cent between 2006 and 2012 after adjusting for RPIJ inflation. At the median the decline is 4.6 per cent, taking wages back to their 2003 level. Using RPI inflation, as many have, pushes the mean and median reductions to 6.9 per cent and 7.5 per cent, and produces pay levels equivalent to those recorded at the turn of the century.

And, with welfare and tax credit cuts continuing to bite, achieving a return to strong wage growth takes on still more importance. In its March projections, the OBR assumed that labour income would account for 76 per cent of overall household disposable income at the start of 2018, up from a low of 73.4 per cent in the middle of 2013.

So where might recovery come from?

Despite the return of confidence to the UK economy, uncertainty still reigns. And even in the best of times all economic predictions are fraught. Perhaps what we can be most certain about then is that all of this week's forecasts will prove flawed to a greater or lesser degree. Rather than offering our own predictions, we set out some (highly) simplified calculations below to consider the sort of magnitude of increase in earnings required if robust growth is to be restored.

- We begin by considering the path of GDP we might anticipate through to the end of the forecast horizon in 2018. If we assume that the independent forecasters are right about growth in 2013 (1.4 per cent) and 2014 (2.3 per cent) and then adopt a trend growth rate of 2.5 per cent, then GDP would reach around £1.7 trillion by 2018. This would put it around 11 per cent higher than the pre-recession peak in 2007 and 14.5 per cent higher than the 2012 level. By way of context, GDP increased by 43 per cent between 1996 and 2007.
- If the next few years of recovery follow the pattern of the upturns in the early 1980s and early 1990s then we might expect 60 per cent of this growth in output to come from private consumption (with a further third coming from gross capital formation). If that were the case, then private consumption would rise by 13.5 per cent, from just under £1 trillion in 2012 to £1.1 trillion in 2018.
- On the assumption that the saving ratio remains unchanged from its current level of 5.9 per cent, this implies a similar (13.8 per cent) increase in disposable household income.
- On the further assumption that three-quarters of disposable income is accounted for by labour income and that employment rises in line with the OBR's March projections, then average earnings would need to rise in real (GDP-deflated) terms by 10 per cent between 2012 and 2018. This is equivalent to 1.4 per cent a year, but given that wages have continued to fall in 2013 and are unlikely to rise significantly in 2014, it implies an annual average of 2.2 per cent in the years from 2015.

We have seen wage growth of this order in the past, but not for any extended period of time. Between 1997 and 2001, average wages grew at an average annual rate of 2.8 per cent in real terms. But between 2001 and 2008, when GDP continued to grow, they increased by just 1.7 per cent a year. Taking an average for the GDP growth years between 1991 and 2008, annual wage increases stood at 2 per cent.

Achieving upwards of 2 per cent year-on-year growth over the coming years may therefore prove beyond us. Given the duration of the squeeze on wages, there may be some scope for a period of rapid rebound, but it is questionable whether the OBR will include such optimistic data in its projections. More probably, employment growth, investment and a reduction in the household saving ratio may be assumed to ease some of the burden on earnings projected. And of course, GDP may simply not reach the level we have assumed for the purposes of this exercise.

By way of illustration, if we adjust the contributions made to growth by consumption and capital formation from 60 per cent and 33 per cent respectively to 50 per cent and 43 per cent, then the average annual growth required in average earnings from 2015 onwards falls to a potentially more attainable 1.6 per cent.

Clearly earnings growth will be a key goal over the coming years. The evidence of the pre-crisis years of the mid-2000s when wage growth slowed down and stagnated for many despite continued economic expansion calls into question the relationship between GDP and wages. For the millions of households still

feeling the effects of the subsequent unprecedented squeeze on living standards, restoring the link between growth and pay during the recovery phase will be vital.

But wage growth also matters for the economic recovery itself. Pre-crisis incomes were sustained in part through major increases in tax credits and consumption was increasingly reliant on the use of credit, with the savings ratio falling to zero. Among all of the data HM Treasury and the OBR produce later this week, it is perhaps the average earnings projections which will offer the best indication of just what shape the next few years are expected to take.

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- developing practical and effective policy proposals; and
- engaging with policy makers and stakeholders to influence decision-making and bring about change.

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