

# The Wellbeing Economy Monitor

June 2022

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## Ministerial foreword

Wellbeing is at the heart of our national purpose as a country, underpinning our National Performance Framework and reflected in our national outcomes and indicators. Economic activity should serve that purpose as a means to deliver improved health and wellbeing.



Our vision for Scotland is to create a wellbeing economy – an economic system that places the wellbeing of current and future generations at its core. Scotland is already leading the way on this work as a founding member of the international Wellbeing Economy Governments network, WEGo.

The National Strategy for Economic Transformation commits us to taking a broader view of what it means to be a successful economy, society and country, looking beyond traditional attitudes and measures of prosperity such as GDP, and putting people and the environment at the heart of our economy.

While we acknowledge that traditional economic metrics remain internationally recognised and we will continue to produce them, they cannot and should not be viewed in isolation. Our Wellbeing Economy Monitor has been developed to look beyond GDP to measure how Scotland's economy contributes to improving things that people really value, such as health, equality, fair work and environmental sustainability.

The data contained in this Wellbeing Economy Monitor will be used alongside our National Performance Framework to guide our future economic decision making, helping us to deliver a just transition to a net zero, nature-positive, circular, wellbeing

economy based on the principles of equality, sustainability, prosperity and resilience.

I want to take this opportunity to thank those who have informed the development of this monitor, and I welcome further feedback as we work to realise our vision for a wellbeing economy in Scotland.

A handwritten signature in black ink, appearing to read 'Kate Forbes', written in a cursive style.

**Kate Forbes MSP**  
**Cabinet Secretary for Finance and the Economy**

## **1. Purpose of the Monitor**

Our vision for Scotland, as set out in the [National Strategy for Economic Transformation](#), is to build a wellbeing economy: that is, an economic system with the collective wellbeing of current and future generations, within environmental limits, at its heart.

We have developed this initial Wellbeing Economy Monitor to provide a baseline for assessing progress towards the development of a wellbeing economy in Scotland. It complements the monitoring of societal wellbeing outcomes in the [National Performance Framework](#) (Scotland's Wellbeing Framework), by focusing on the key areas where the economy and economic policy contribute to those outcomes, in particular in those areas which influence the wellbeing of future generations.

This provides a starting point for more work on measurement of the wellbeing economy. We aim to build on this by continuing to maintain and refine the data presented at a national level and to complement this with a framework and tools to support analysis of wellbeing economies at more local levels.

## **2. Framework for the Monitor**

The causal relationships between issues such as employment, health and environmental sustainability are highly complex.

There are a range of approaches to capturing the various domains which are relevant to collective wellbeing. For example, the OECD maintains the Better Life Index, which allows users to compare countries across 11 topics the OECD has identified as essential, in the areas of material living conditions and quality of life.

The well-established four capitals approach gives us a simplifying framework. It tells us that maintaining, investing in and sustaining our stocks of natural, human, social and produced/financial “capitals” – or resources - will enable our long-term progress towards collective wellbeing. By focusing on future as well as current wellbeing, this set of measures also provides a rounded picture of the resilience of the economy.

The four capitals approach was explained in [Towards a Robust, Resilient Wellbeing Economy for Scotland: Report of the Advisory Group on Economic Recovery](#). In that report the four capitals were labelled environment, people, community and business. For the purposes of the Wellbeing Economy Monitor, we have used slightly different names for the four capitals but the meaning remains the same. The Advisory Group’s description is summarised in the figure below:



Figure 1: Advisory Group for Economic Recovery Four Capitals representation

### 3. Indicator selection

The indicators under each of the four capitals were selected according to the following criteria:

- **Relevance:** There must be a clear relationship between the indicator and type of asset (natural, human, social or produced/financial capital).
- **Validity:** The indicator must measure what it is supposed to measure.
- **Distinctiveness:** The indicator must not measure something already captured under other indicators.
- **Practicality:** The indicator must provide value for money and it must be feasible and affordable to obtain data. In practice this means that most of the indicators are drawn from the National Performance Framework.
- **Clarity:** The indicator must be straightforward to interpret.
- **Credibility:** The indicator must be based upon impartial, reliable data that is precise enough to show change over time.
- **Comparability:** There must be enough available data for the indicator to be able to draw comparisons over time, and ideally with other Wellbeing Economy Government group members.

### 4. Summary of the data

The data gives us a mixed picture. Greenhouse gas emissions per capita, marine and terrestrial abundance, relative poverty, preventable death rates, the gender pay gap and the proportion

of employees earning less than the living wage are all broadly falling over the periods covered in this document. Meanwhile, terrestrial occupancy, young people's participation and investment are increasing.

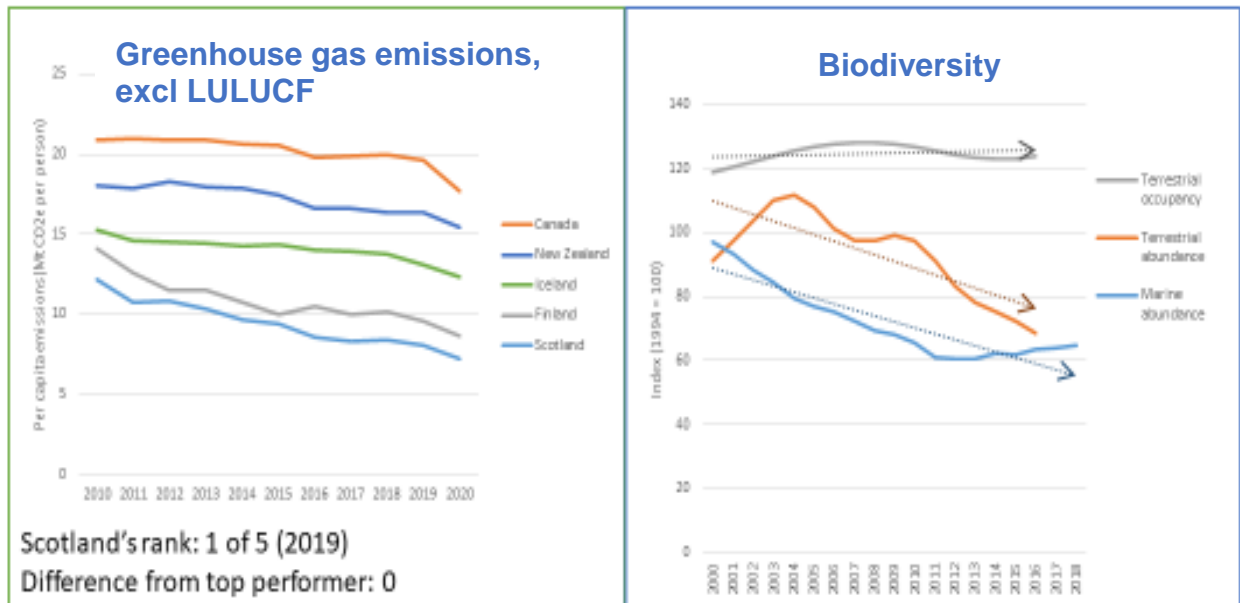
## **5. Next steps**

We will work with stakeholders and public bodies to maintain and further develop the Monitor.

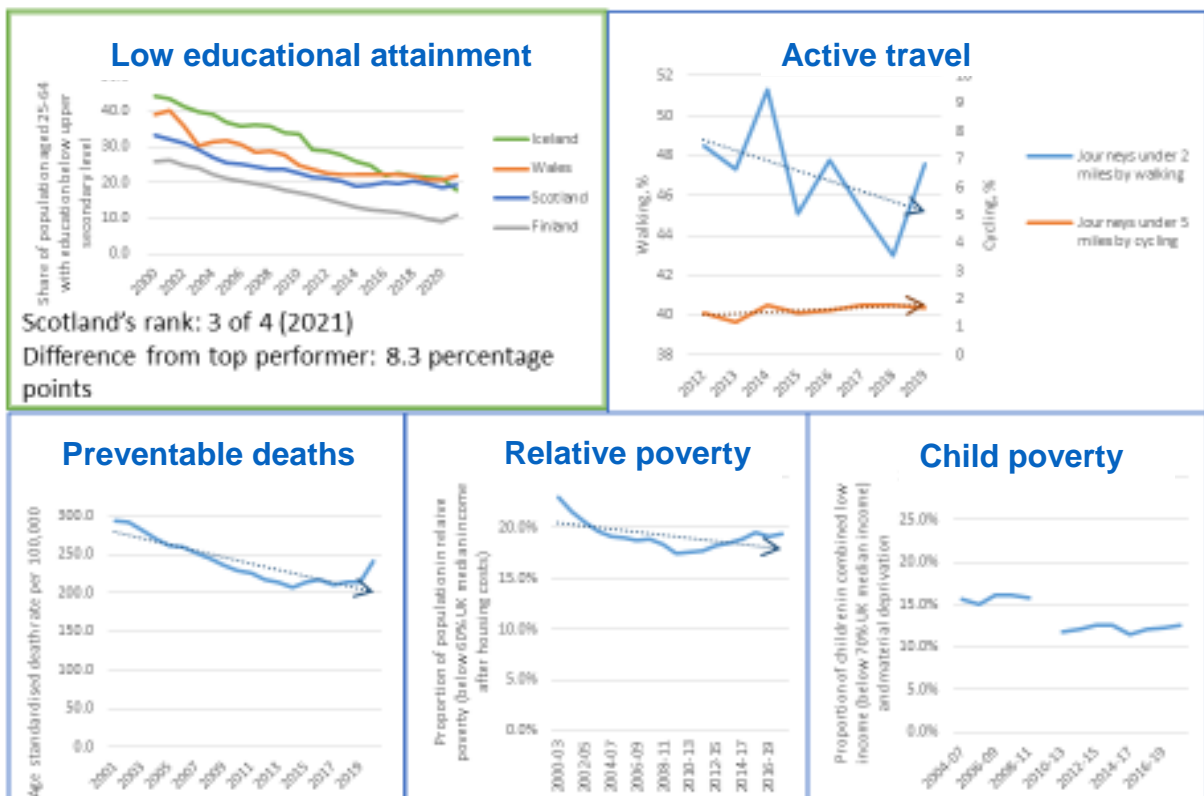
We will develop tools to support other economic development actors, such as local authorities, to integrate a wellbeing economy approach into their work.

## 6. The Monitor

### Natural capital

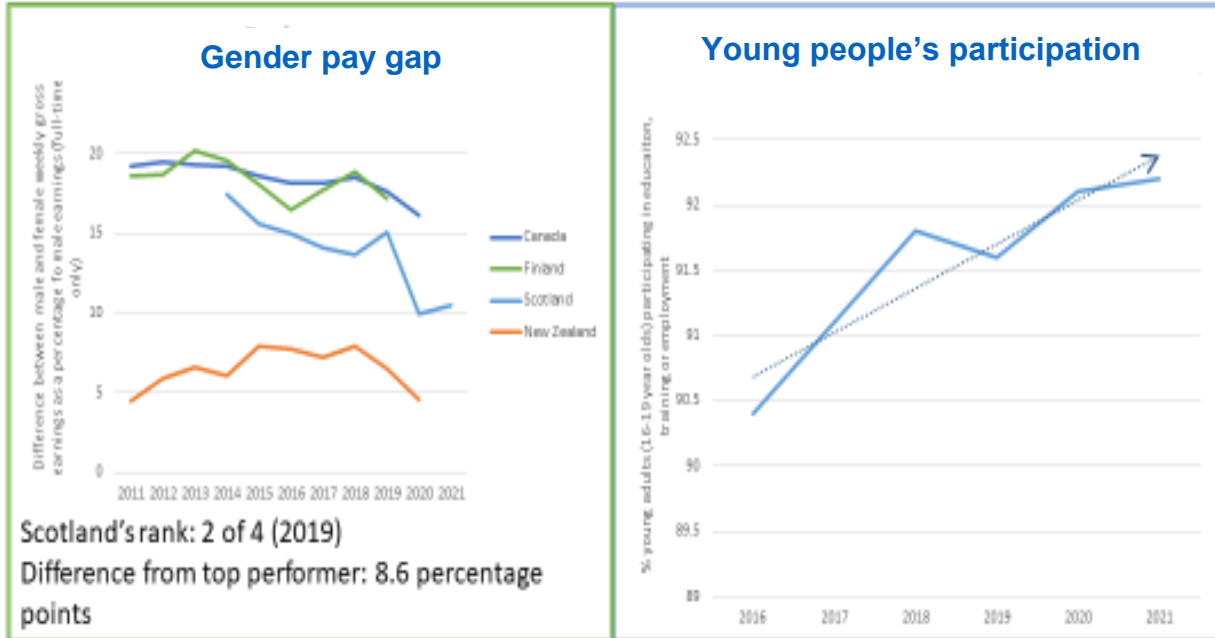


### Human capital

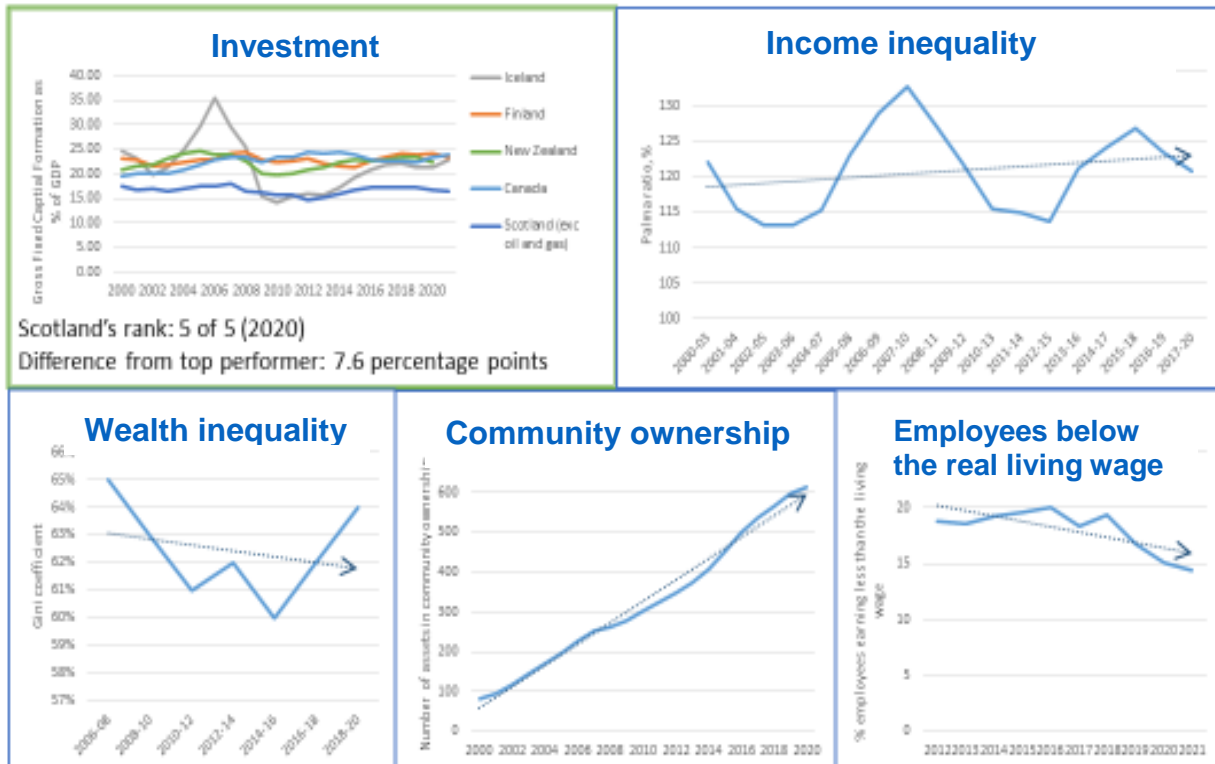




## Social capital



## Produced and financial capital



## Technical notes:

Where possible, comparisons have been provided between Scotland and the other participant countries of the [Wellbeing Economy Governments \(WEGo\)](#) group.

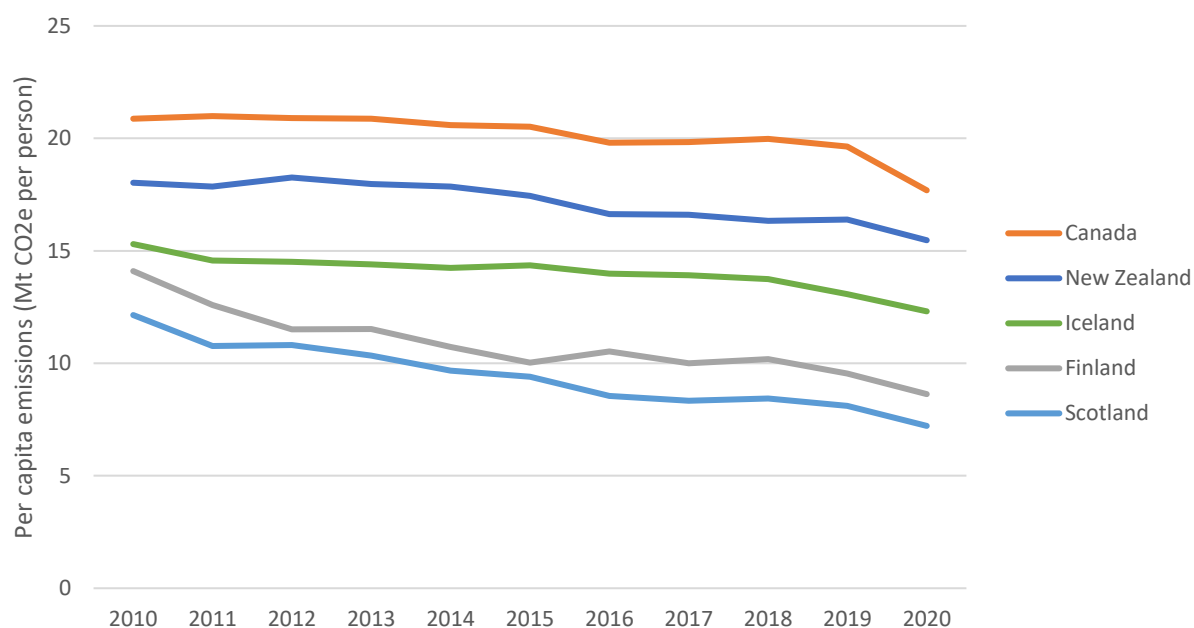
Data provided in this monitor is the latest available on 6 June 2022. It will be updated by 6 December 2022.

Time series have been presented from 2000 to the most recent period, where data availability allows. Linear trend lines have been added to time series to help illustrate the general direction of travel over the period. These do not constitute a forecast of future trends.

## 7. Charts in detail

### Natural capital

Figure 2: Greenhouse Gas emissions, excluding LULUCF

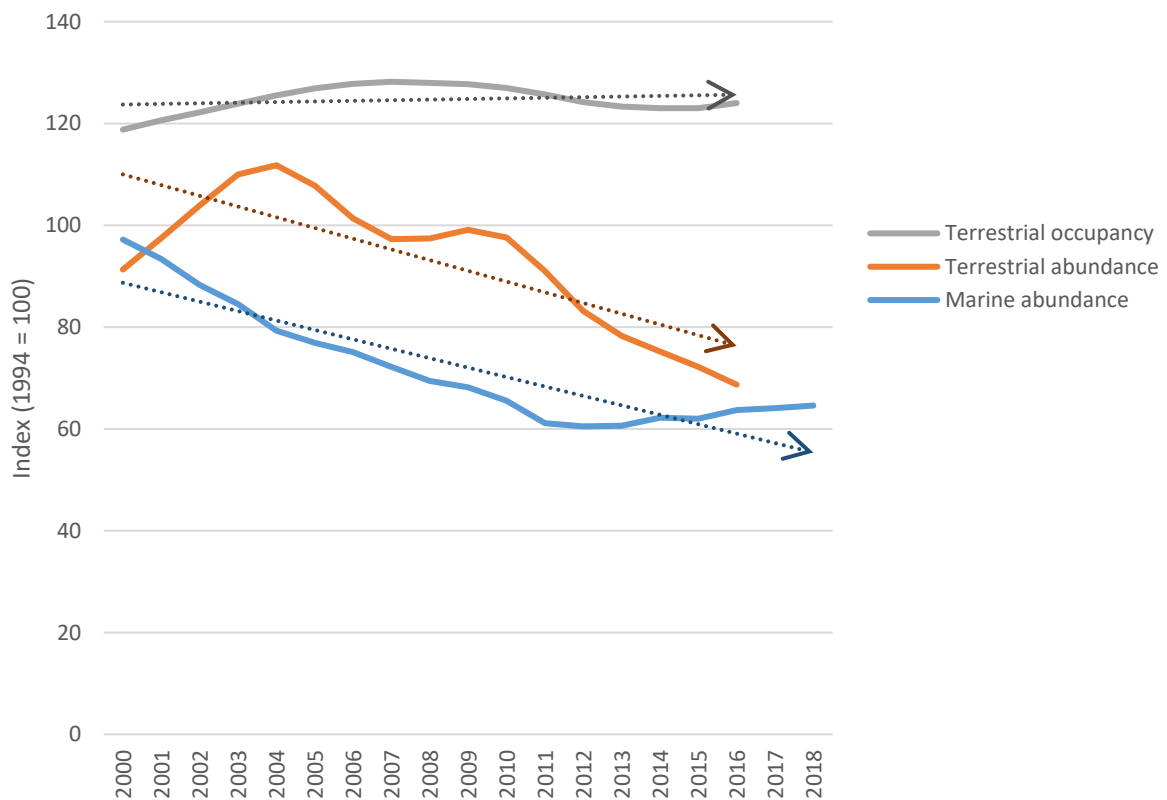


Source: [Scottish Greenhouse Gas Statistics 2020](#); [OECD](#)

Figure 2 shows greenhouse gas emissions per capita. For Scotland, this value has fallen from 12.1 Mt per capita in 2010 to 7.2 in 2020. Land use, land use change and forestry (LULUCF) emissions have been omitted from this comparison as Scotland has recently begun to include additional wetlands emissions in the Scottish Greenhouse Gas inventory, rendering any comparisons with other nations including LULUCF potentially misleading.

Scotland has a net zero emissions target date of 2045.

Figure 3: Biodiversity: marine and terrestrial



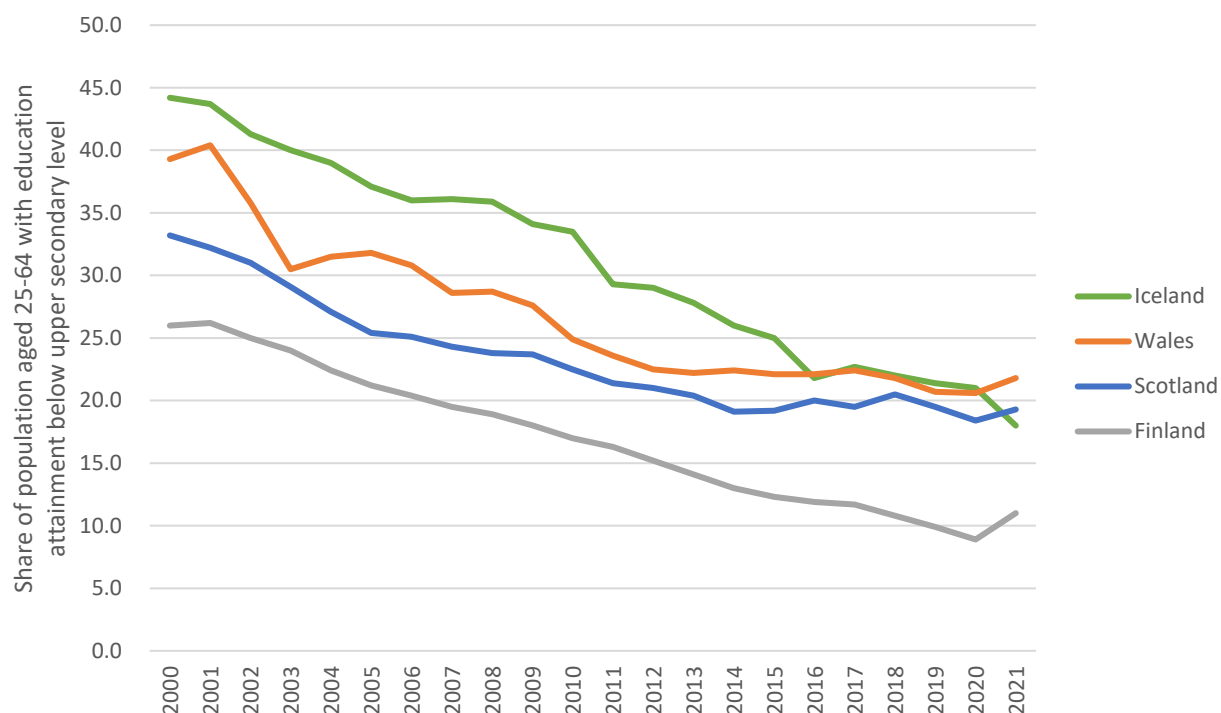
Source: [NatureScot](#)

Figure 3 shows the three metrics that compose Scotland’s biodiversity index. The marine abundance index fell from 2000 to 2012 before recovering slightly from 2012 to 2018. By 2018 it stood at 64.6% of the 1994 level. Between 2000 and 2004, the terrestrial abundance index was rising, but then fell

for most of the period from 2004 to 2016, when it reached 68.7% of the 1994 level. The terrestrial occupancy index rose from 118.8 to 124 over the period from 2000 to 2016.

## Human capital

Figure 4: Low educational attainment



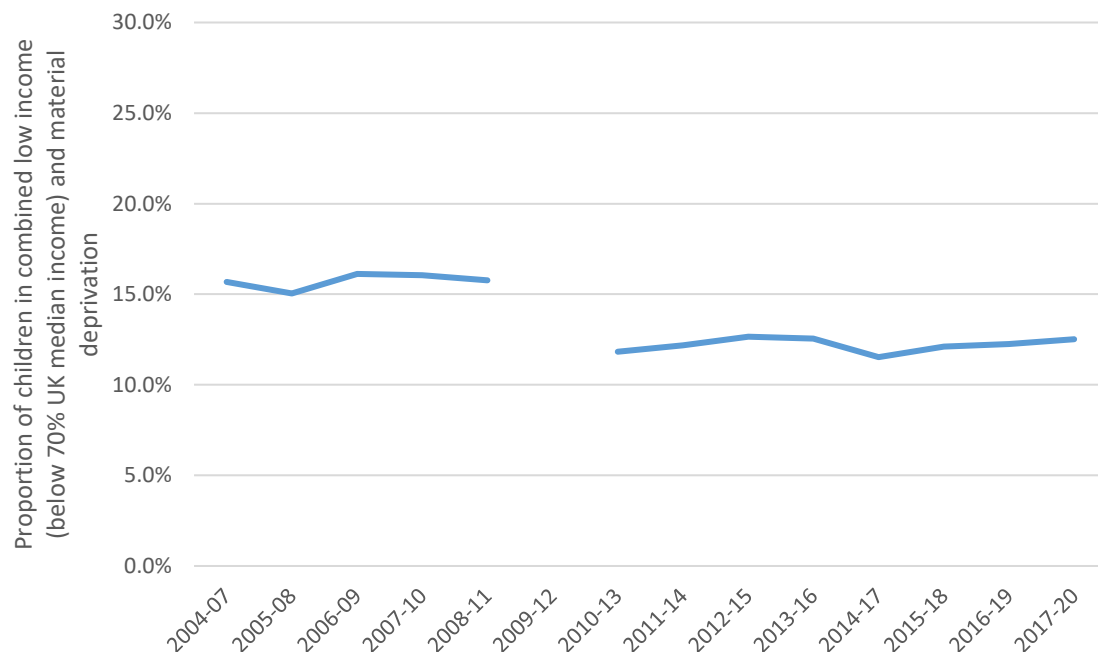
Source: [OECD](#)

Figure 4 shows the proportion of adults aged 25 to 64 with lower secondary education level educational attainment or less in Scotland, Finland, Iceland and Wales<sup>1</sup>. In 2021, the latest year for which we have comparable data, for Scotland this figure was 19.3%. This was higher than Finland (11.0%) and Iceland (18.0%) but lower than Wales (21.8%). This OECD measure is similar to the measure of low or no qualifications reported in the National performance Framework (NPF), however the OECD measure includes those who don't know

<sup>1</sup> Educational attainments are internationally standardised through the ISCED-2011 (<http://uis.unesco.org/en/topic/international-standard-classification-education-isced>).

their highest qualification level while they are not included in the NPF measure. There is also a further small difference in the qualifications included within both measures.

Figure 5: Child poverty



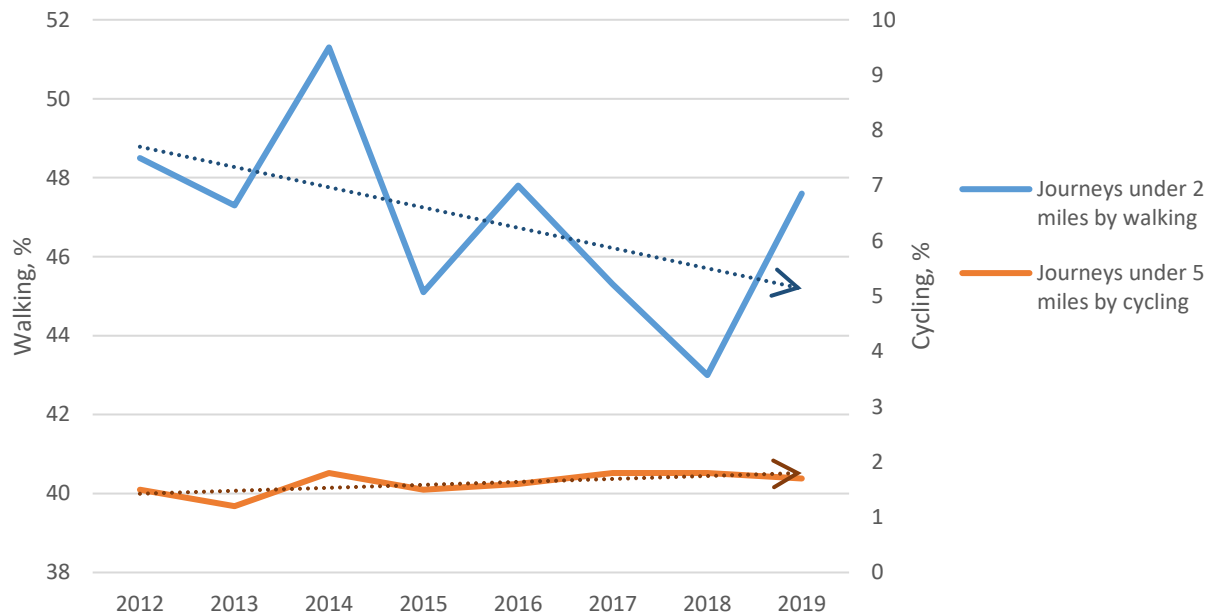
Source: [Poverty and Income Inequality in Scotland 2017-20](#)

Figure 5 shows the proportion of children in combined material deprivation and low income after housing costs (below 70% UK median income) has remained broadly stable over the period. Due to a change in methodology there is a break in the series.

The Child Poverty (Scotland) Act 2017 sets out targets to reduce the proportion of children in poverty by 2030. The targets state that by 2030, of children living in Scottish households: less than 10% should be living in relative poverty (how many families are on low incomes compared with middle income households); less than 5% should be living in absolute poverty (how many low income families are not seeing their living standards improving over time); less than 5% should be living with combined low income and material deprivation (how many lower income families cannot afford basic necessities);

less than 5% should be living in persistent poverty (how many families live on low incomes three years out of four).

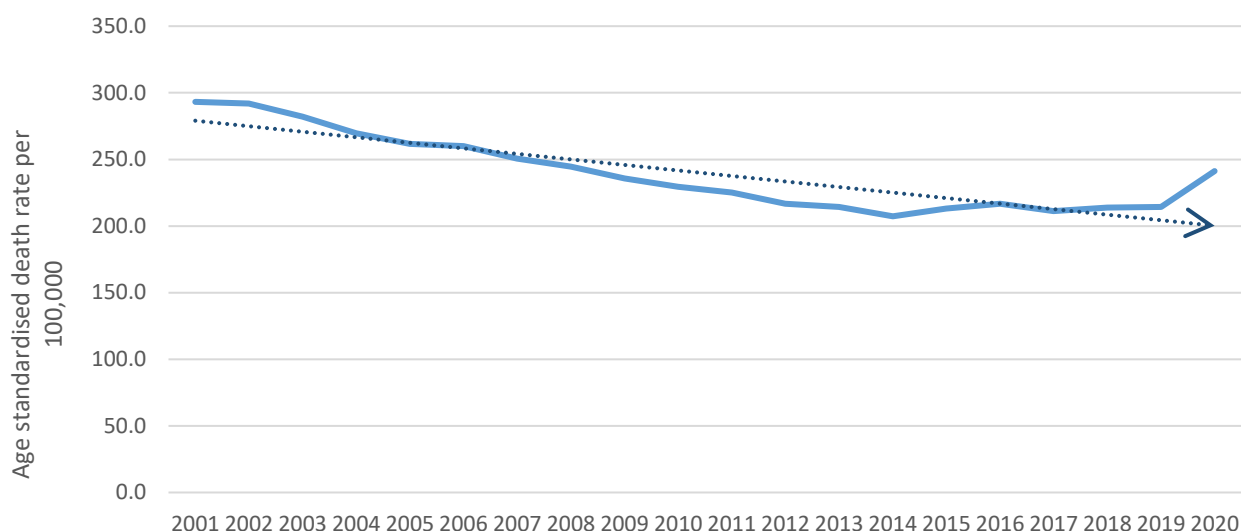
Figure 6: Active travel



Source: [Scottish Household Survey](#)

Figure 6 shows the proportion of short journeys taken by walking or cycling. For walking, the percentage of journeys under 2 miles was 48.5% in 2012. It has fluctuated between 43% and 51.3%. It was at 47.6% in 2019. The percentage of journeys under 5 miles taken by cycling has remained between 1.2% and 1.8% throughout the period from 2012 to 2019. It was 1.7% in 2019.

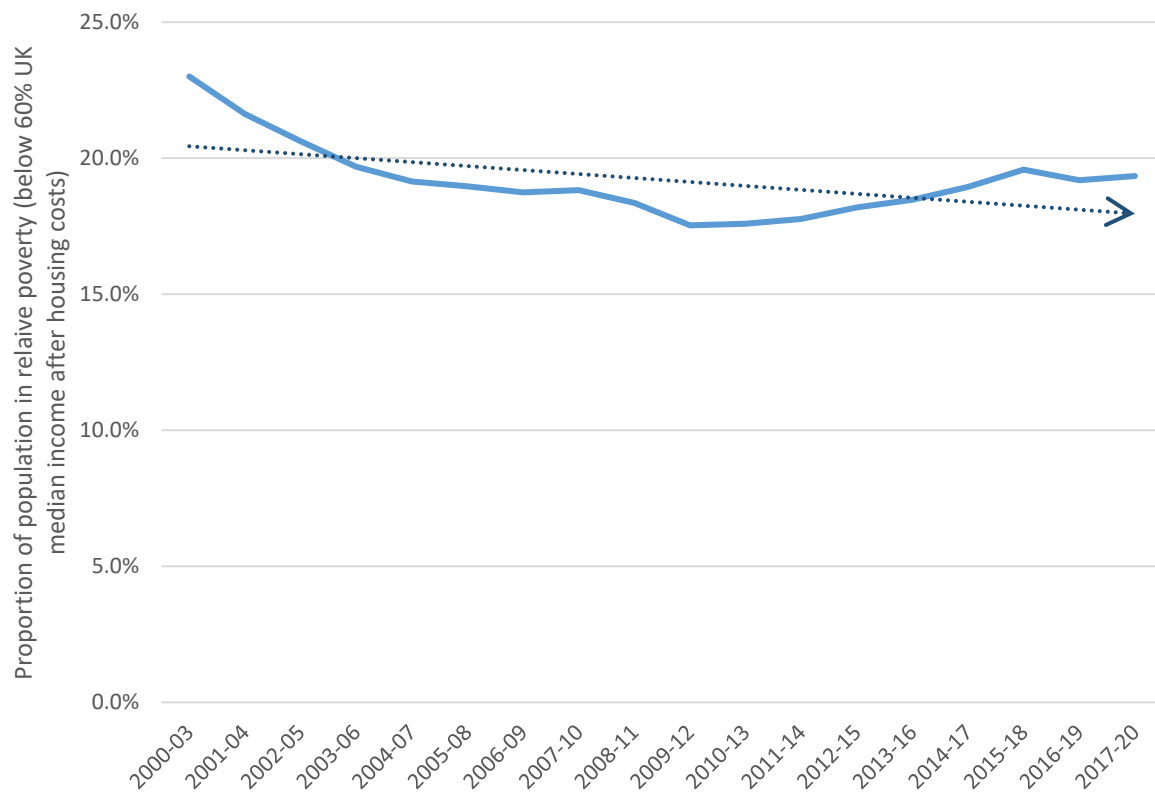
Figure 7: Preventable deaths



Source: [Avoidable mortality | National Records of Scotland](#)

Figure 7 shows that for preventable deaths, the age-standardised death rate per 100,000 in Scotland fell from 293.2 in 2001 to 207.3 in 2014. It remained relatively consistent over the years to 2019, but rose from 214.3 in 2019 to 241.3 in 2020. Note that the 2020 figure includes deaths from COVID-19 and illustrates that the increase in overall avoidable mortality in 2020 was largely due to the inclusion of COVID-19 as a preventable death by the OECD.

Figure 8: Relative poverty after housing costs



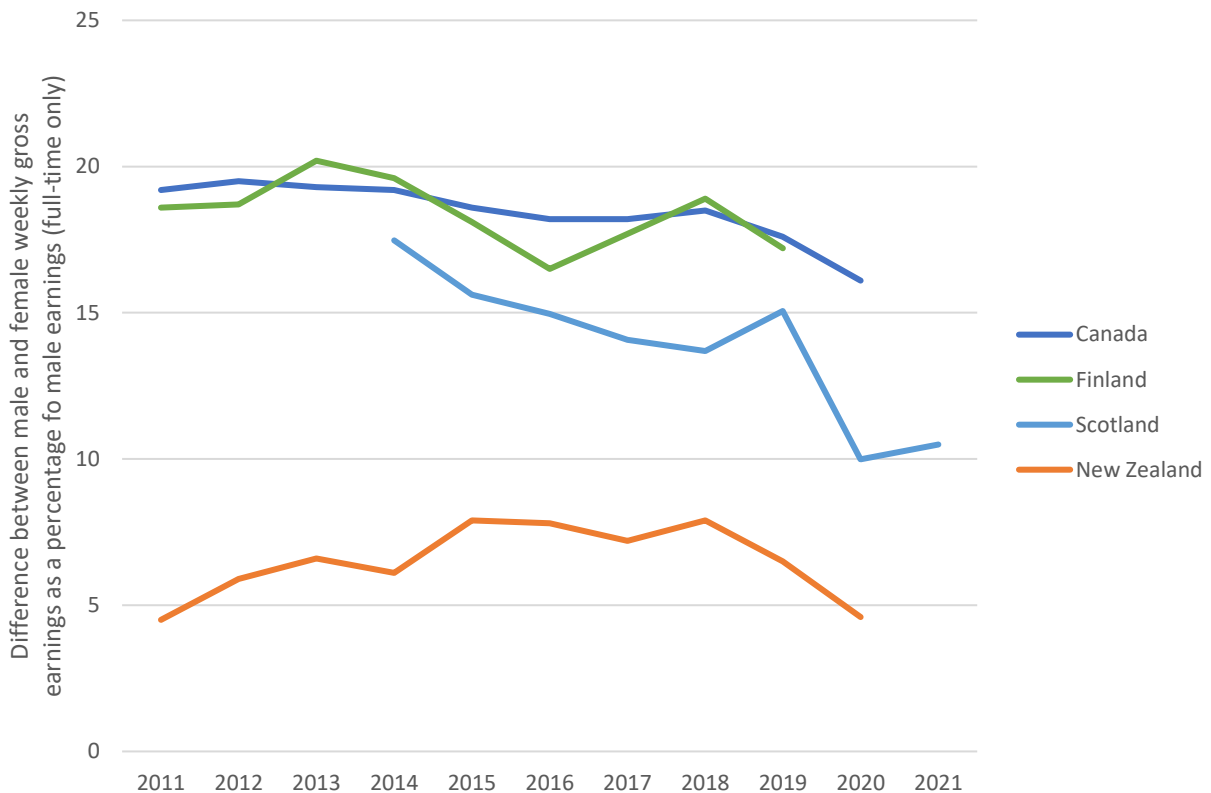
Source: [Poverty and Income Inequality in Scotland 2017-20](#)

Figure 8 shows the percentage of individuals living in private households with an equivalised income of less than 60% of the UK median after housing costs. This proportion had been falling slightly between the late nineties and the lowest point in this time series in 2009-12. After that, it started to rise again up until now, where the rise appears to have stopped.



## Social capital

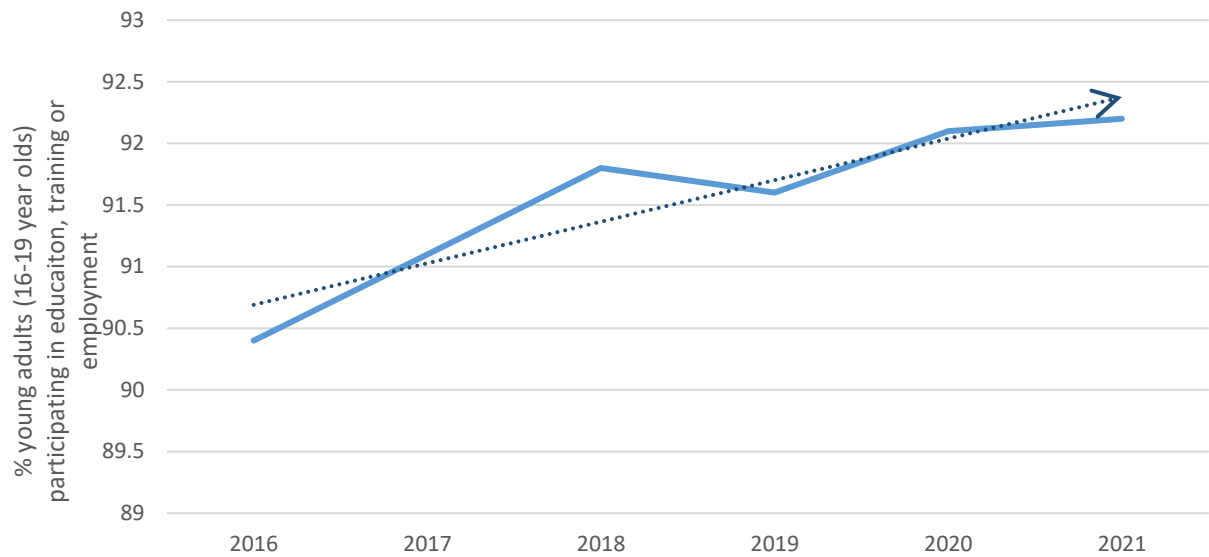
Figure 9: Gender Pay Gap



Source: [Annual survey of hours and earnings: 2021](#); [OECD](#)

Figure 9 shows the gender pay gap for full-time employees median gross weekly earnings in Scotland narrowing over the period from 2014 to 2021 overall, despite a slight increase from 10.0% in 2020 to 10.5% in 2021. Scotland's gender pay gap is seen to be larger than that of New Zealand but smaller than those in Canada and Finland throughout the period. Gender pay gaps are reported in Scotland's National Performance Framework in terms of gaps in hourly earnings. In this case weekly earnings have been used to allow international comparison.

Figure 10: Young people's participation

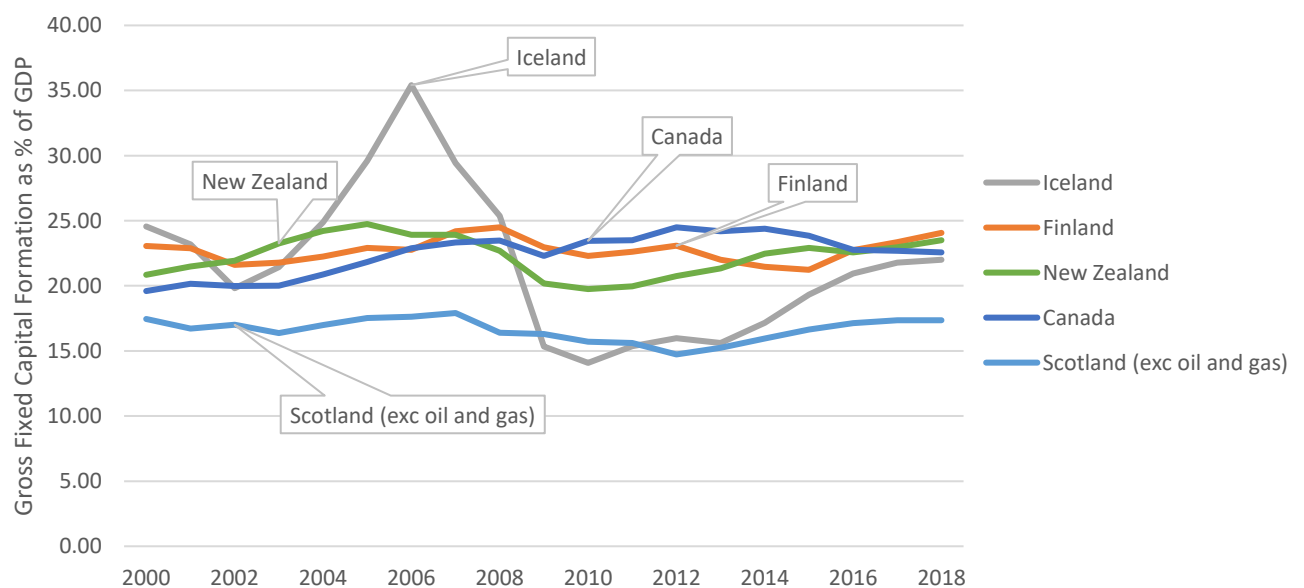


Source: [Annual Participation Measure | Skills Development Scotland](#)

Figure 10 shows the percentage of young adults (16-19 year olds) participating in education, training or employment rising from 90.4% in 2016 to 92.2% in 2021.

## Produced and financial capital

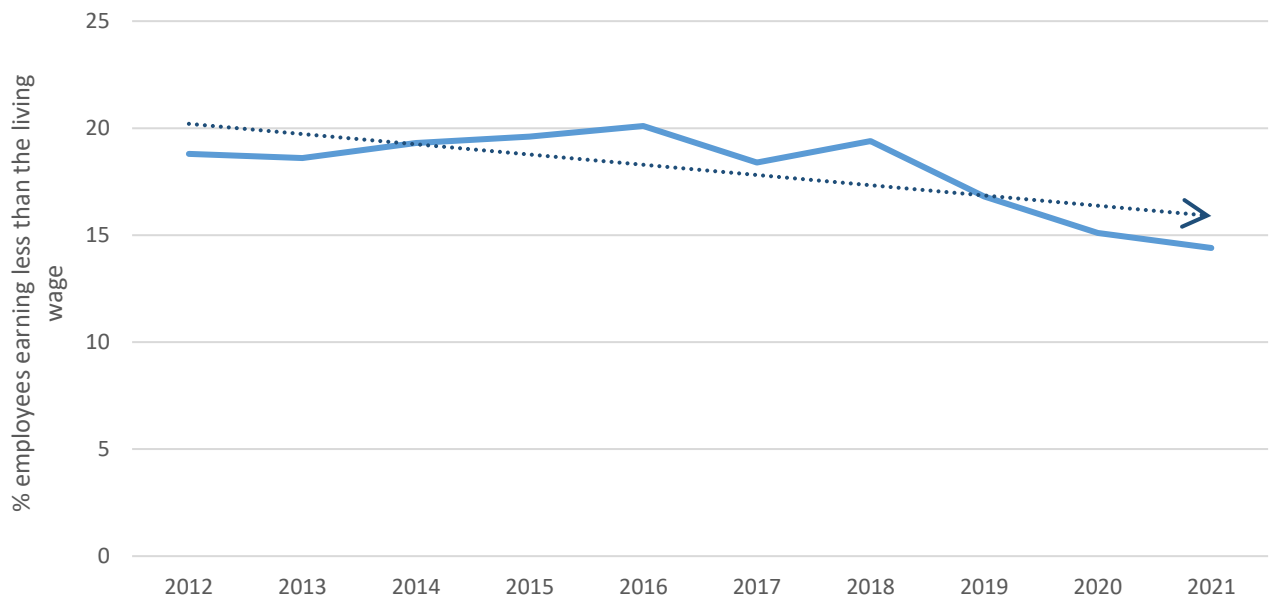
Figure 11: Investment



Source: [GDP Quarterly National Accounts: 2021 Quarter 4 \(October to December\)](#) ; [OECD](#)

Figure 11 shows investment measured by Gross Fixed Capital Formation (onshore) as a percentage of GDP. It shows Scotland below the comparator countries in 2021 (the latest year for which data is available), at 16.6% while the comparators are clustered between 22% and 24%.

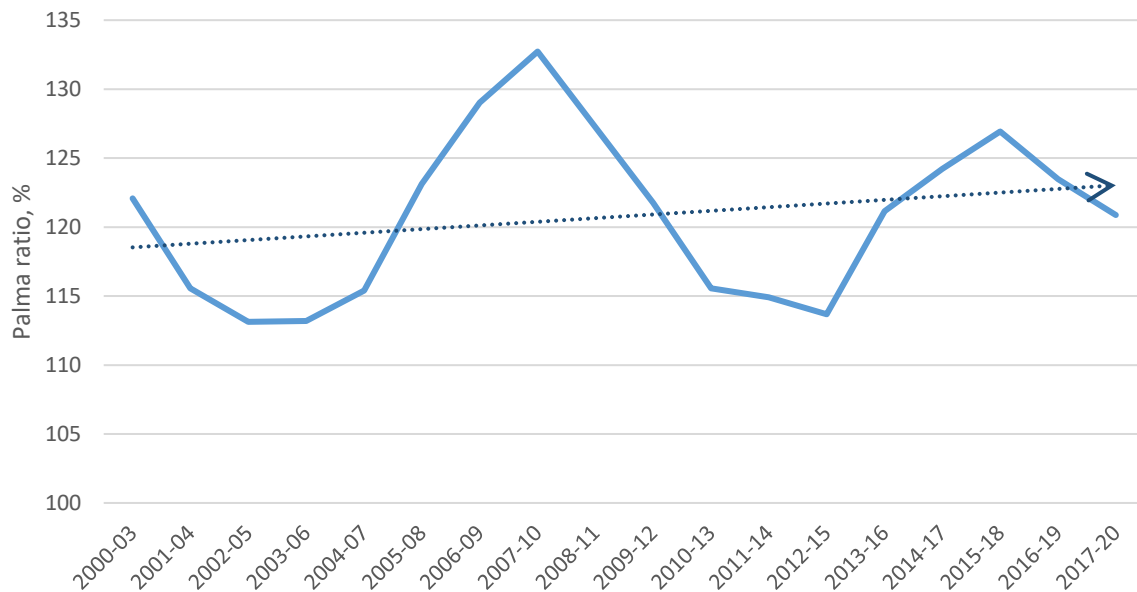
Figure 12: Employees (18+) earning below the real living wage



Source: [Annual Survey of Hours and Earnings](#)

Figure 12 shows the proportion of employees aged 18 and over earning less than the living wage. Living wage rates are calculated annually by the Resolution Foundation and are overseen by the Living Wage Commission. The proportion of employees earning less than the real living wage has decreased from 18.8% in 2012 to 14.4% in 2021.

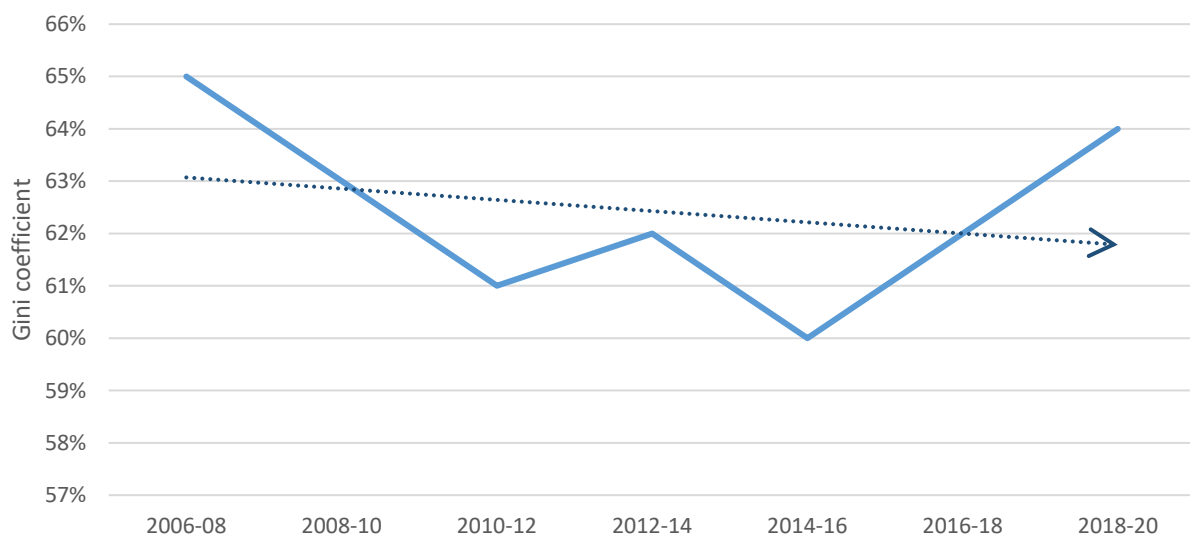
Figure 13: Income inequality



Source: [Poverty and Income Inequality in Scotland 2017-20](#)

Figure 13 shows income inequality in Scotland as measured by the Palma ratio (the total income of the top ten percent of the population divided by the total income of the bottom forty percent of the population (written as a percentage)). It fluctuates throughout the period, reaching a high of 132.7% in 2007-10. It is currently decreasing from the most recent high in 2015-18.

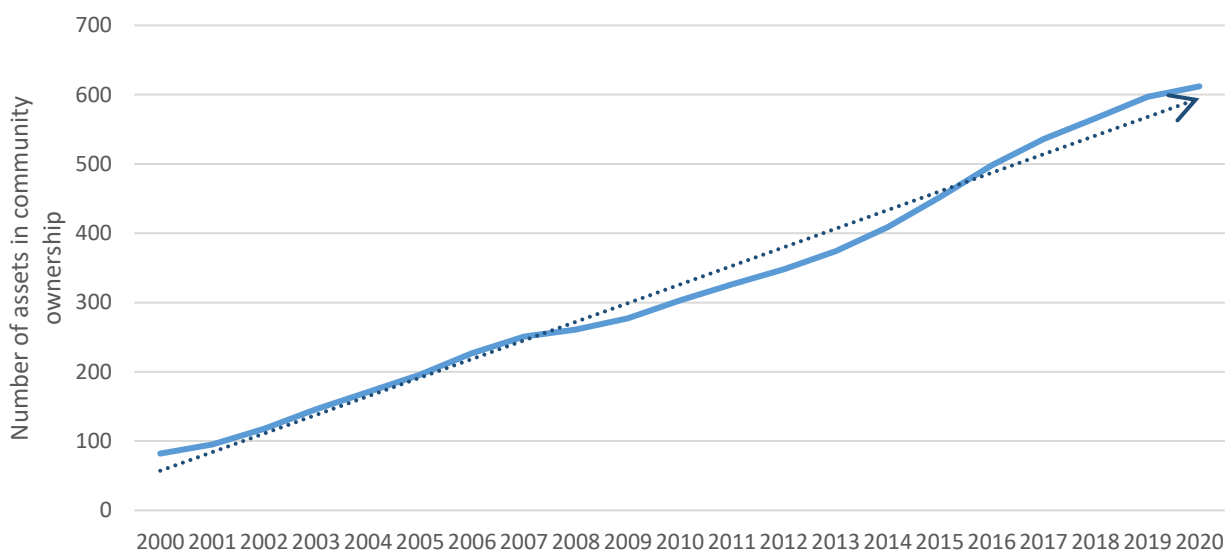
Figure 14: Wealth inequality



Source: [Wealth in Scotland 2006-20](#)

Figure 14 shows the Gini coefficient<sup>2</sup> of wealth in Scotland. The Gini coefficient of total wealth was 64% in 2018-2020. It had been broadly stable since 2006-2008, when data collection began, ranging between 60% and 65%.

Figure 15: Community ownership



Source: [Community ownership in Scotland](#)

Figure 15 shows the number of assets in community ownership, as at December 2020, increased from 82 in 2000 to 612 in 2020. Note that where the year of purchase or transfer of the asset is unknown, it has been defaulted to 2000, the start of the series.

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<sup>2</sup> The Gini coefficient is a statistical measure of dispersion often used to assess economic inequality. The Gini coefficient ranges from 0% to 100%. 0% means all households have the same wealth, and 100% means one household has all the wealth and all other households have none.



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