Summary

- This report reviews recent economic developments and the economic and fiscal prospects facing Wales.
- The economy in Wales has recovered quite strongly from the effects of the earlier phases of the pandemic, but uncertainty about the future course of the pandemic remains high, and there has been extensive disruption to supply chains and rising inflation.
- The labour market in particular has performed much better than expected, and the limited increase in unemployment represents a major policy success.
- However, long term unemployment has risen, and the scarring effects of the pandemic are likely to result in reduced incomes over a protracted period.
- In addition, the disadvantage faced by many minority groups, including people with poor health or disability, appear to have increased.
- A particular concern is that the effects of the disruption to the education of children and young people will have lasting effects on the prospects for those from disadvantaged backgrounds.
- Inflation has risen sharply, and is likely to impact particularly on low income groups. However, both the OBR and the Bank of England expect the spike in inflation to be temporary.
- As with the rest of the UK, Wales has experienced very slow growth in living standards since around the time of the financial crisis in 2008, and this is expected to continue.
- Many of the long term economic challenges and opportunities facing Wales remain as before the epidemic, but the rapid growth of remote working is both a new challenge and an opportunity.
- The income of the median (or "typical") household in Wales, which is the best single measure of living standards, is closer to the UK figure than commonly realised, and the gap has closed a little over time.
- The narrowness of the gap in median incomes compared to some other indicators such as GDP reflects in part the extent of transfers under the UK's fiscal system. It also reflects the relatively low numbers of high earners and relatively low income from property ownership in Wales.
- Poverty levels in Wales show little trend over recent years, and while levels are somewhat higher than for the UK as a whole, particularly for working age adults, they are lower than in some English regions.
- Indicators of living standards have converged over time across local authority areas in Wales, but job creation has been unevenly distributed.
- Wales faces both economic challenges and opportunities. Taking the opportunities to strengthen economic performance will also improve the tax base and potentially the funding of public services.
- Key challenges include addressing low productivity, new trading relations and climate change.
- In addition, Wales faces a challenge from the slow growth of, and potential decline in, its population, particularly the population aged 16-64, which is most likely to be engaged in economic activity.

- As a result of the additional discretionary spending announced by the UK Government, the backdrop for the Welsh Government's Budget is less bleak than expected earlier in the year.
- Relative to core funding in 2021-22, the resource budget grows on average by 3% a year in real terms over the 3 years covered by the draft budget. Almost all of that growth happens in the first year.
- However, across all 3 years covered by the draft budget, funding remains lower in real terms than in 2021-22 if COVID-19 funding is included in the current year.
- The longer term prospects for the Welsh budget will depend on the performance of the economy, on how a range of other risks play out, and on government responses to them, both in Wales and at the UK level.
- As a result of tax devolution, around 80% of Welsh Government funding is now derived from the block grant.
- Funding from tax revenues is a source of risk in the budget and links funding to the performance of Welsh devolved taxes relative to their UK equivalents.
- The net impact of the devolved taxes on the Welsh Government budget is positive and increasing over the next few years. This is driven in part by policy choices and also in part by the freeze on the income tax personal allowance.
- The large gap between total public sector revenue and expenditure for Wales represents a major transfer to Welsh people through the UK fiscal system.
- This transfer is the main reason for the gap between measures of household income and GDP in Wales and represents a key risk to Welsh living standards.

Introduction

This year's report has again been produced during a period of continuing uncertainty due to the evolving Covid-19 pandemic and the emergent of the Omicron variant.

The Office for Budget Responsibility (OBR) produced its latest forecasts in October and the UK Government published its Spending Review at the same time. While both economic and fiscal forecasts are liable to change, these developments provide a basis for assessing Welsh prospects over the near term.

Many of the Welsh Government's policy levers operate most effectively over the medium to long term. This report therefore also reviews a number of important longer run trends and challenges that both pre-date the Covid-19 crisis and will persist beyond it.

Recent economic developments

The economy in Wales is deeply embedded in the wider UK economy. In consequence, the short run performance of the economy in Wales is very strongly influenced by developments across the UK as a whole (and this close relationship is confirmed by several charts in this report).

The most recent available monthly data for UK GDP is included in Chart 1. Despite its well-known limitations, GDP provides a reasonable indicator of short term economic fluctuations, particularly when the changes are large.

The most recent GDP data for Wales is for the first quarter of 2021. More timely data for Welsh GDP is not available. The quarterly data for Wales is difficult to interpret as it shows high volatility and is subject to large revisions (with, for example, some previous quarters being revised from high positive growth to contraction). So even if more timely Welsh GDP data were available, it would be of limited value if produced on the same basis.

However, GDP, and its key component, Gross Value Added (GVA)[1], remains an important indicator of the strength of the economy in Wales and of the Welsh tax base. The less timely but more reliable annual data on GVA is considered further below.

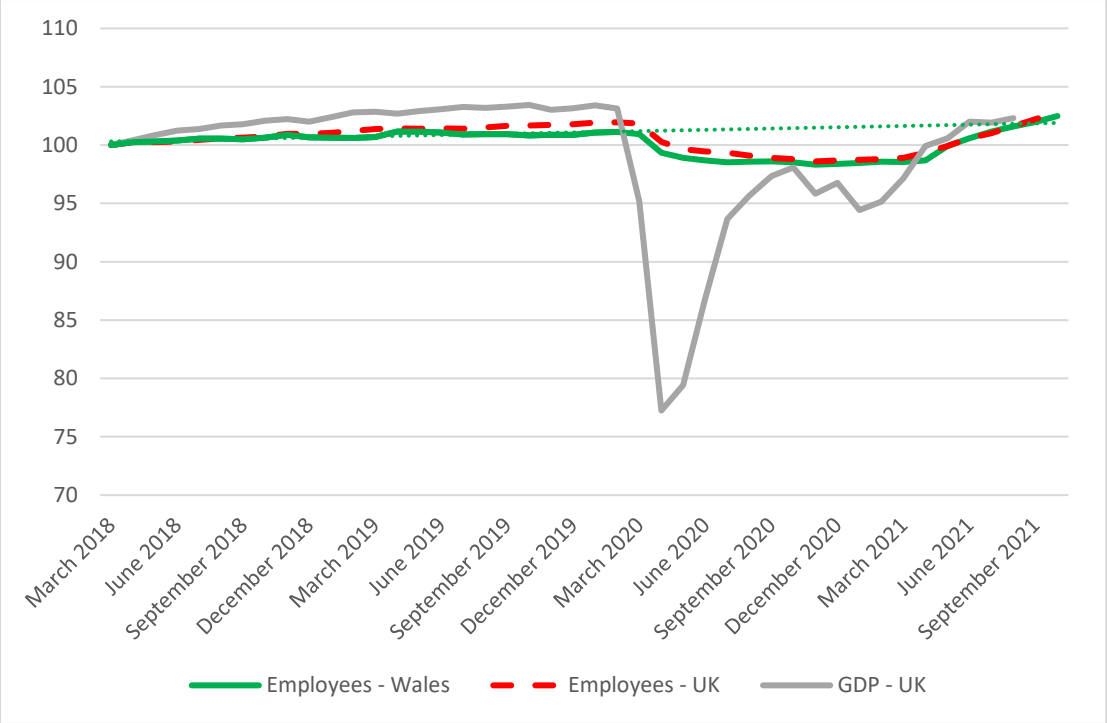
The most timely and relevant data we do have for Wales is from the labour market, and the count of employees registered for PAYE is particularly informative indicator as, unlike many other indicators it is not based on a sample survey with wide confidence intervals.

The counts of employees for both Wales and UK are also shown in Chart 1[2]

[1] GDP and GVA are conceptually similar but differ in their treatment of some taxes and subsidies; GVA is measured before, and GDP after, making adjustments for these tax and subsidies. GDP and GVA present a very similar picture of Welsh economic performance.

[2] As this measure is a count rather than a sample survey, it not subject to sampling error of the kind that affects the Labour Force Survey and which can cause difficulties in interpreting results during times of great economic change.

Chart 1: Pandemic Economic Impacts.



Source: ONS

The chart shows that the decrease in employment across both Wales and the UK as a whole was very much more modest than the decline in GDP[3]. This reflects the success of the policies put in place to mitigate the economic effects of the pandemic on businesses and the labour market.

The decrease in GDP during the pandemic reflected the combined effect of the pandemic itself and of the measures put in place to control the spread of the disease. It is not possible accurately to assess the relative contributions, but research indicates that, even in the absence of control measures, a large decline in GDP would have occurred as people altered their behaviour. It is also likely that, that, if temporary control measures had not been put in place relatively quickly, the long term negative economic effects of the pandemic would have been even greater as even more severe and protracted restrictions would have ultimately been necessary.

It can also be seen from Chart 1 that prior to the pandemic, employee numbers were growing a little more slowly in Wales than across the UK as a whole, reflecting differential growth in the working age population.

[3] It should be noted that the chart excludes data on self-employment and other information suggests that here the negative impact was somewhat greater.

Over the course of the pandemic employee numbers have been somewhat less adversely affected in Wales than is the case for the UK as a whole, where the figures reflect particularly severe reductions in employment in London.

While the data on employee numbers shown in the chart is informative about the overall scale and trajectory of the impact on the labour market in Wales, it of course does not capture the effects on self-employment, where the data is volatile but where it appears that, in 2020, reductions were proportionately greater than the falls in employee numbers.

Throughout the pandemic, the gap between the employment rate in Wales and the UK has remained small by historical standards. As noted in last year's report[4], the large difference in employment rates between Wales and the UK, which persisted over the 1980s and 1990s, has been largely, but not fully, eliminated over the years since devolution.

Overall, then, the impact of the pandemic on the Welsh labour market has been both far smaller than the effect on GDP and much less severe than originally expected. Mass unemployment has been averted, thanks in large measure to the massive support schemes put in place by the UK and Welsh governments. This crisis has - so far - led to the lowest post-recession peak in unemployment since 1975, when UK GDP fell by 2% - compared to a fall of nearly 10% in 2020 (both annual changes).

Nevertheless, 2020 saw the biggest contraction in the size of labour market since the early 1990s, with the largest falls for younger and older people. Men were more adversely affected than women.

About one–quarter of the reduction in the UK labour force[5] in 2020 appears to have been accounted for by lower levels of employment of in-migrants. The remainder – three-quarters, was explained by higher inactivity.

In respect of the fall in the number of in-migrant workers, it is very difficult to disentangle the effects of Covid and of Brexit. However, the overall effect has been to add to recruitment difficulties in some sectors.

A strong rebound in hiring has occurred over the course of 2021, driven in part by structural change (favouring, for example, employment in the distribution sector), and in part by reopening, resulting in the lowest ever ratio of unemployment to vacancies during the autumn.

Analysis for the UK as a whole suggests that the largest increases have been in low paid work, with a somewhat less strong improvement for those with higher skill levels. This is to be expected given that, during the worst of the pandemic,

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[4] chief-economists-report-2020.pdf (gov.wales)

[5] Data on this issue, and on several others discussed subsequently, is only currently available at UK level.

disproportionate losses occurred in low paid work. Employment amongst the young has also been recovering strongly.

Despite this recent recovery in the labour market, long term unemployment has increased compared with the pre-pandemic level. The large employment "penalties" faced by many minority ethnic groups, and particularly disabled people, have persisted, and in some cases appear to have increased.

At the time of writing, the recovery of employment across both Wales and UK appears to have been attributable almost entirely to a reduction in unemployment, with little or no reduction in inactivity. In contrast to unemployment, the increase in inactivity has been comparable to previous recessions.

The persisting elevated level of inactivity across the UK reflects higher student numbers, lower numbers of students in or seeking work, early retirement and – perhaps the most concerning aspect – increased long term ill-health. It is too early to say whether the latter feature reflects lasting effects of Covid, or other factors.

Amongst younger workers, inactivity appears to have fallen amongst women but risen amongst men, with the balance perhaps in part reflecting the effects of increased home working.

The increase in inactivity, if it persists, will require a concerted policy response.

Shorter term economic prospects

UK output and labour market

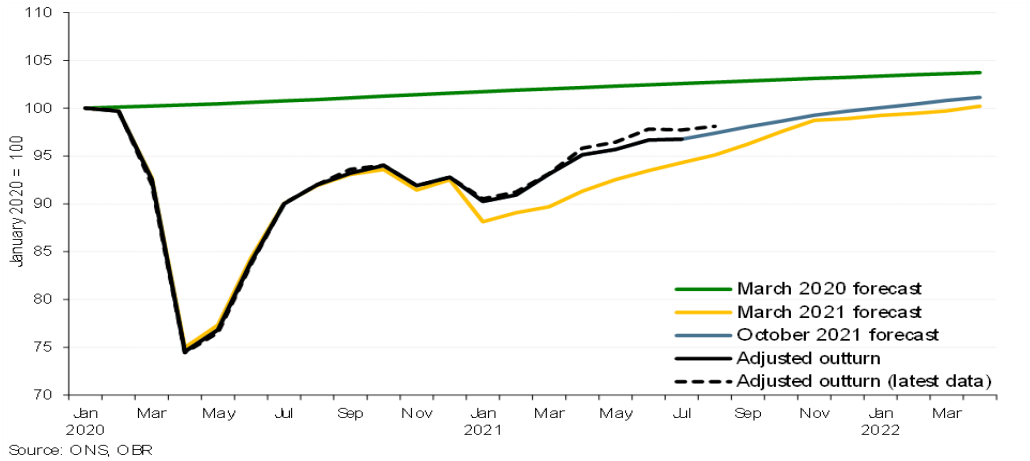
As already noted, Wales is deeply embedded in the wider UK economy and Welsh economic prospects are heavily dependent on expectations for the UK as a whole.

In its latest Economic and Fiscal Outlook[6] published alongside the UK Government's Autumn Budget and Spending Review, the Office for Budget Responsibility (OBR) noted that momentum behind the UK economy had faded over the summer. The latest data shows that UK GDP increased by 1.3% in the three months to September compared with 5.5% in the three months to June.

Well-documented supply pressures, reduced universal credit payments, further rises in Covid infections and a natural tail-off in the strong bounce-type expansion seen for much of the year were expected to combine to limit output gains in late autumn and winter. Nevertheless, the pre-pandemic level of GDP was expected to be regained around the turn of the year. See chart 2.

[6] Economic and fiscal outlook - October 2021 - Office for Budget Responsibility (obr.uk)

Chart 2: Monthly UK real GDP outturns and near-term forecast

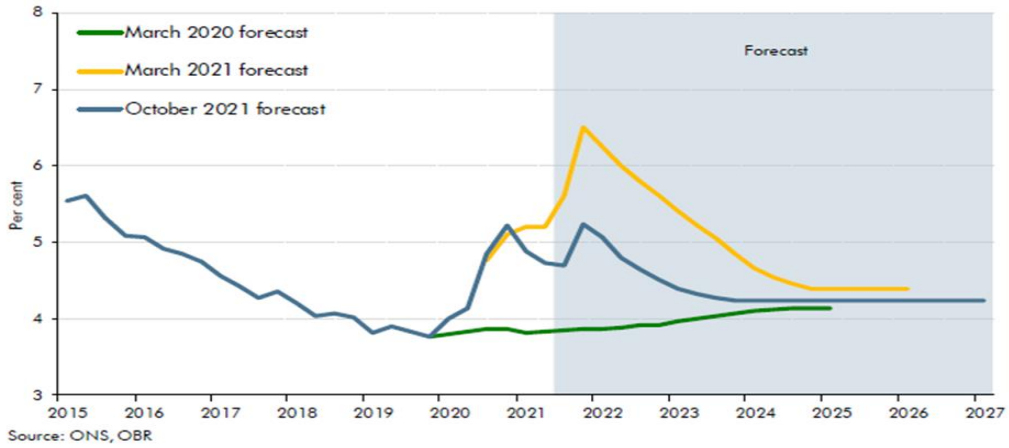


Source: ONS, OBR

The OBR expected unemployment to increase over the autumn as some previously furloughed workers became unemployed (see chart 3). In addition, it was noted that it would take time for some workers who lost jobs in sectors that were struggling to "match" themselves to the industries which are prospering in the wake of the post lock-down economy from those where conditions are more difficult.

This matching problem may represent a particular challenge for older workers who have lost their jobs – and the latest data does indeed suggest that the inactivity rate of older working age people is rising.

Chart 3: UK Unemployment rate and near-term forecast



Source: ONS, OBR

However, the increase in unemployment expected by the OBR, already much less than earlier forecasts, again looks likely to be an over-estimate, based on the latest data and the emergence of the Omicron variant.

Recent developments have however underscored the continuing uncertainty about the course of the pandemic, and in particular the implications of new variants.

Inflation

Consistent with the prior assessment of Bank of England officials, the OBR expected inflation to average more than 4.0% for much of the next year. On the assumption that energy prices and supply bottle necks should eventually ease, price pressures were expected to dissipate towards the end of the year and beyond. CPI inflation was expected to be around 3.0% toward the end of next year and approach 2.0% by year end 2024.

Since the OBR produced their report, inflation has accelerated, particularly as a result of increases in gas prices and of the disruption to supply chains that has also impacted business performance. Many of the factors appear global in nature, and may be a temporary consequence of the combination of the recovery with the continued effects of the pandemic. If this is the case, a monetary policy response would appear inappropriate. However, as there may also be a risk that inflation could become entrenched, the Bank of England may feel it necessary to increase interest rates in order to avert this possibility.

"Scarring" effects

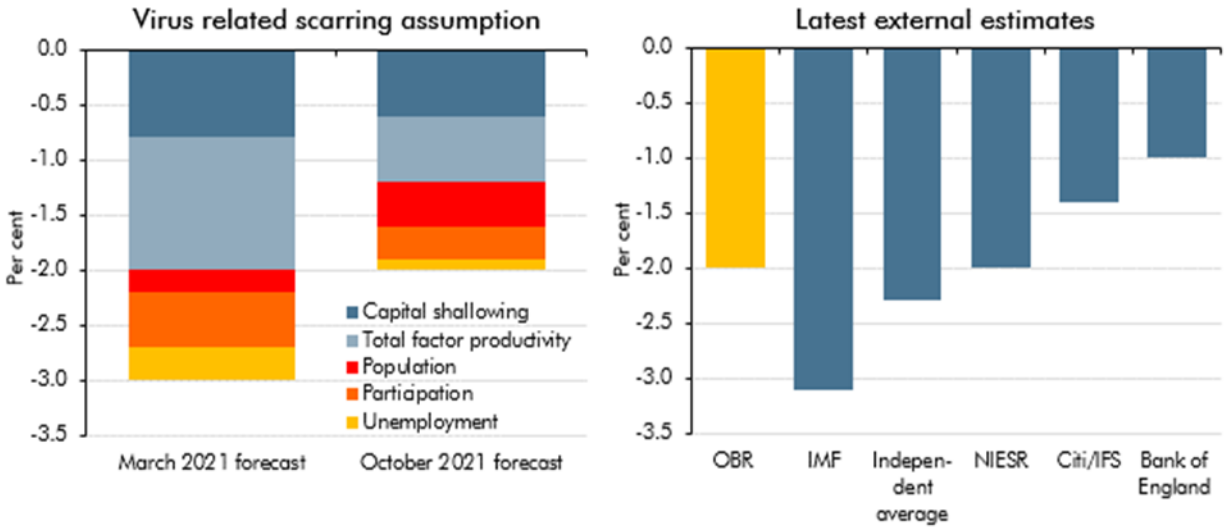
Recessions invariably leave economic scars and other scars on society. These include the legacy of lower investment, in both physical and human capital (the latter reflecting in part the effects of unemployment, which can lead to the erosion of skills, but also a reduction in training).

The OBR had thought that the level of GDP would be permanently reduced by 3.0% because of the pandemic. Largely because of the success of policies put in place by UK and devolved Governments, the scar is now estimated to be 2.0%. This is still substantial – it is worth around £500 per head on average in Wales each year going forward.

The effects are likely to be felt disproportionately by disadvantaged groups, as scarring effects in the labour market are generally more severe for those who were already disadvantaged, but still much lower than the damage caused by previous recessions.

The OBR's decomposition of the pandemic economic scar is shown in Chart 4, alongside estimates provided by other forecasters.

Chart 4: Pandemic-related scarring assumptions



Note: IMF and Independent average are calculated as the differences between the pre-pandemic and latest projections of GDP up to 2024 in the *IMF's World Economic Outlooks* and the averages in the HM Treasury's *Forecasts for the UK economy* publications.
Source: Bank of England, HM Treasury, IFS, IMF, OBR

The OBR also provided a reminder of the costs of the UK's transition to a new, less close, trading relationship with the EU. According to the OBR, reduced trade owing to Brexit is expected to lower productivity, and by implication incomes and living standards, by four per cent per year over the medium term. This cost is twice as big as the economic scar of two percent of GDP mentioned above which the OBR attaches to the pandemic (but is still lower than the effects expected by a number of independent researchers).

Implications for Wales

In general, the OBR's assessment of near term prospects for the UK is also applicable to Wales.

While the Welsh labour market, like the UK's, has performed far better during the pandemic than forecast, long term unemployment has increased, and could increase further as the economy restructures during the recovery process. And there remains a risk that unviable firms supported during the pandemic may collapse over the coming months.

In addition, there are risks resulting from the expected squeeze on living standards over the next couple of years. This squeeze is attributable to higher inflation (especially energy prices), increased taxes and benefit cuts (for those who cannot work).

Analysis by the IFS has showed that, even before allowing for further increases in inflation, changes to tax and benefits would be expected to result in median incomes falling over the next year. People who are working, earning the minimum wage, and receiving Universal Credit, would gain. But many people who earn the minimum wage do not live in poor households. Workless households, who are most likely to be poor, would lose.

Poorer households are will also be disproportionately affected by increases in energy prices.

Pressure on incomes could result in lower spending, with adverse effects on the pace of the recovery and on local employment in badly affected areas. There may well be consequential effects on the demand for public services.

Given lower income levels in Wales, and an incidence of poverty that is higher than in some other parts of the UK, Wales could be particularly affected by all of these adverse outcomes.

This squeeze on living standards will come on top of a protracted period, dating back to around the time of the financial crisis in 2008, during which the growth in living standards in Wales, as across the rest of the UK, has been exceptionally slow. Very weak productivity growth has been the key factor explaining this, and is discussed further below.

In addition, the adverse effects of Brexit identified by the OBR are likely to be felt particularly in Wales, with its' higher than average dependence on manufacturing and exposure to EU markets.

In general, analysis by the IFS[7] indicates that, within Wales, unsurprisingly, it is again those areas that are most dependent on manufacturing that are at greatest risk. In addition, and depending particularly on the impact of new trade agreements negotiated by the UK Government, there are obvious potential risks to the agricultural sector, and particularly to livestock farming.

There are particular concerns about the consequences for the future labour market experiences of young people from disruption to education during the pandemic. By their nature, these potential scars may take a long time to appear in lower incomes and employment. However, the likelihood is that, unless strong and effective remediation is undertaken, this will result in a further widening of inequalities over the long term.

Developing and applying, on a sustained basis, an effective policy response to this challenge will determine the extent to which these adverse outcomes come to pass.

Consequences for Wales of increases in "remote" economic activity

The pandemic has accelerated the trend to "remote" economic activity, particularly remote working, with many employers stating that they intend to move permanently to a model of hybrid working. The scale of the change is currently unclear, but the effects could be profound.

[7] Brexit and labour market inequalities: potential spatial and occupational impacts - Institute For Fiscal Studies - IFS

Recent analysis indicates that, at present, around one-fifth of jobs could be performed entirely on a remote basis. These "anywhere jobs" are often relatively highly-skilled and well-paid posts, predominantly in the business services sector[8].

An increase in remote working could also risk widening inequalities through, on one hand, the loss of employment for lower paid people in locally consumed services and, on the other, gains in the well-being of people working remotely who are typically in better paid jobs.

Remote workers may also see gains in their incomes, if remote working turns out to increase their productivity, and hence their pay.

At the same time, increases in remote working may bring opportunities for people with valuable skills but who, for reasons perhaps of disability or geographic remoteness, were not in employment pre-pandemic.

The OECD has recently considered the implications of the trend to remote working on the spatial distribution of economic activity[9]. The OECD concluded that the possibility of working remotely opens up new opportunities for places outside large cities to reach new markets and attract new residents and firms.

The OECD does not expect a general exodus from the largest cities as more dynamic and attractive centres will be able to reinvent themselves, with, for example, a move away from retail and towards leisure based activities. However, there are likely to be particular risks for urban areas with lower levels of amenity, of which there are of course a number of examples in Wales.

Various settlement patterns could emerge in the post pandemic period due to the increased adoption of remote working. Potential changes identified by the OECD, which could occur in combination, include:

- structural changes arising from a permanent movement of high skilled workers outside city centres, including the loss of locally consumed services, as previously noted;
- an expansion of commuting zones around cities resulting in, or exacerbating a "doughnut" effect;
- smaller cities that have a high level of amenity becoming increasingly attractive.

The policy responses suggested by the OECD include:

- investing in ICT connectivity and associated skills to reducing digital divides and facilitate the adoption of remote working across regions, workers and firms;

[8] See: Anywhere jobs and the future of work | VOX, CEPR Policy Portal (voxeu.org)
[9] See: Executive Summary | Implications of Remote Working Adoption on Place Based Policies : A Focus on G7 Countries | OECD iLibrary (oecd-ilibrary.org)

- improving the attractiveness and accessibility of vulnerable places, including by providing co-working spaces, high quality childcare, effective transport networks and affordable housing;
- ensuring that outcomes from remote working are as efficient and environmentally sustainable as possible by appropriate land use policies and adapting transport infrastructure.

The OECD's analysis suggests potential opportunities for Wales, as well as risks. In particular, the high level of amenity in many parts of Wales could make it an increasingly desirable place for people to live and work.

The precise implications of more remote activity for transport use and housing demand are unclear. For example, people may seek to live in larger houses in less "central" locations, with increasing trip distances, even if the total number of trips is reduced. Overall energy use could rise rather than fall due both to changes in transport use and to increased energy use in home heating more than offsetting any reduction in workplace energy use.

At the current stage of the recovery, road traffic has almost recovered its pre-pandemic levels, while rail and bus travel remains well below those levels.

Trends in Welsh living standards

This section reviews trends in living standards in Wales, comparing Wales with the rest of the UK and considering variation within Wales.

As this report considers mainly economy developments and prospects, the focus is on material living standards. But, as the pandemic has of course emphasised, other aspects of well-being are crucially important, with some indictors of mental well-being, for example, showing marked deterioration at various stages of the pandemic.

The Welsh Government's annual Well-being of Wales Report[10] reviews recent trends as they have affected well-being in Wales more holistically, as required by the Future Generations Act, and the new Future Trends Report[11] provides an updated assessment of the implications of the long run trends facing Wales for the goals set in the Act.

It should be noted that, as last year's report demonstrated, there is typically far more variation in living standards within areas than between them, with incomes being most strongly influenced by individual and household characteristics, and particularly by levels of qualification and health status.

These considerations also point to the critical importance of the wider UK tax and benefits system in mitigating variation in living standards, and hence to the important consequences of policy choices made by the UK government in these areas.

[10] Wellbeing of Wales: 2021 | GOV.WALES
[11] Future Trends, National Indicators and National Milestones: Consolidated plan for 2021 [HTML] | GOV.WALES

Information on household incomes in Wales is available from two sources. One is the Family Resources Survey (FRS), which provides key results for average household income and for poverty levels.

In the past, the FRS sample size for Wales has been small, meaning that data needs to be averaged across several years (hence producing results that are not timely) and that detailed analysis is often precluded. The Welsh Government has therefore funded a boost to the FRS in Wales in order to improve our ability to analyse changes in living standards in Wales, and particularly to assess how such changes affect various population groups, including those with low levels of income.

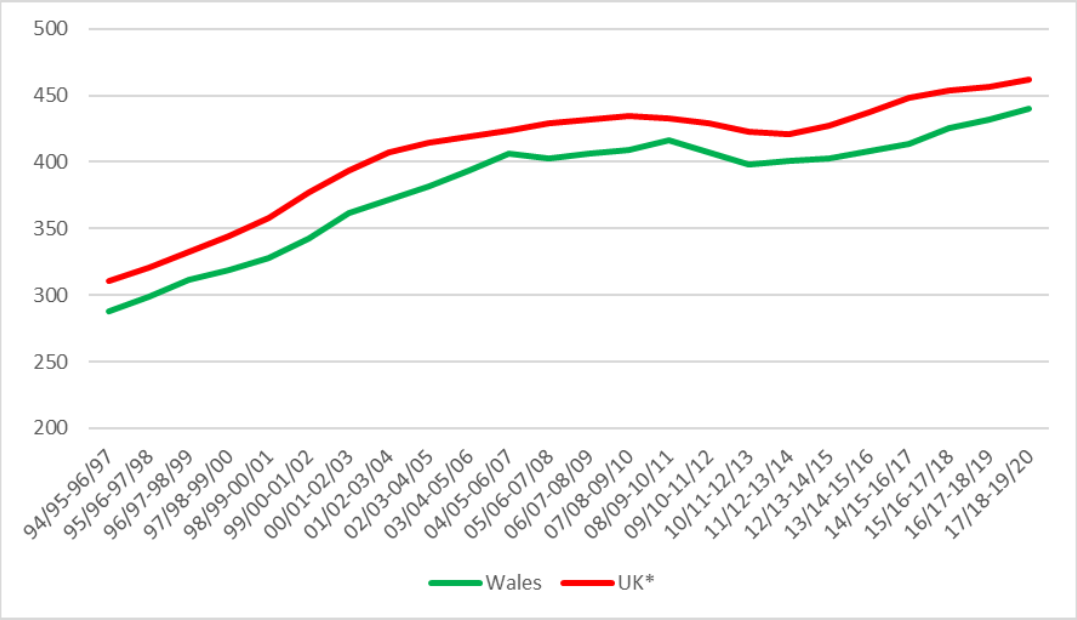
The other source of information on income is the Regional Accounts, which also provides results for average household income, but where results are based in part of the apportionment of high level data in the national accounts to local areas. The Regional Accounts data also includes some income which is "notional" rather than actual, most importantly the value of housing services deemed to be received by owner occupiers.

Trend in median income

Median household income is the income of the household that, when households are ranked by income, is located in the centre of the distribution. It can therefore be regarded as a reflecting the income of a "typical" household, and is widely regarded as the most representative single measure of material living standards.

Chart 5 shows median household income for Wales and the UK over the longer run, after adjusting for differences in housing costs.

Chart 5: Median household income (£ per week, 2019/20 prices)



Source: DWP
Notes:
*GB for the years prior to 2002/03
Data is equivalised to ensure results reflect similar household composition and shown after housing costs.

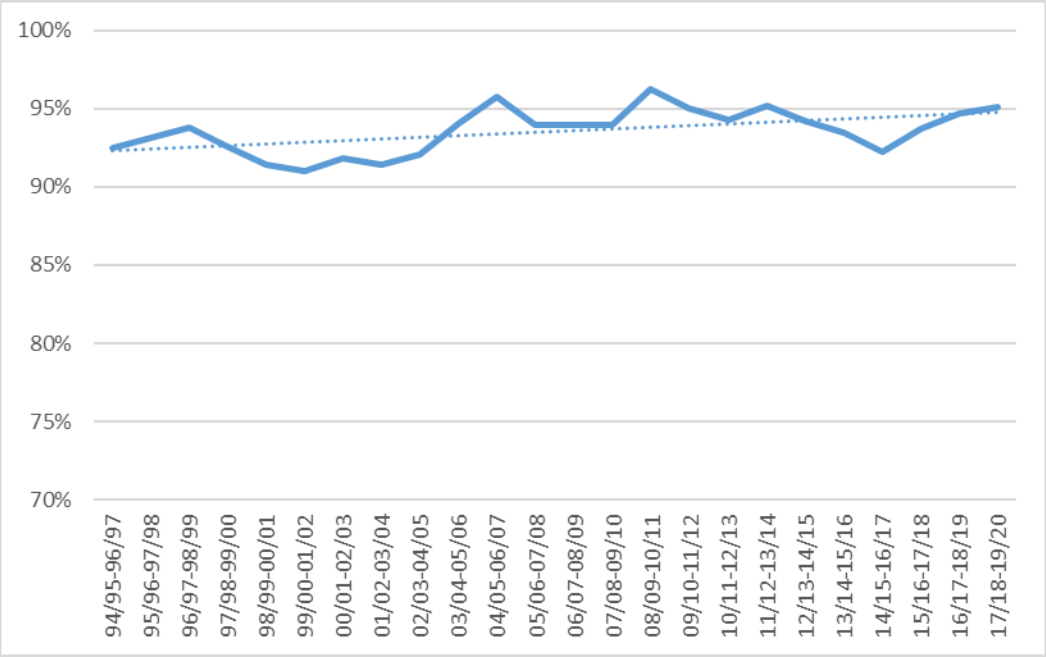
The data in the chart shows that, over the period as a whole, median incomes in both Wales and UK have grown by around 1.8% per year, after allowing for inflation.

Growth has been much slower over period since around the time of the financial crisis in 2008, though it had partially recovered over the most recent available years (which pre-date the pandemic). This period of slow growth in incomes and living standards is unprecedented in modern times, and largely reflects slow growth in productivity, the ultimate driver of living standards[12].

It can be seen that, despite annual variation, the trends for Wales and UK are closely correlated, as would be expected given the largely common economic and fiscal context.

Chart 6 shows median household income for Wales, but this time expressed relative to the figure for the UK as a whole. The chart shows that, while the figure for Wales tracks that for the UK as a whole quite closely over the medium term, there is considerable annual variability. This may reflect statistical factors, rather than real change.

Chart 6: Median household income: Wales relative to UK.



Source: DWP

Chart 6 also shows that there has been some modest convergence since the mid 1990s, with the median Welsh household income just 4.9% below that for the UK as

[12] The underlying weakness of productivity growth over the most recent years is somewhat masked in the chart as the growth in incomes has been partly driven by a recovery in employment rates, something which obviously has only finite potential.

whole in the most recent period, and with the figure for Wales higher than for several English regions[13].

As discussed in last year's report, the much more modest gap between Wales and the UK when the comparison is made on the basis of measures of median income rather than GDP (or its main component, GVA) reflects in large part the very large transfers made through the UK fiscal system[14]. The difference also reflects the fact that the gap in median incomes is smaller than the gap in mean incomes, and this point is discussed further below.

GDP and GVA however remain important as key indicators of the underlying strength of the economy in Wales and therefore of the tax base.

The most recent data for GVA is for 2019. In that year GVA per head in Wales was the second lowest of all UK countries and regions. Wales's performance on GVA per head relative to the UK shows little trend in recent years, though it remains somewhat lower than in the period up to the financial crisis of 2008.

Over the last few years, GVA per head in Wales has risen above that in the North East of England, a reversal of the previous position, when Wales had for many years the lowest GVA per head of all UK countries and regions.

Trend in mean Gross Domestic Household Income

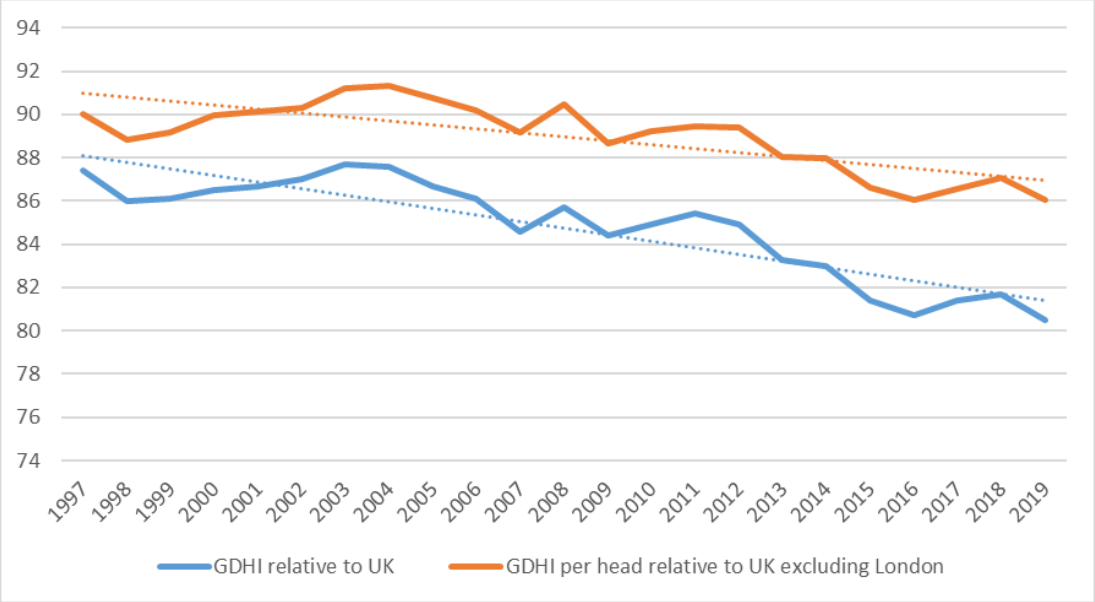
The alternative source of information on household incomes in Wales, the Regional Accounts, confusingly paints a somewhat different picture of Welsh relative performance. The income measure available from the National Accounts is Gross Domestic Household Income (GDHI), which is (approximately) the income that households have left after the deduction of taxation and receipt of benefits. It is a measure of mean, rather than median, income.

Chart 7 shows GDHI per head in Wales, relative to both the UK as a whole and the UK excluding London over a broadly similar period to chart 6.

[13] While this figure adjusts for differences in housing costs, it does not take account of other differences in the cost of living. Previous analysis by the ONS suggests that if such differences were taken into account it might reduce the gap by up to around 2 percentage points.

[14] Net out-commuting (which contributes to Welsh incomes but not to Welsh GVA or GDP, makes a further, but smaller contribution to the gap.

Chart 7: Gross Domestic Household Income: Wales and UK



Source: ONS and Welsh Government

The data in Chart 7 indicates that, in contrast to the measure of median household income, the gap between Wales and UK on GDHI has widened, particularly over the period since the financial crisis of 2008[15]. The chart also indicates that the gap between Wales and the UK (excluding London) has widened, albeit to a lesser extent, so a stronger relative growth in incomes in London can only be a part of the explanation for the overall widening.

Examination of the underlying data indicates that two factors appear to have been important in explaining the divergence between Welsh on median household incomes and on GDHI.

The first is somewhat slower growth in higher levels of pay in Wales.

Comparing annual total pay in Wales and UK, over the period since 1999 there is little trend in the gap in median pay, with Welsh pay being 90.5% of UK in 1999 and 90.7% in 2021. However, mean pay in Wales has decreased, from 86.5% of the UK in 1999 to 83.8% in 2021.

Chart 8 compares total pay in Wales and the UK at various points in the pay distribution[16].

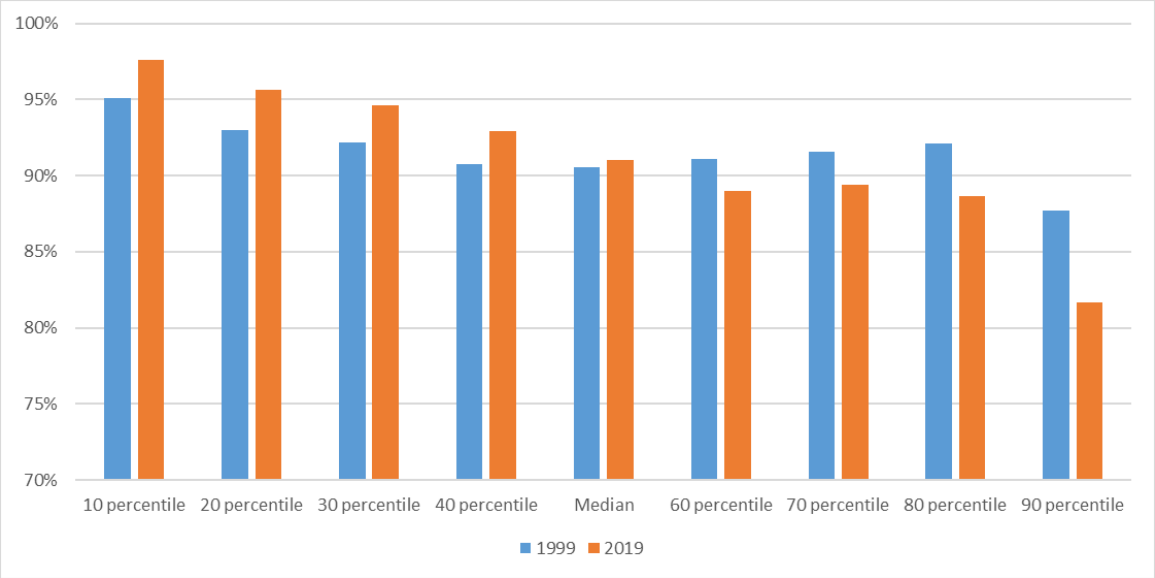
The reasons for the difference between mean and median trends appears to reflect the fact that, across the UK as a whole, the highly paid have experienced greater

[15] A measure of mean income is also available from the FRS, alongside the measure of median income. The gap with the UK shown on this measure is quite volatile, but with little sign of any trend closing of the gap.

[16] Although not shown here, the data also shows that the distribution of pay in Wales is less unequal than for the UK as a whole, reflecting the smaller share of high earners in Wales.

increases in pay than has been the case in Wales. As a result, the gap between pay in Wales and the UK for those who are highly paid has grown.

Chart 8: Pay in Wales as a percentage of UK, by decile



Source: ONS - ASHE

It can also be seen from Chart 8 that, while the gap in pay between Wales and the rest of the UK has been widening towards the top of the distribution, it has been narrowing towards the bottom, the latter effect probably reflecting in part the consequences of the National Minimum Wage.

The relative increase towards the bottom of the distribution has been insufficient to offset the relative decrease towards the top, resulting in the differing trends for median and mean pay.

The second factor explaining the divergence between median incomes and GDHI is the differing trends in property values between Wales and the UK. GDHI includes a relative large nominal component that is intended to reflect the benefit that owner occupiers get from living in the dwelling that they own[17].

Detailed investigation of the regional accounts data indicates that slower relative growth in the notional income of owner occupiers and the rental income from letting dwellings over the most recent ten years or so appear to have driven a large part of the relative decline in Welsh GDHI.

Taken together, the slower growth in high pay in Wales, and the slower growth in income from housing, represents a weakening of Wales' overall fiscal position, even though the direct effects on the "typical" citizen, as revealed by the trend in median income, appear relatively benign.

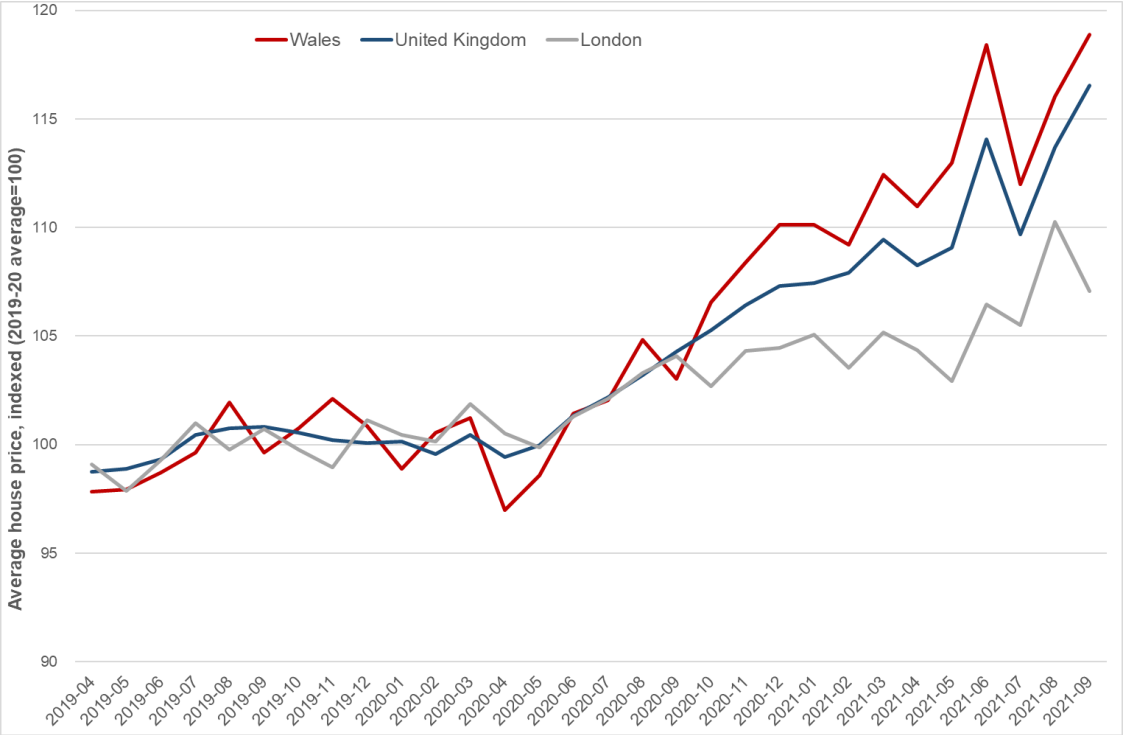
[17] This component is the major element in "operating surplus" for the household sector. The estimates are based on rental values of dwellings rather than sale prices, which reflect only recent transactions and are volatile.

The analysis above only covers the period to 2019/20, and there are some recent developments which could either reinforce or alter the trends to date:

- Greater inequalities driven by the pandemic and the technological changes it has accelerated might potentially increase the fortunes of those earners at the top end who are under-represented in Wales.
- The trend of house prices in Wales may rise relative to other places due to remote working / economic activity. This might feed through to increased property and rental income in future.

The most recent data for house prices, shown in Chart 9, does indeed provide some indication of an increase in demand in Wales that may have exceeded that seen across the UK as a whole (and particularly in London).

Chart 9: Recent changes in house prices



Source: ONS

Income distribution: poverty

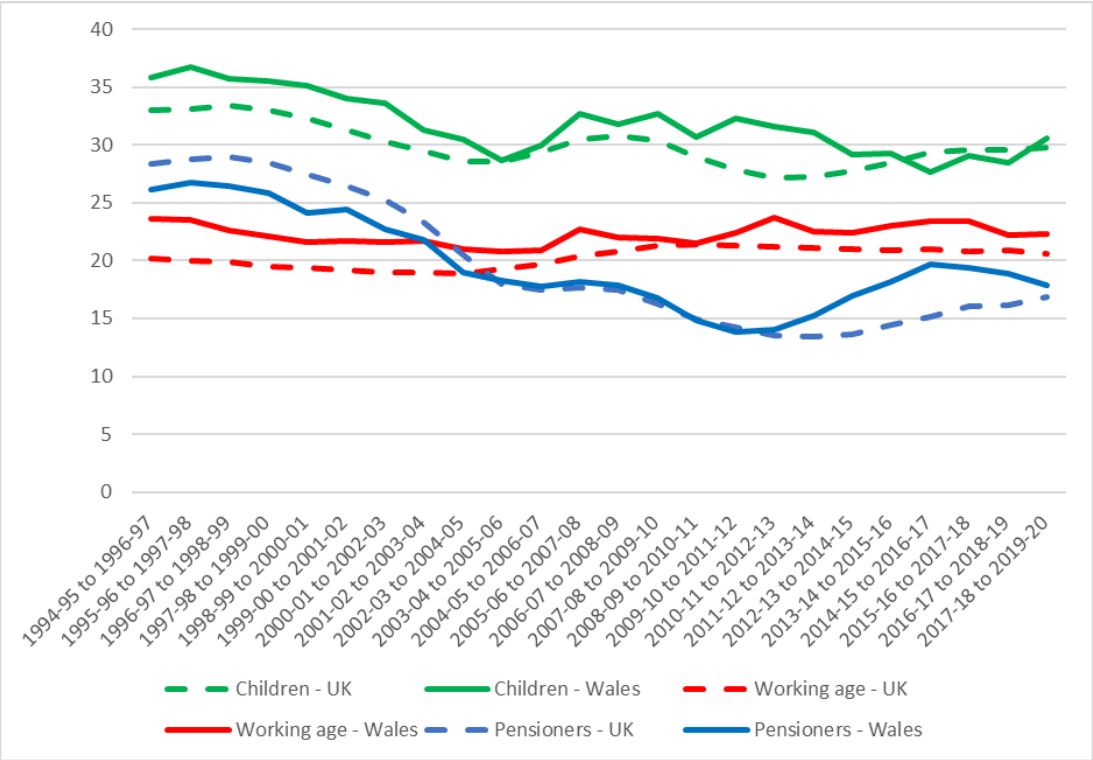
Data from the Survey of Personal Incomes indicates that incomes in Wales are less unequally distributed than across the UK as a whole, principally because Wales has a smaller share of people with high levels of income.

However, the FRS is the main official source of information on relative incomes and poverty for Welsh households.

Chart 10 shows trends in relative poverty[18] (after allowing for housing costs) in Wales and the UK as a whole.

[18] Relative poverty is defined as income below 60% of that received by the median UK household. So poverty would increase if incomes received by households in the lower part of the distribution

Chart 10: Relative poverty Wales and UK, after housing costs (% of population)



Source: DWP

The chart does not show sustained trend changes in poverty rates in Wales over the last decade or so (although there are some indications of a recent increase in child poverty), following a decade in which poverty fell.

The latest data shows poverty rates that are currently higher for children, and lower for pensioners, when compared with working age adults. It also shows that poverty rates in Wales are mostly quite close to the UK average.

The highest poverty rates in the UK are generally in London, with a number of other UK regions having higher rates than Wales.

Income distribution and living standards: spatial variation

GDHI per head, unlike median household income, is also available at the level of local authorities. On this basis, in the most recent year, 2019, Monmouthshire had highest level of income in Wales, close to the UK average. The lowest level of income was in Blaenau Gwent. In the same year, and perhaps contrary to expectations, income in Cardiff was only a little above the Welsh average, while in Powys income was well above Welsh average, despite recording the lowest GDP per head in Wales.

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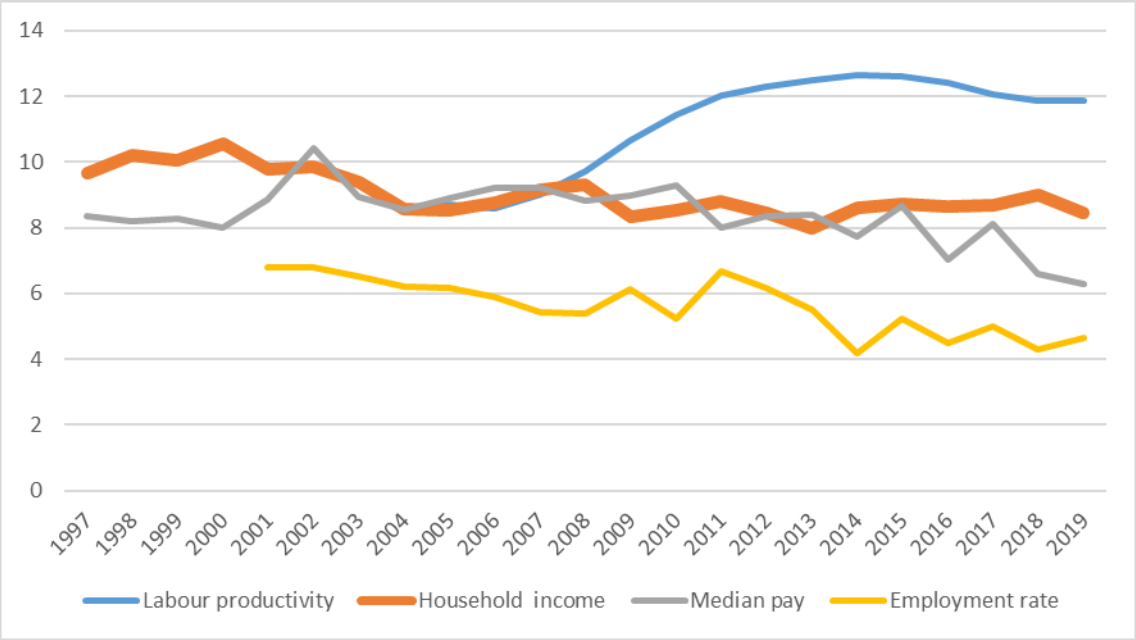
increased but the increase was less than received by median household. And poverty could fall even if incomes reduced in the lower part of the distribution, provided this reduction was less than that received by the median household.

This demonstrates that, at the local level, the economic output produced in an area – GDP – is a poor indicator of the living standards of the resident population.

Over the medium to longer term, measures of living standards for local authority areas in Wales have been, if anything, converging rather than diverging.

Chart 11 shows an indicator of divergence (the "coefficient of variation") across local authority areas in Wales for four measures relevant to assessing living standards. A lower number indicates less divergence.

Chart 11: Variation in income and other indicators across local authority areas



Source: ONS, Welsh Government

While GDHI is an established measure of household income, as already noted the better measure, median income, is not available at the local level. However, data for median pay is available and is included in the chart. The employment rate is also included as employment status is a key influence on well-being.

Chart 11 shows that, for the measure of household income (GDHI), some convergence took place over the earlier part of the period, with relative stability since then. Employment rates have broadly converged over the whole period, with median pay also converging over more recent years.

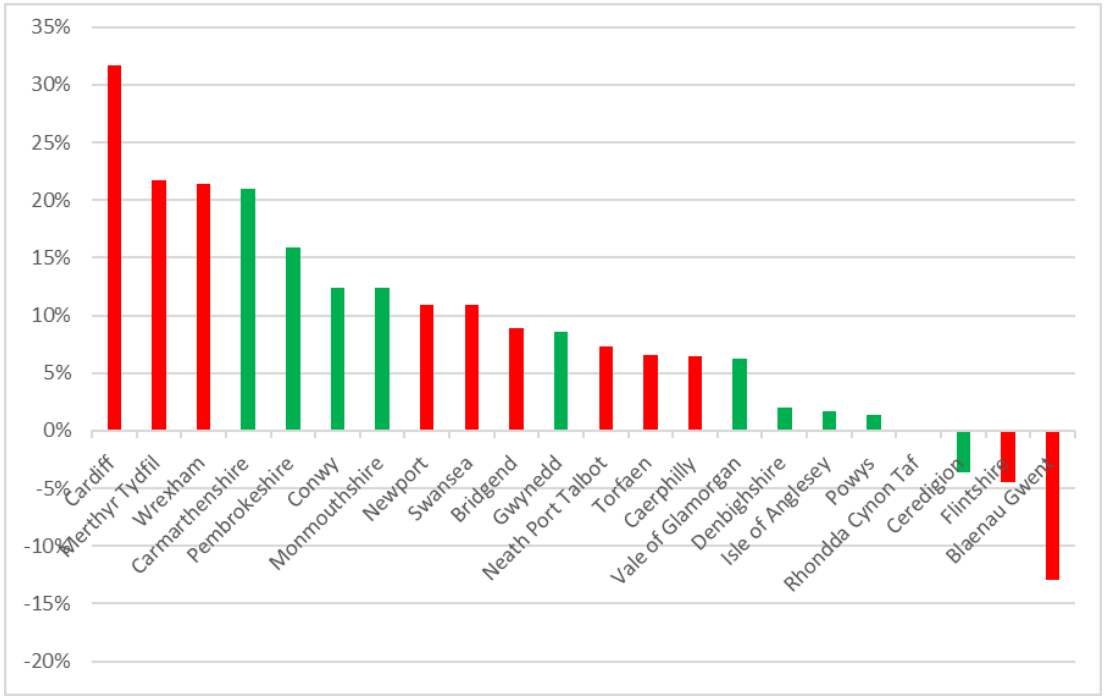
The exception is labour productivity (GDP per hour worked), where local authority areas diverged quite sharply over the years from around 2007. However, examination of the underlying data reveals that this divergence was driven by abrupt changes in measured GDP per hour for some local authority areas, and it appears possible that this reflected statistical effects rather than real change.

While local authority areas have, if anything, converged on the main indicators of living standards for the resident population set out above, these indicators do not necessarily reflect the relative strength of local economies. Local economies can grow more quickly or more slowly without this necessarily translating into effects on

the average resident, as the growth can be reflected in changes in commuting and/or migration.

The differential economic growth of Welsh local authority areas is illustrated by the data in Chart 12, which shows changes in the number of jobs in each area.

Chart 12: Change in total jobs 2002-04 to 2017-19



Source: Welsh Government
Note: Local authority areas with a large rural element shown green

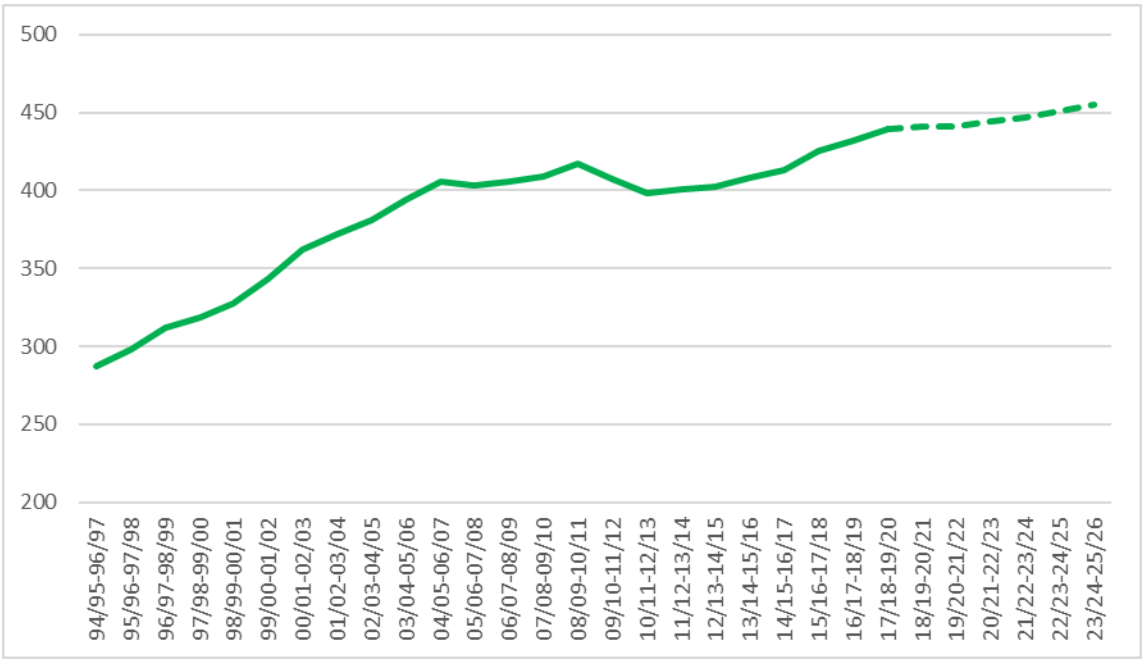
Chart 12 shows that, while the largest growth in jobs has been in Cardiff, beyond this there is no clear geographical pattern across Wales.

Prospects for Welsh living standards

The Office for Budget Responsibility (OBR) have forecast very slow growth in incomes over the next few years at the UK level.

Chart 13 below includes an *illustrative* projection of Welsh median household incomes until around the middle of the decade. This should be seen as approximate as the projection is based on the OBR forecast for the UK as a whole, which uses mean rather than median income.

Chart 13: Median household income and projection (£ week, 2019/20 prices)



Source: ONS, Welsh Government

The OBR's forecasts imply a continuation of the historically unprecedented trend of low growth in living standards experienced since the financial crisis.

Growth in living standards is forecast to be particularly sluggish over the next two years, as inflation and tax increases erode the real value of disposable incomes, and welfare cuts reduce the incomes of some groups, particularly those who are not in work.

Comparison of the projection with longer run trends indicates that real median disposable incomes per household are far below what would have been expected if the overall trend that existed prior to the financial crisis had persisted. In Wales, this would be equivalent to average weekly household income being over 30% higher – or around £130 per week - by 2025/26.

The reasons for the projected slow growth in incomes are varied. Over the short to medium term, the OBR points to the role of inflation. Next year, household income, after taking inflation into account, is set to increase by only 0.3%. Over the next 5 years, historically sluggish productivity growth is a major contributor, with real household income growth is expected to average approximately 1.0%, again much lower than the long term trend of more than 2.0%.

The projection assumes a close correlation between mean and median incomes. This may result in an unduly optimistic picture, as the IFS has noted that the impact of inflation and tax increases in 2022 is likely to result in particularly severe impacts on the middle and lower parts of the income distribution with real median income falling and – probably – poverty increasing.

Over the longer term, as previously noted, the OBR currently expects the pandemic to result in household incomes being around two percent lower each year than they

otherwise would have been, although there is a high degree of uncertainty about this. And, as also previously noted, the OBR continues to forecast, based on the latest trade data, that the UK's move to new trading relations with EU will also act as drag on growth over the long term, eventually resulting in UK economic output and incomes being around four per cent lower than they would otherwise.

However, the most important factor behind the forecast slow rate of growth over the long term is a continuation of the low rate of underlying productivity growth. This long run challenge is discussed further below.

Longer term challenges and opportunities

Productivity

Productivity – the amount of output produced for each hour worked – is the main driver of living standards over the long run. Increases in real wages can only be sustained if they result from improved productivity.

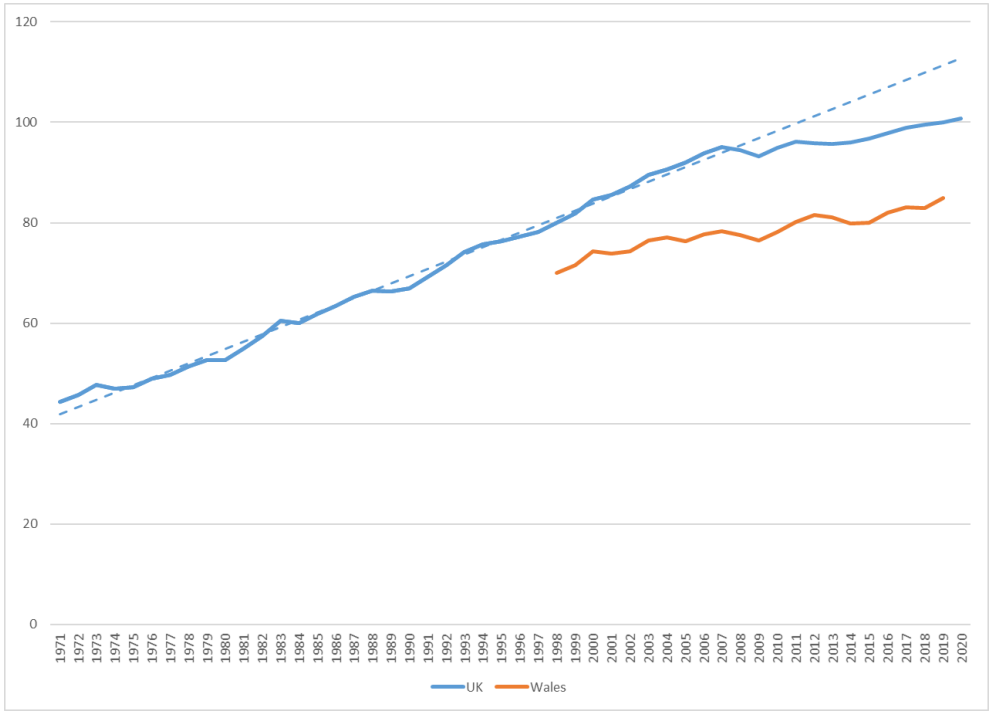
In turn, productivity improvements are driven by innovation – the development of new or better goods and services and increases in the efficiency with which goods and services are produced. In principle, increasing productivity allows higher living standards without any increase in the use of inputs or the consumption of resources, although in practice the extent to which resources are consumed will depend on the policies in place to limit resource depletion.

Productivity is also a key driver of the size of the tax base and hence of the level of resources available for funding public services.

Trend in productivity growth

Prior to a time around the financial crisis of 2008, productivity across the UK, including Wales, grew by a little over two per cent each year on average. Since then, the rate of productivity growth has fallen, averaging well under one per cent per year – see Chart 14.

Chart 14: Labour productivity (output per hour worked, 2019=100)



Source: ONS and Welsh Government
Note: Data for Wales is approximated on the basis of output per worker rather than per hour worked.

The reasons for the relatively poor rate of productivity growth experienced by the UK (including Wales) since around 2008 are imperfectly understood. It is a feature that has been shared by many other developed countries, albeit generally to a lesser extent.

One potential explanation for the common experience is that the rate of innovation may have slowed. Another, more hopeful, possibility is that a range of new technologies are in the process of being adopted, but with a "penalty" that reflects transitional costs and frictions, and is therefore temporary.

As just noted, the UK's productivity performance has been particularly poor. One factor that has been particularly acute in the UK is a low level of business investment. This long term problem may have been exacerbated over the last decade, first by the presence of a large financial sector suffering from a "hangover" from the financial crisis, then by the imposition of stringent "austerity" measures by the UK Government and finally by the uncertainty associated with both the EU referendum and the transition to a new trading relationship with the EU.

However, over recent years spending on research and development in the UK appears to have increased, and this may offer some grounds for optimism about prospects.

Welsh productivity levels

Levels of productivity in Wales are relatively low, even in the UK context: amongst UK countries and regions: hourly productivity is only lower in Northern Ireland.

In contrast to the good performance on employment, the gap in productivity between Wales and the UK as a whole widened in the years prior to around 2008 and has been largely unchanged since.

Many of the factors explaining the relatively weak Welsh productivity performance are reasonably well understood, and have been discussed in previous reports.

In summary, low Welsh productivity levels are *not* explained by the mix of industries in Wales. In particular, productivity in manufacturing, which accounts for a larger share of the economy in Wales than the rest of the UK, compares reasonably well.

The Welsh workforce does however have qualification levels that, while similar to (or even a little above) parts of England, are below those for southern England and Scotland. Research indicates that skills and qualification are by far the most important drivers of productivity.

Wales has probably also experienced some productivity penalty from its dispersed settlement pattern, and particularly from the absence of a very large and dynamic conurbation. Such conurbations can support jobs with high productivity and pay in the tradeable service sector.

A successful tradeable services sector in turn provides a strong basis to support businesses providing locally consumed services.

Parts for Wales are also hampered by their relative peripherality and consequent limited connectivity.

There may also be issues arising from a lack of indigenous large firms; from weak management skills; and, from limitations in the access to finance, although evidence in these areas is less complete.

Improving productivity through continuing to address these issues will be a key factor in driving future living standards in Wales and in developing the tax base needed to support good public services.

The increased potential for remote economic activity, including remote working, offers a new opportunity for Wales to strengthen its offer as a location for highly productive and well paid employment.

Climate change

As a sequence of reports by the Intergovernmental Panel on Climate Change (IPCC) has documented, climate change will have far reaching environmental and social consequences, with the extent of such consequences depending on the degree of mitigation that is achieved on a global basis.

Climate change and economic growth

IPCC analysis of the potential effects of climate change and of the impact of mitigation is based on a range of so-called “Shared Socio-economic Pathways”[19], each of which is intended to illustrate a possible future, but with varying implications for the amount of radiative forcing and hence for the impact on future temperatures.

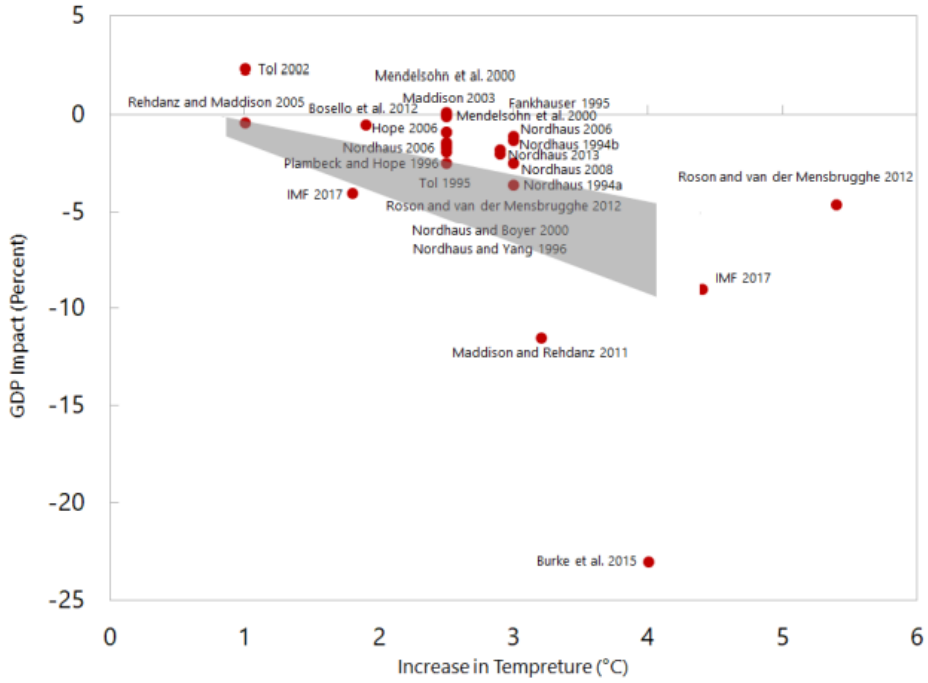
[19] The Shared Socioeconomic Pathways and their energy, land use, and greenhouse gas emissions implications: An overview - ScienceDirect

All of these pathways make the assumption of continuing economic growth, albeit at varying levels and with growth generally slowing over the century as more countries approach the growth frontier and other factors, including demographic change, act as a drag. Alongside economic growth, the pathways also show increases in other indicators of well-being, such as life expectancy, which are generally quite closely correlated with economic growth.

In general, pathways with faster rates of economic growth (as measured by global GDP) are associated with greater increases in temperature, but this is not a uniform relationship. SSP1 ("The world shifts gradually, but pervasively, toward a more sustainable path, emphasizing more inclusive development that respects perceived environmental boundaries") is in fact associated with somewhat faster global economic growth than SSP2 ("The world follows a path in which social, economic, and technological trends do not shift markedly from historical patterns").

The International Monetary Fund (IMF) has undertaken analysis to consider how the effects of climate change could feed back onto economic growth, reducing it from what it would have been in the absence of such change[20] . The results of the IMFs own analysis, and its summary of the findings of other published research on the same topic, are shown in Chart 15.

Chart 15: Impact of temperature increases on global GDP



Source: IMF
Note: Chart shows impact of temperature increase on projected level of GDP in 2100.

The IMFs own analysis ("IMF 2017" in chart) indicates that a temperature increase of around two degrees in 2100 (the upper limit proposed in the Paris Agreement) would reduce the level of GDP in that year by around 5% and a temperature increase of around four and half degrees would reduce the level of GDP by about 10%.

[20] https://www.imf.org/-/media/Files/Publications/WP/2019/wpiea2019215-print-pdf.ashx

For context, prior to the pandemic, global growth had averaged around three per cent each year over recent years.

The shaded area in the chart represents the IMFs assessment of the range within which the relationship between temperature and GDP in the year 2100 is most likely to lie, taking account of the range of quality of the available studies. This is slightly more optimistic than implied by the IMF's own analysis, though it is noted that there is a very high level of uncertainty here.

The chart shows effects at the global level. Results at the level of individual countries vary widely - much worse than indicated in the chart for many currently poor countries, though less bad for countries at higher latitudes, such as the UK.

The IMF and others have stressed that their analysis does not take account of potential "tipping points", and does not therefore reflect the possibilities of resulting irreversible and catastrophic change. The estimates of impact are therefore more likely to be reliable for modest temperature increases, towards the lower end of the figures on the horizontal axis, at which such tipping points appear less likely.

With this crucial caveat, the data in the chart indicates that, while the effects of temperature increases in the lower part of the range on the level of GDP are very large in absolute terms, these would translate into modest reductions in annual economic growth rates, probably smaller than a rounding error.

Costs of mitigating climate change

Analysis in the landmark Stern Review[21] indicated that, at the global scale, the benefits of mitigating climate change greatly outweighed the costs, even before taking account of possible tipping points and catastrophic change.

Analysis by the UK's Climate Change Committee (CCC) is consistent with this, indicating that achieving net zero greenhouse gas emissions in the UK should cost less than one per cent of GDP on an annualised basis, and perhaps closer to one half of one per cent[22].

These costs should again be assessed in the context of the continuing economic growth assumed by both the IPPC and the CCC. For the UK, the OBR has assessed the UK's long run rate of productivity growth as 1.5%. On this basis, the costs of mitigating climate change are expected to be equivalent to well under one year's growth.

The associated investment costs are nevertheless large in absolute terms, and will be even larger as a percentage of GDP in Wales than across the UK as a whole, as a result of the particular mix of industries which characterises the economy in Wales.

Figures should be regarded as illustrative in view of uncertainty about future technologies and policy choices, but the implication of the CCC's "balanced pathway" to net zero for Wales is that the additional investment needed might

[21] The Economics of Climate Change: The Stern Review - Grantham Research Institute on climate change and the environment (lse.ac.uk)

[22] This is the net effect of higher investment costs offset by operating costs that are lower in aggregate.

amount to an uplift of something over ten per cent above "business as usual" investment a typical year over the period to 2050.

On the basis of the same illustrative figures, over three-quarters of the necessary additional investment would be accounted for by three sectors: electricity supply, buildings (heating and energy efficiency) and surface transport. In the latter area, the large majority of the cost is attributable to decarbonising road transport vehicles.

In many areas, higher investment costs will, over time, be partly or fully offset by lower running costs.

In its advice to the Welsh Government[23], the CCC has noted that, in respect of meeting the costs of net zero:

- A large part of the cost in Wales will be "socialised" across the UK as whole (and beyond) as it will be met through higher prices passed on to consumers.
- The majority of the cost is likely to be met by the private sector, responding to incentives and regulations - and ultimately by consumers - rather than government (though the extent to which this is the case will depend on policy choices, many of which are still to be made, for example on how to pay for decarbonising building heating).
- Many of policy changes needed are in non-devolved areas, and in so far as costs are retained by government, these would fall to the UK, rather than the Welsh, Government.

The change in industrial structure that results from the policies put in place to promote decarbonisation will result in the movement of people between "old" and "new" sectors and occupations. This process will require government support in various ways, including to assist in re-skilling. But even in the absence of decarbonisation, industrial change is a pervasive feature, with at least 2,000 jobs lost, and new ones created, each week in Wales. There is also continuing change in the nature of skills requirements as a result of diverse range of factors including automation. So in these respects, decarbonisation is just one aspect of a much broader phenomenon that justifies active government involvement to protect the vulnerable through economic transitions.

As noted above, one feature identified as contributing to the UK's (and therefore also Wales's) long standing productivity weakness is a low level of business investment to support increased business efficiency. The increased levels of investment associated with addressing climate change therefore offer as a co-benefit the opportunity to address this weakness.

Welsh demography

Population projections

Population growth has been slower in Wales than for the UK as a whole in the past 10 years, and Wales has a higher proportion of its population aged 65 or older than any UK nation.

[23] Advice-Report-The-path-to-a-Net-Zero-Wales.pdf (theccc.org.uk)

The proportion of the population aged 16 to 64 years old in Wales has been decreasing year-on-year since mid-2008, when 16 to 64 year olds were estimated to account for around 64% of the population.

The official population projections are not forecasts. They are subject to high levels of uncertainty, and this is reflected both in the preparation of variant projects and in often large differences as the projections are updated over time. The most recent projections are 2018-based, and will now be subject to particular uncertainty as the result of the effects of both Brexit (and the associated changes to migration rules) and the pandemic on international migration.

Under the 2018-based main projection it was projected that the proportion of the population aged 16 to 64 would continue to decrease in both Wales and in the UK, to around 58% of the population in Wales by mid-2043 - lower in Wales than in the UK as a whole, as has been the case since at least 1981.

The overall population of Wales had continued to grow in period prior to the change to the migration rules and the pandemic. This growth was due to positive net international and cross-border migration. The percentage population growth between mid-2019 and mid-2020 in Wales was the highest of the UK nations.

Nevertheless, over recent years the number of deaths in Wales has greatly exceeded the number of births and the impact of recent changes to migration patterns could result in in-migration failing to fill this negative natural change, with overall Welsh population falling, potentially for a protracted period.

Risks from demographic change

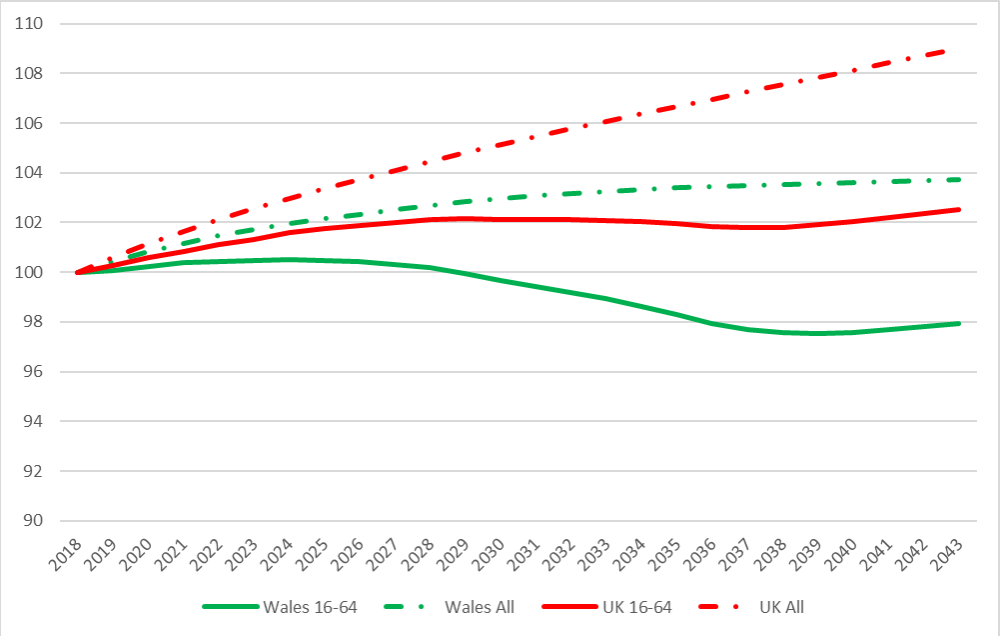
Population change poses real economic and fiscal risks to Wales. There is some evidence that an aging of the population is associated with slower growth in productivity (and hence of the tax base).

Wales has a higher share of older people in its population than the UK as a whole. However, the projected changes in share as the population ages into the future are similar so aging does not pose a direct risk.

In contrast, the 2018-based principal population projections pointed to a major difference between Wales and the UK in terms of the size of the population that would be expected to be engaged in, or preparing to be engaged in, economic activity[24]. See Chart 16.

[24] Projections are, of course, inherently uncertain, particularly in the context of changes to UK immigration rules.

Chart 16: Principal Population Projections, 2018 =100.



Source: ONS, Welsh Government
Note: 16-64 cohort has been identified rather than "working age" as the latter is influenced by changes over time in the retirement age.

Chart 16 shows that, in Wales, population aged 16-64 was projected to be broadly stable over the period to 2028, while it is rising across the rest of the UK. The cohort then decreases in size in Wales.

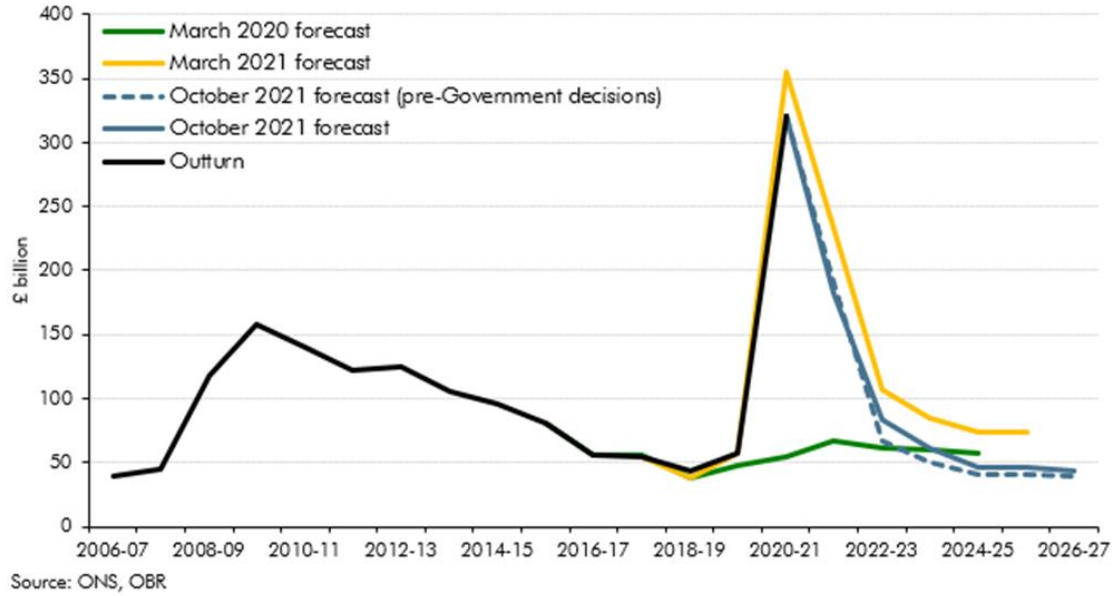
The fiscal implications of demographic change are considered further below.

Fiscal prospects

UK – Short term fiscal prospects

The OBR's October 2021 forecast for public sector net borrowing is shown in Chart 17.

Chart 17: Forecast for Public Sector Net Borrowing



Borrowing reached a peacetime record of £320 billion or 15% of GDP in 2020-21, but was £35 billion lower than the OBR estimated in March. This stronger fiscal performance has continued into the current financial year, with the OBR expecting borrowing to be £183 billion in 2021-22, less than 60% of the level in 2020-21 and £51 billion lower than forecast in March. Most of the downward revision reflects higher receipts as the economy has rebounded more strongly than previously forecast.

The OBR forecasts a further sharp reduction in borrowing in 2022-23, more than halving to £83 billion, as pandemic support comes to an end. It then declines more gradually to reach £44.0 billion (1.5 per cent of GDP) in 2026-27. This leaves borrowing at the forecast horizon 1.0 per cent of GDP lower than it was before the pandemic in 2019-20, and at a level that would be the lowest for 25 years.

Compared to the March forecast, before any budget measures, borrowing in future years is reduced by around £35bn a year. On top of that the Chancellor announced tax rises of around £15bn a year, mainly the Health and Social Care Levy, to provide an overall fiscal improvement of £50bn a year. Around £30bn of that has gone towards higher departmental spending than planned for in the UK Government's March budget. The rest reduces borrowing.

Public sector net debt is forecast to peak at 98.2% of GDP in 2021-22. It remains broadly stable in 2022-23 and 2023-24, before falling by larger amounts thereafter to reach 88.0 per cent of GDP in 2026-27 - still higher than the pre-pandemic level.

Alongside its budget, the UK Government published an update to the Charter for Budget Responsibility with a new set of fiscal targets. These include a revised fiscal mandate and three supplementary targets. The OBR's forecast shows that all four of the new targets are more likely to be met than missed, but by relatively modest margins.

The new fiscal mandate is to have public sector net debt (excluding the Bank of England) as a share of GDP falling by the third year of the rolling forecast period. The three supplementary targets are:

- To balance the current budget by the third year of the rolling forecast period.
- To ensure that public sector net investment does not exceed 3 per cent of GDP on average over the rolling five-year forecast period.
- To ensure that a subset of expenditure on welfare is contained within a predetermined cap and margin set by the Treasury (the 'welfare cap').

The OBR notes that the headroom the Chancellor has left himself in order to meet his new fiscal targets in 2024-25 is smaller than George Osborne gave himself in 2010 or Phillip Hammond in 2016 to meet their fiscal mandates, but larger than that for George Osborne's second fiscal mandate in 2015. None of these previous mandates were met.

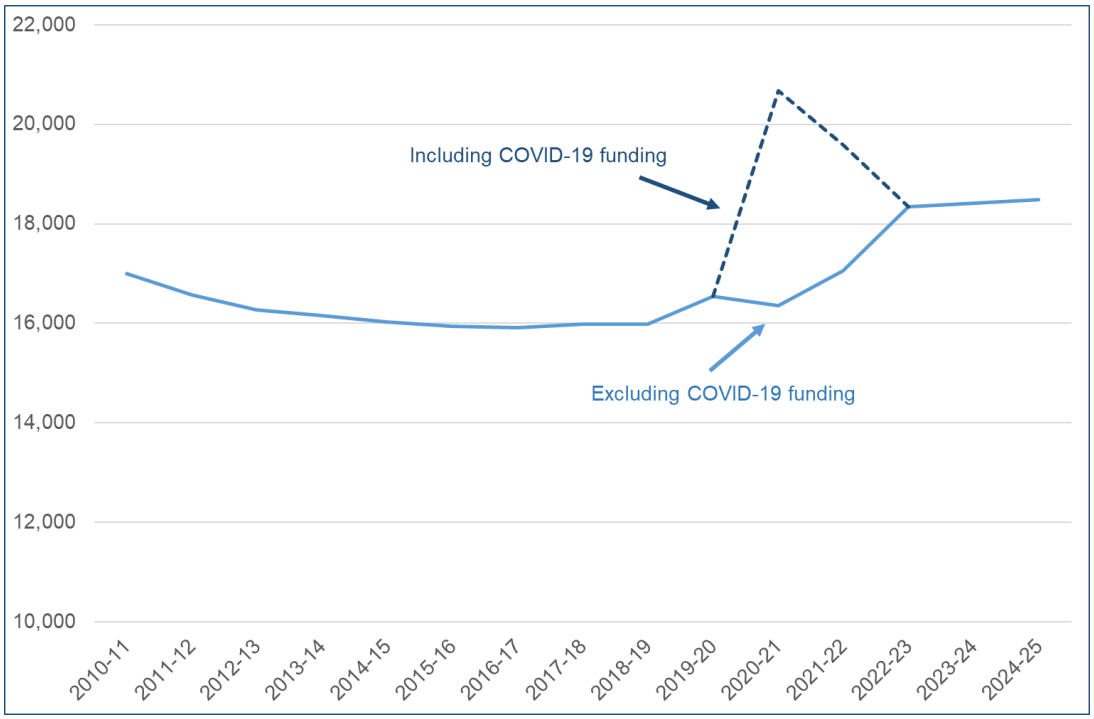
Wales - fiscal prospects over the budget period

The UK Government's October budget and spending review provided details of the Welsh Government's funding for 2022-23 to 2024-25. As a result of the additional discretionary spending noted in the section above, the backdrop for the Welsh Government's Budget is less bleak than previously expected. The core resource budget increases by £1.8 billion in 2022-23 and then by around £0.5 billion and £0.4 billion in 2023-24 and 2024-25.

There is a substantial increase in 2022-23 relative to core funding in 2021-22. However the picture looks very different if COVID funding is included in the current year. Relative to total funding in 2021-22, the resource budget falls by around £0.7 billion.

Relative to core funding in 2021-22, the resource budget grows on average by 3% a year in real terms over the 3 years covered by the Welsh Government's budget. As shown in chart 18, almost all of that growth happens in the first year.

Chart 18: Welsh Government Resource Budget in real terms (£m, 2020-21 prices[25])

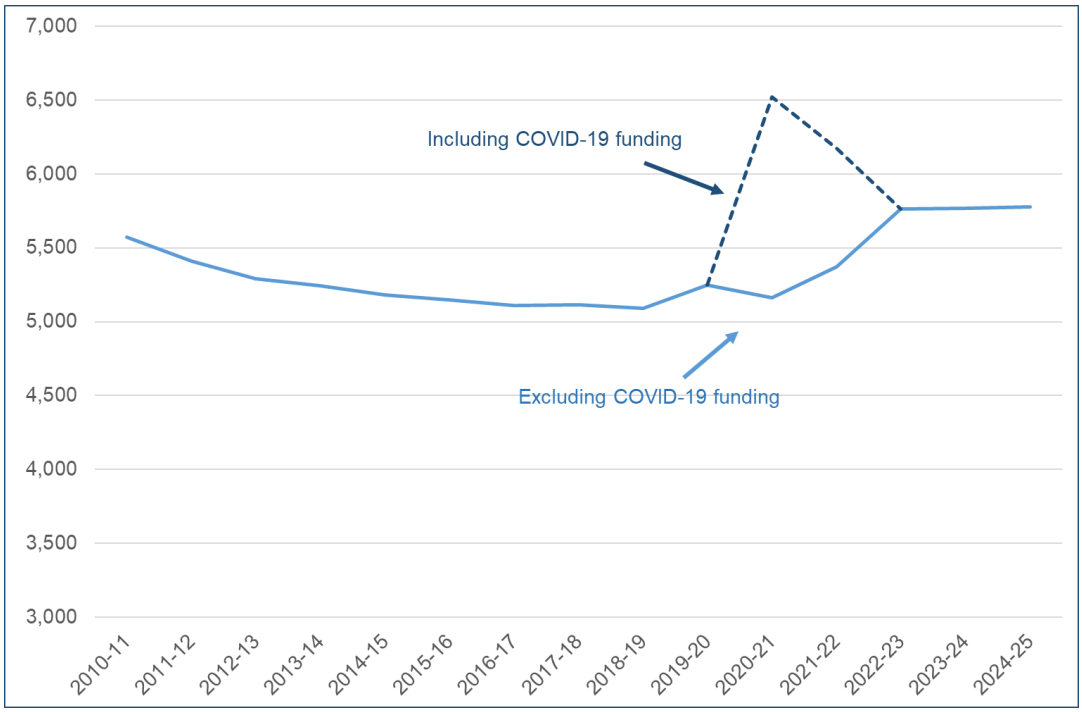


Source: Welsh Government

Chart 19 shows the same resource budget figures as chart 18, but on a per person basis. Having fallen by around 9% in real terms during the last decade, the budget in 2022-23 is a little higher per person than in 2010-11. However, it barely grows in 2023-24 and 2024-25.

[25] Excludes farm support funding as not included in years before 2020-21.

Chart 19: Welsh Government Resource Budget in real terms per person (£, 2020-21 prices)



Source: Welsh Government

UK - Longer term fiscal prospects

Longer term fiscal prospects reflect in part expectations about future economic trends, which are discussed above.

The OBR *Fiscal Sustainability Report*, as the title suggests, reviews the UK's long run fiscal pressures. The most recent report was published in July 2020, with the following key conclusions[26]:

- The UK's fiscal position is unsustainable over the long term without significant tax rises (or a reduction in spending obligations) mainly as a result of pressures on the cost of delivering public services.
- The key drivers of increases in the cost of public services are an aging population (which drives mainly pension costs but also social care) and relative cost increases in the provision of health (which is much more important for health care costs than population ageing).

The UK public finances have experienced a very sharp shock as a result of the pandemic and public sector net debt is now expected to be nearly 100% of GDP for the next few years.

[26] https://obr.uk/fsr/fiscal-sustainability-report-july-2020/

This is one of the three sources of potentially very large fiscal risk which the OBR focuses on in its latest *Fiscal Risks Report*[27]. As it notes, higher post-pandemic government debt, combined with a shorter effective debt maturity as a by-product of quantitative easing, leaves the UK's public finances more exposed, and more quickly, to increases in interest rates. It also notes that inflation is no longer a very effective way to reduce the debt-to-GDP ratio, reflecting both the shortening of the effective maturity of public debt and the relatively high proportion of index-linked debt in the UK.

The other two areas of focus in that report are the pandemic and climate change. As discussed above, the OBR's latest assessment of the long term scarring impact of the pandemic is 2% of GDP, revised down from 3% in March. The short to medium term increases in discretionary spending described above also address some of expenditure pressures highlighted as risks by the OBR.

In relation to climate change, the OBR assesses the public costs of getting to net zero by 2050 as "significant but not exceptional". However, under one scenario considered by the OBR, there could be an increase in public sector net debt of 20% of GDP by 2050 (but relatively little impact over the next decade).

It should be noted that decarbonisation does not always imply additional spending. Some of the costs may be integrated into existing capital programmes and budgets, although it may also require reprioritisation of existing spending, particularly stopping or reducing expenditure in areas which increase carbon emissions over the long term.

Under the OBR's assessment, the potential longer run impact on the public finances is dominated by three elements: the loss of road fuel duties; the consequences of possible future government choices to fund a large part of the cost of decarbonising building heating; potentially, the cost of government funding greenhouse gas removal from the atmosphere if needed to offset continuing emissions in some hard to decarbonise sectors.

To make its assessment, the OBR has to make various assumptions about future policy choices in these areas, with the increase in public sector debt resulting in particular from choices not to replace lost fuel duties with other sources of revenue and for government to meet a large part of the cost of decarbonising building heating.

Future choices in these areas are of course at present unknown and the former choice may seem – arguably – unlikely to be the one that is made in practice.

In so far as decarbonisation results in higher energy costs than otherwise (as appears likely), it seems inevitable that there will be adverse distributional consequences, as energy costs typically account for a higher share of incomes for people with lower levels of income[28]. Such effects could in principle be offset either

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[27] Fiscal risks report – July 2021 - Office for Budget Responsibility (obr.uk)

[28] The UK Governments' recent Net Zero Review also finds that there is likely to be large variation in exposure to energy costs within income groups: Policy paper overview: Net Zero Review Final Report - GOV.UK (www.gov.uk)

through the tax and benefits system or through the redesign of tariff structures, with differing implications for the public finances.

Effective mitigation of climate change will reduce, but of course not eliminate, the need to fund adaptation, most notably in respect of the consequences of increased rainfall and sea level rise[29]. Many flood defence schemes already have a strong case in terms of value for money, and the case for such projects will be further strengthened[30].

In all of these areas, policy choices made by the UK Government will have implications for levels of spending in devolved areas, and hence for the consequentials received by the Welsh Government.

Welsh longer-term fiscal prospects – 2025-26 onwards

The longer-term projections shown in Chart 20 use the budget plans illustrated above as a starting point. For 2025-26 and 2026-27 they use the assumed growth in overall UK resource DEL from the OBR's October forecast to grow the Welsh Government DEL, together with the devolved tax forecasts from the OBR's *Welsh Taxes Outlook* published alongside the Welsh Government's draft Budget. Three scenarios are then considered for the period from 2027-28 to 2032-33.

Scenario one: OBR "demand-based" spending projections

- Based on the OBR's central projections for relevant non-interest, non-benefit spending from the 2020 Fiscal Sustainability Report. UK Government spending relevant to block grant funding grows a little over 1% a year faster than GDP, reflecting increased demand from factors such as an ageing population and increases in the real costs of providing health and care. The OBR states that spending under this scenario would be unsustainable under current taxation policies.

Scenario two: Growth in line with GDP

- UK Government spending relevant to Welsh Government block grant funding for day-to-day spending grows at the same pace as the UK economy. This level of spending might be considered more affordable than that implied by the first scenario by a UK Government unwilling to increase the share of national income taken in taxation.

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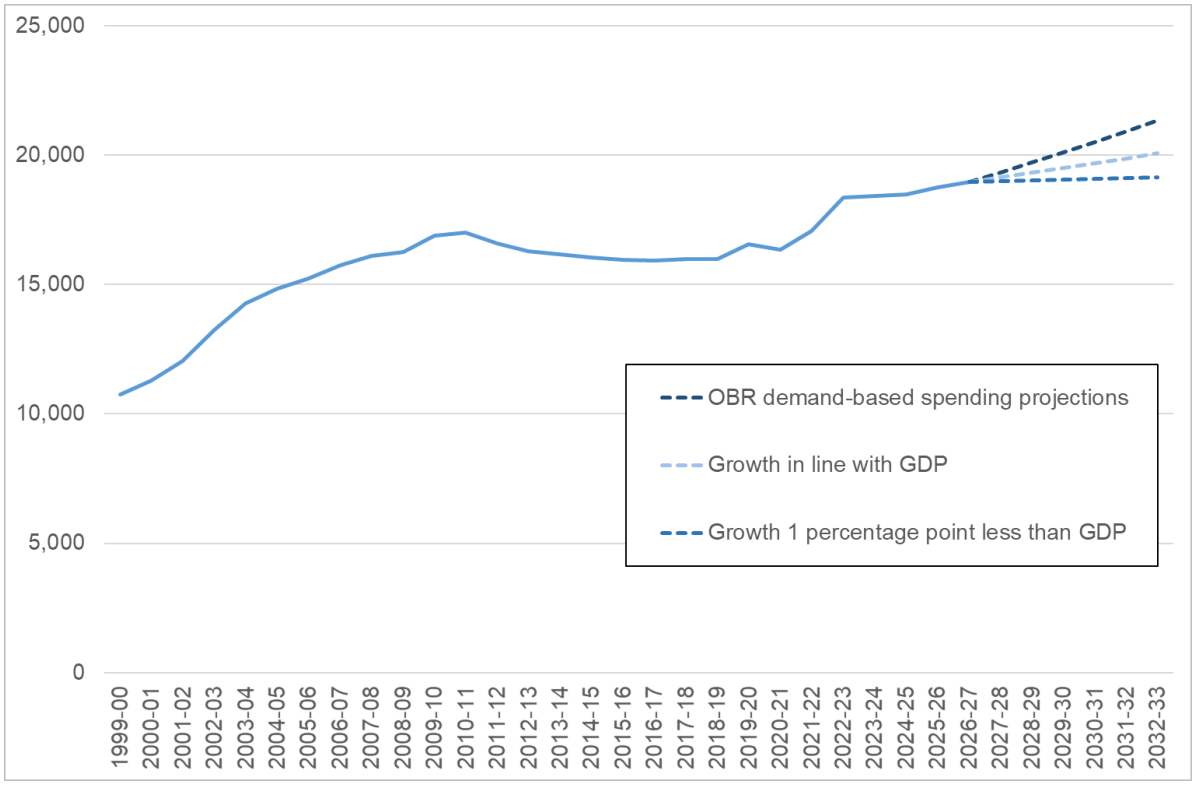
[29] The IPCC judges that extreme weather events, particularly high temperatures and precipitation, have become more common and predicts further increases in future. However, the European Environment Agency indicator of economic losses attributable to climate and weather events across Europe (including the UK) is highly volatile and, although increasing, does not indicate a strong trend over the period since 1980. It should be noted that the losses are expressed in real terms but not "normalised" to account for greater exposure due to increases in population and property values; the result of such normalisation would be to reduce the measure of losses over time.
Economic losses from climate-related extremes in Europe (europa.eu)

[30] Over the last few years, Welsh Government expenditure on flood and coastal protection has averaged over £70 million a year, a figure which suggests costs in Wales, while large, appear manageable.

Scenario three: Growth one percentage point less than GDP

- Relevant UK Government spending grows one percentage point slower than the UK economy, perhaps reflecting a scenario where there are demands to reduce debt more rapidly or other elements of UK spending – such as pensions or debt interest – are growing more quickly.

Chart 20: Long-Term Projections for Welsh Government Day to Day Spending (resource budget excluding COVID-19) in real terms, under three scenarios (£m, 2020-21 prices)



Source: Welsh Government

The two years beyond the current budget period, see slightly faster growth than 2023-24 and 2024-25. The demand-led scenario then has the Welsh Government resource budget growing faster again over the remainder of the projection, but not as fast as during the 2000s. Given the OBR's conclusion that this level of spending growth is unsustainable without tax increases, this scenario may well be regarded as implausibly optimistic.

The middle scenario of growth in line with GDP would continue the trend in the overall UK DEL figures for 2025-26 and 2026-27.

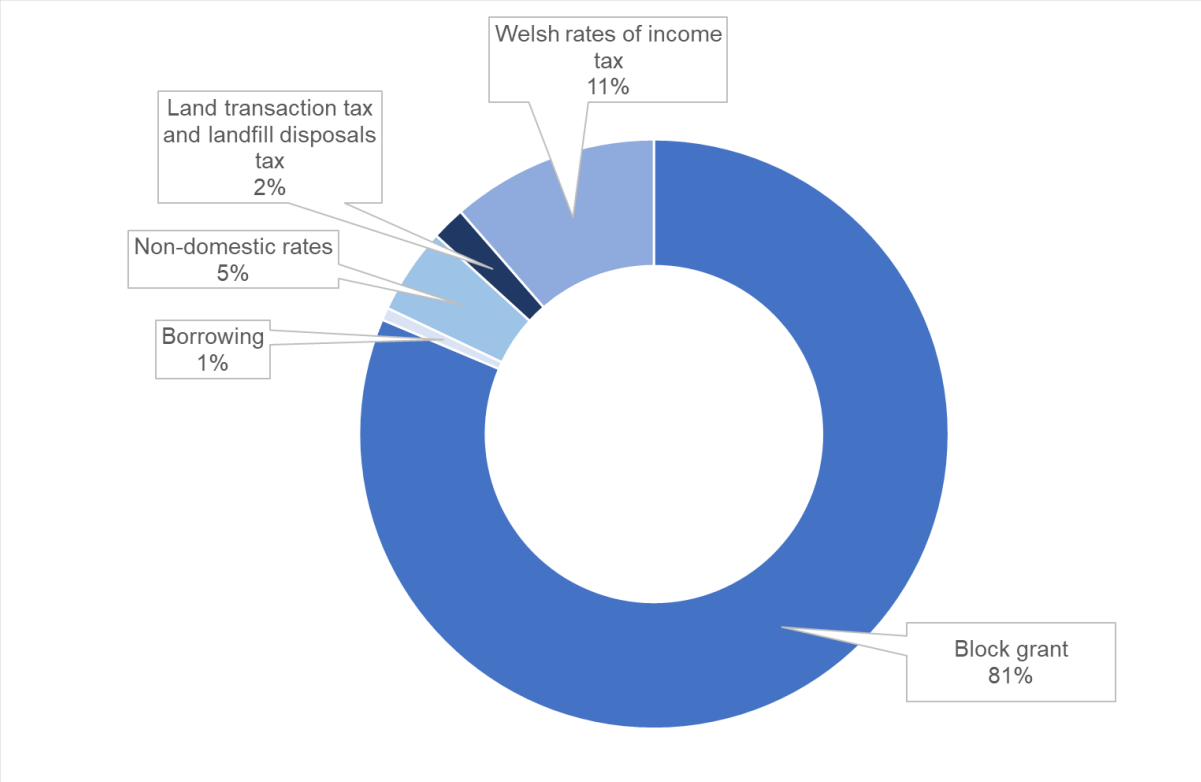
The lower scenario would see the Welsh Government resource budget broadly flat in real terms, much like 2023-24 and 2024-25.

Welsh tax revenues

As a result of tax devolution, around 80% of Welsh Government funding is now derived from the block grant (see Chart 21). Funding from tax revenues is a source

of risk in the Welsh Government budget and links funding to the performance of Welsh devolved taxes relative to their UK equivalents.

Chart 21: Financing of Welsh Government Draft Budget 2022-23

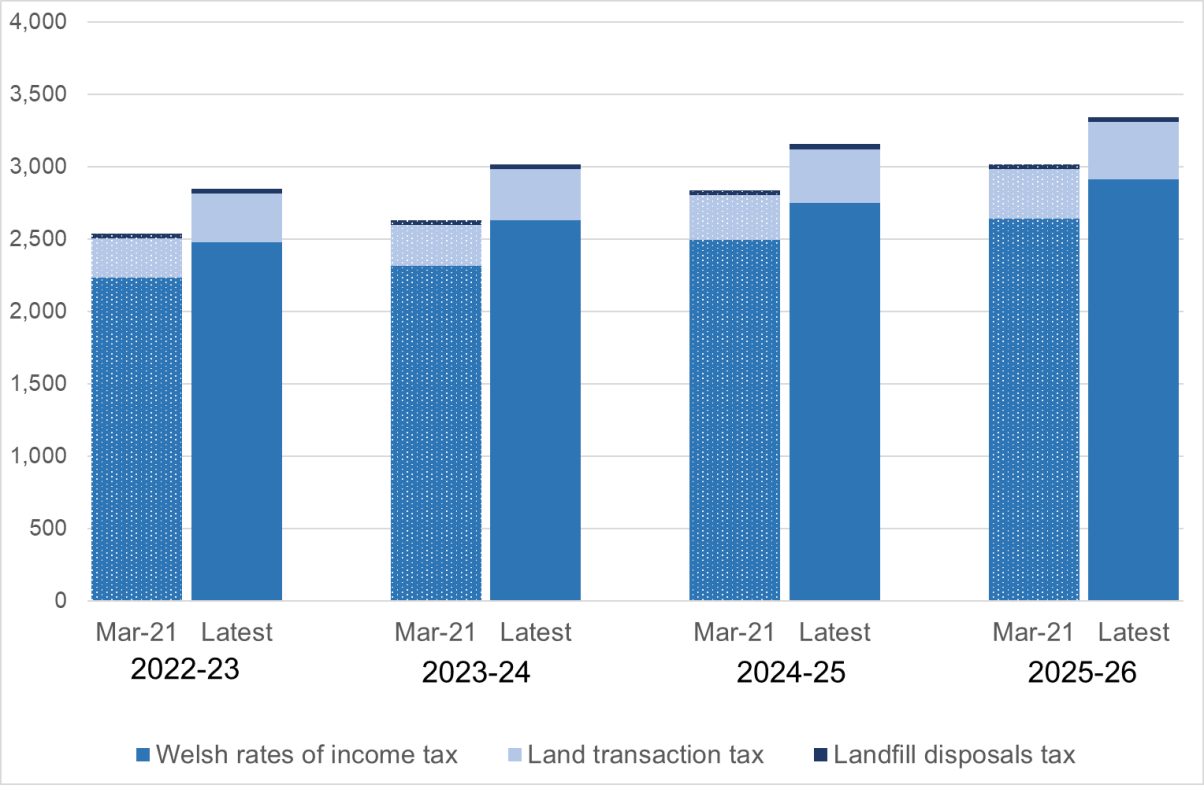


Source: Welsh Government

The OBR's Economic and Fiscal Outlook accompanying the UK Government's October Budget and Spending Review included new forecasts for the devolved taxes and for the UK taxes which are used to derive the block grant adjustments. Updated revenue forecasts for the fully devolved taxes and further detail is included in the OBR's Welsh Taxes Outlook published alongside the Welsh Government's draft budget.

The latest forecasts show higher revenues across all devolved taxes compared to the OBR's March forecast (chart 22). This is in keeping with the better outlook for the economy in general compared to expectations earlier in the year. Overall the devolved revenues are up by over £300m each year from 2022-23.

Chart 22: Devolved tax forecasts (£ million)



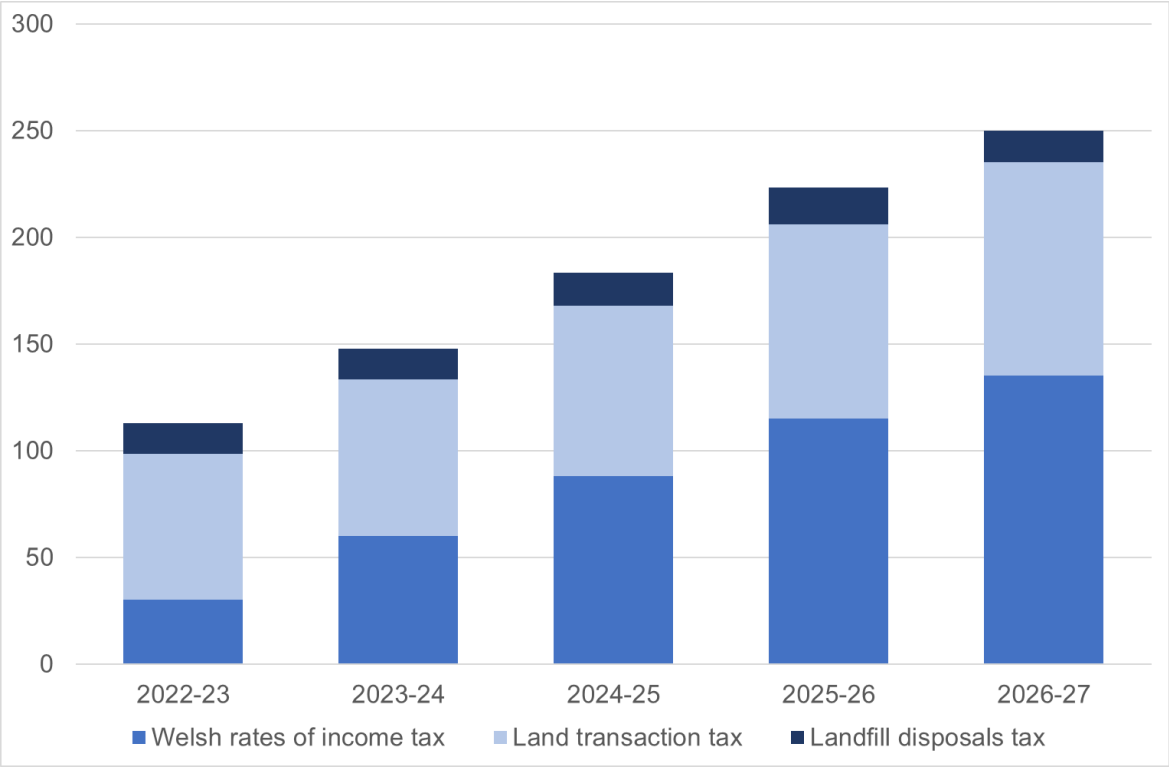
Source: OBR

The forecasts for UK equivalent taxes are also up relative to March. These affect the block grant adjustments applied to the Welsh Government's funding and mean that the net impact of the new forecasts on the Welsh Government budget is smaller than the increase in devolved revenues shown above.

The net position between the devolved taxes and the associated block grant adjustment is shown in chart 23. Over the years covered by the Welsh Government draft budget, it shows the net impact increasing from £110m in 2022-23 to £180m in 2024-25. The impact increases further in the last two years of the forecast. The gap is driven in part by policy choices, for example land transaction tax has a higher rate on additional properties than the UK Government's stamp duty land tax. In addition the freeze on the income tax personal allowance has a greater proportional impact on revenues in Wales than elsewhere.

For budget purposes, the WRIT block grant adjustment and the WRIT revenue forecast for 2022-23 are now fixed. There will be a reconciliation adjustment once the outturn data is published. The first set of WRIT outturn information for 2019-20 was published this summer and was close to recent forecasts. Outturn information for 2020-21 will be published next summer and will lead to a reconciliation adjustment applied to the 2023-24 budget. The charts here and the draft budget arithmetic take no account of projected reconciliation adjustments based on current forecasts.

Chart 23: net position between devolved tax forecasts and block grant adjustments (£ million)



Source OBR and WG calculations

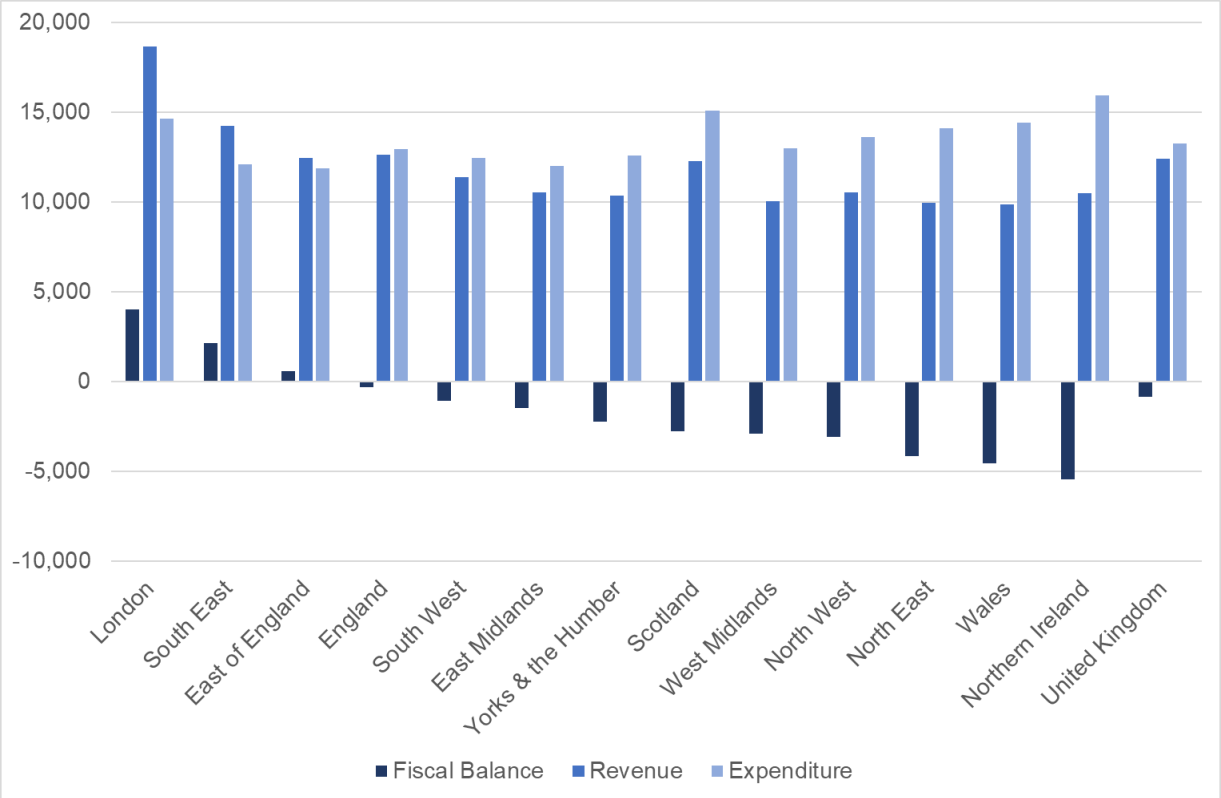
Fiscal balance

Chart 24 shows the fiscal balance for Wales and other UK countries and English regions. A negative balance indicates expenditure higher than revenues.

Public expenditure per head is higher in Wales than in most other UK countries and English regions. Generally the level of expenditure in different areas reflects the relative age structures and other indicators of need. Expenditure per head is higher in Scotland and London for other reasons.

Tax revenue per head in Wales is lower than any other UK country or English region, though only a little below the level in the North East and the West Midlands. The underlying weakness of the tax base in Wales again reflects demographic factors, but also the relatively small number of high income earners in Wales, both of which are reflected in Welsh relative performance on GDP.

Chart 24: Fiscal balance per person (£), 2019-20



Source: ONS
Notes: North Sea oil and gas revenues allocated on geographic basis

The large gap between revenue and expenditure for Wales represents a major transfer to Welsh people through the UK fiscal system, and this transfer is the main reason for the gap shown between measures of household income and GDP in Wales as discussed above. This reliance on fiscal transfers obviously represents a key risk to Welsh living standards.

As noted above, demographic change further adds to the longer term economic and fiscal risks facing Wales.

Under the current fiscal arrangements, Wales has considerable, but not complete, protection from apparently adverse movements in population – indeed, in some circumstances, such movements could have beneficial effects over the shorter term (as the block grant contains a large base which would be rolled forward, and "shared" across a population that would be smaller than otherwise).

However, under potentially different future fiscal arrangements, a weakness in the tax base resulting from demographic change could be a much greater liability.

While many of the factors determining future population levels are driven by factors that are hard to influence, the increased potential for remote economic activity, including remote working, coupled with the high level of amenity in Wales, provides scope for policies to address relative population decline in Wales. Measures that increase the attractiveness of Wales as location could help to retain and attract people, including returnees.