National Records of Scotland

Scotland's Population

The Registrar General's Annual Review of Demographic Trends

2015

161st Edition

Preserving the past | Recording the present | Informing the future

Annual Report of the Registrar General of Births, Deaths and Marriages for Scotland 2015

161st Edition

To Scottish Ministers

I am pleased to let you have my Annual Report for the year 2015, which will be laid before the Scottish Parliament pursuant to Section 1(4) of the Registration of Births, Deaths and Marriages (Scotland) Act 1965.

Tim Ellis
Registrar General for Scotland
10 August 2016

Published 10 August 2016

SG/2016/86

Contents

Introduction

I have pleasure in introducing my fourth annual report as Registrar General and Chief Executive of National Records of Scotland. This is the 161st edition of the Registrar General's Annual Review, which brings together invaluable information about the people of Scotland.

Why are these statistics about the people of Scotland important? They not only help in the planning of services and allocation of resources to where they are most needed, whether it be for schools, the building of houses or care for the elderly, but they also tell the story of our lives.

That story is one of change. Changes in the way we live, work and study, and in the way our families and communities are made up. Society changes, and the story of those changes is told, at least in part, through our statistics.

About half of 17 and 18 year olds go on to higher education compared to about five per cent 50 years ago. Over the last decade, we have seen more young adults living with their parents or renting rather than buying a home.

People are living longer – there are now more people aged 65 or over than there are children. Only four years ago it was the reverse. Around 25 per cent of baby boys and 30 per cent of baby girls born today are likely to live to be 100. Inter-generational relationships are important as children live at home longer and 60-something year old grandparents may also have a frail parent they are caring for.

Children are likely to have fewer brothers and sisters than their parents. Parents are older on average at the birth of a child than they were 50 years ago. A baby born nowadays is more likely to be born to a couple who are not married than to a couple who are married. A far higher proportion of births are to mothers born outside the UK compared with 15 years ago. At school there is a much richer mix of ethnicities amongst pupils.

More people are now coming to Scotland from overseas than leaving to go overseas. A hundred years ago, there was a net loss of people, especially young men from industries such as ship building and mining. Our invited chapter by Professor Michael Anderson summarises the key patterns of migration to and from Scotland since 1850 and offers a fascinating insight into potential reasons for these patterns and for the differences from England and Wales.

The changes in the way we live require changes in the way services are provided - to help ensure children have the best start in life, people are supported throughout their working life and we all live longer healthier lives. The statistics National Records of Scotland produce inform and support the development of suitable policies and plans which will help respond to those changes.

Scotland's 2011 Census continues to provide a rich seam of information and we are continuing to produce commissioned requests and look for ways to make it more accessible to a wider range of people.

The first pilots are underway to link information from health, social care and non-health services to support better treatment, safety and research. Rigorous approaches to information governance and privacy have been adopted. As promised in my previous Annual Review, I have included information about the use of statistics from the NHS Central Register and the safeguards that are in place to protect confidentiality.

Since the first RGAR was produced in 1855, Scotland has seen profound change, but the Annual Review, and the statistics that National Records of Scotland produce, have continued to paint a picture of our nation. As we look ahead to a period that seems likely to see further profound changes, we will continue not only to tell the story of the past, but also to record the present, and to provide the data and information that can help inform our future. I hope you enjoy the following portrait of the people of Scotland.

Tim Ellis
Registrar General,
National Records of Scotland

Important points

Population

The estimated population of Scotland on 30 June 2015 was 5,373,000 - the highest ever.

The population of Scotland grew by around 25,400 in the 12 months between 1 July 2014 and 30 June 2015, an increase of 0.5 per cent.

The population increased because in-migration exceeded out-migration by approximately 28,000 between mid-2014 and mid-2015. Deaths exceeded births by approximately 2,000 and other changes, such as in armed forces and prisoners, resulted in a loss of approximately 500 people.

The age of the population of Scotland was as follows:

- 17 per cent of people were aged under 16;
- 65 per cent of people were aged 16 to 64; and
- 18 per cent of people were aged 65 and over.

Scotland's population has been fairly stable over the past 50 years. It last peaked at 5.24 million in 1974 before falling to 5.06 million in 2000. It then increased each year to achieve the highest estimate so far of 5.37 million in 2015. The increase since 2000 has mainly been the result of more people moving to Scotland than leaving. 2014-based projections (estimates for future years largely based on past trends) suggest that the population of Scotland will rise to 5.7 million by 2039.

If current trends continue, the population is also projected to age, with the number of people aged 75 and over increasing by 85 per cent, from 0.43 million in 2014 to 0.8 million in 2039. These projections make no allowance for the future impact of government policies or other factors.

Births

There were 55,098 births registered in Scotland in 2015.

There were 1,627 (2.9 per cent) fewer births in 2015 than in 2014, resuming the trend over the five years prior to 2014 of declining births.

The average age of mothers has increased from 27.4 in 1991 to 30.2 in 2015. Similarly, the average age of fathers has increased from 30.0 in 1991 to 32.8 in 2015.

The percentage of babies born to unmarried couples was 51.2 per cent in 2015, compared to 47.1 per cent 10 years earlier and 33.7 per cent in 1995. Most births were registered by both parents, whether married or not.

The majority of mothers who gave birth in Scotland in 2015 were born in the UK (84 per cent), including 75 per cent who were born in Scotland. Eight per cent of mothers

had been born elsewhere in the European Union (EU), including five per cent from the countries which joined the EU in 2004 (the largest number were to mothers born in Poland). Mothers whose country of birth was a Commonwealth Country accounted for five per cent of births.

For 15 per cent of births in 2015 neither parent was born in Scotland (compared with nine per cent in 2005) and for 11 per cent of births neither parent was born in the UK (compared with four per cent in 2005).

Deaths

There were 57,579 deaths registered in Scotland in 2015. This was 3,340 (6.2 per cent) more than in 2014.

The main causes of deaths were:

- cancer, which caused 16,093 deaths (28 per cent of all deaths);
- respiratory system diseases (such as pneumonia or chronic obstructive pulmonary disease (COPD)), which caused 7,669 deaths (13 per cent of all deaths);
- ischaemic (coronary) heart disease, which caused 7,142 deaths (12 per cent of all deaths);
- mental and behavioural disorders (such as dementia), which caused 4,427 deaths (eight per cent of all deaths); and
- cerebrovascular disease, which caused 4,303 deaths (seven per cent of all deaths).

Over the last 30 years or so, male death rates from lung cancer have fallen by 34 per cent (from 119 per 100,000 population in 1980 to 1982, to 79 in 2015). By contrast, the rates for females, though still lower than those for males, have increased by 73 per cent (from 41 per 100,000 population in 1980 to 1982, to 71 in 2015).

The percentage of deaths caused by coronary heart disease has fallen from 29 per cent in 1980 to 1982, to 12 per cent in 2015, and the percentage for cerebrovascular disease has reduced from 14 per cent to seven per cent, but the percentage of deaths caused by cancer has risen from 22 per cent to 28 per cent. There has been an increase in the proportion of deaths from respiratory system diseases from 11 per cent to 13 per cent and in the percentage of deaths from mental and behavioural disorders (for example dementia) from one per cent to eight per cent. The percentage of deaths from diseases of the nervous system and sense organs (for example Alzheimer's Disease) has also increased, from one per cent in 1980 to 1982, to six per cent of all deaths in 2015.

Death rates from cancer, coronary heart disease and cerebrovascular disease in Scotland are well above the rates for the other countries in the UK.

There were 211 stillbirths and 175 infant deaths in 2015. Rates for both have improved significantly over time and are at the lowest levels ever recorded. In 2015, the stillbirth rate was 3.8 for every 1,000 births (live and still) and the infant death rate was 3.2 for every 1,000 live births.

Life expectancy

Life expectancy at birth is improving and the gap between males and females is decreasing:

- Life expectancy in Scotland has improved greatly over the last 33 years, increasing from 69.1 years for males and 75.3 years for females born around 1981 to 77.1 years for males and 81.1 years for females born around 2014.
- The gap in life expectancy between males and females has decreased from 6.2 years for those born around 1981 to 4.1 years for those born around 2014.

Life expectancy at birth increases as deprivation decreases:

- There is a difference between life expectancy in the most and least deprived areas of Scotland. For those born around 2012 (the latest life expectancy figures by deprivation) this is more pronounced for men (12.5 years) than for women (8.5 years).
- The gap between male and female life expectancy is also larger in the most deprived areas (6.4 years) than in the least deprived areas (2.4 years).

Life expectancy in Scotland is lower than in other UK constituent countries and most countries in Western Europe, for both males and females.

Migration (people moving into and out of the country)

In the last half of the 20th century, more people tended to leave Scotland than come to Scotland. However, since mid-2000, this trend has reversed.

In the year to 30 June 2015, the number of people moving to Scotland from other parts of the UK, and the number moving out of Scotland to other parts of the UK were as follows:

- 47,200 people came to Scotland from the rest of the UK; and
- 38,800 people left Scotland for other parts of the UK.

This movement of people increased the population by around 8,400 people.

In the year to 30 June 2015, the number of people moving to Scotland from overseas and the number moving out of Scotland to go overseas were as follows:

- 37,800 people came to Scotland from overseas; and
- 18,200 people left Scotland to go overseas.

This movement of people increased the population by around 19,600, an increase of 11,600 from the previous year.

Migrants to Scotland tended to be younger than the general population. Of in-migrants to Scotland, 49 per cent from the rest of the UK and 68 per cent from overseas were aged 16 to 34, compared with 25 per cent in the resident population.

Marriages and civil partnerships

There were 29,691 marriages in Scotland in 2015. Of these, 1,671 were same-sex marriages following The Marriage and Civil Partnerships (Scotland) Act 2014 coming into force on 16 December 2014. The majority of same-sex marriages were of couples who changed their existing civil partnership to a marriage (936, 56 per cent).

There were 6,232 'tourism' marriages (21 per cent of the total) where neither the bride nor groom lived in Scotland. People living in Scotland who marry elsewhere are not included in the figures.

The average age at which people marry for the first time has increased by around two years since 2005, to 33.6 years for men and 31.9 years for women in 2015.

Just over half of all marriages (52 per cent) were civil ceremonies, carried out by a registrar – compared with just under one-third (31 per cent) in 1971. There were 15,583 civil ceremonies in 2015.

The largest number of religious marriages was carried out by Church of Scotland ministers (4,052), with clergy from the Roman Catholic Church carrying out 1,438 marriages. Humanist celebrants, authorised to conduct marriages in Scotland since 2005, officiated at 4,775 marriages.

With the introduction of same-sex marriages, those choosing to enter into civil partnerships have declined with only 64 civil partnerships in 2015, 33 male couples and 31 female.

Adoptions

In 2015, there were 504 adoptions recorded in Scotland, an increase of 11 per cent over 2014 and the highest number recorded since 1996. The number of adoptions each year is around a quarter of the number recorded in 1970.

Households and housing

In mid-2015, there were 2.43 million households in Scotland, which is an increase of around 160,000 over the past 10 years.

Across Scotland in 2015, three per cent of homes were empty and one per cent were second homes, though there were wide differences across the country. Remote rural areas have the highest percentage of dwellings that are vacant and second homes.

The number of households has increased faster than the population over the last 10 years and is projected to increase to 2.78 million by 2037, an average annual increase of around 16,000 households. This increase is the result of an ageing population, and more people living alone or in smaller households, as well as an increasing population. The largest increases are found in the number of households where someone lives alone, particularly amongst older people. In contrast, the number of larger households is projected to fall.

Statutory registration

Since 1855, by law all births, deaths and marriages (and since 2005 civil partnerships) must be registered. Councils are responsible for providing the registration service under the supervision of the Registrar General.

There are currently three district examiners who are responsible for checking the accuracy of all the 145,000 records created each year.

Every year since 2007, registrars in the 32 councils have achieved a high rate of accuracy, with an average of over 97 per cent of the records they create having no mistakes in them.

Scotland's Census

The latest census in Scotland took place on 27 March 2011. The census has collected information about the population every 10 years since 1801 (except in 1941 when no census was taken due to the Second World War).

National Records of Scotland has released an extensive range of summary statistics and analytical products based on census data. The Scotland's Census website is the main dissemination route for publishing data from Scotland's Census 2011. The website, which gets around 120,000 visits each year, provides:

- a core set of around 400 standard census tables delivered via the Census Data Explorer (CDE), available for a range of output geographies, from national down to census output area level;
- summary statistics and a series of statistical bulletins and news releases relating to the standard census tables;
- Area Profiles – key statistics for local areas and for Scottish and UK Parliamentary Constituencies;
- Maps and Charts;
- a facility – the Data Warehouse – for users to bulk download all census tables for the various geographies;
- comprehensive metadata alongside the data;
- analytical reports on a variety of topics based on census data; and
- a wide range of supporting background information.

Census data has also been accessed for a whole range of purposes by a wide spectrum of users, including Scottish Government, local authorities, NHS Health Boards, the third sector, media, Parliament, the commercial/private sector, researchers and the general public.

Chapter 1 – Population

The estimated population of Scotland on 30 June 2015 was 5,373,000, the highest ever and an increase of 25,400 from the previous year.

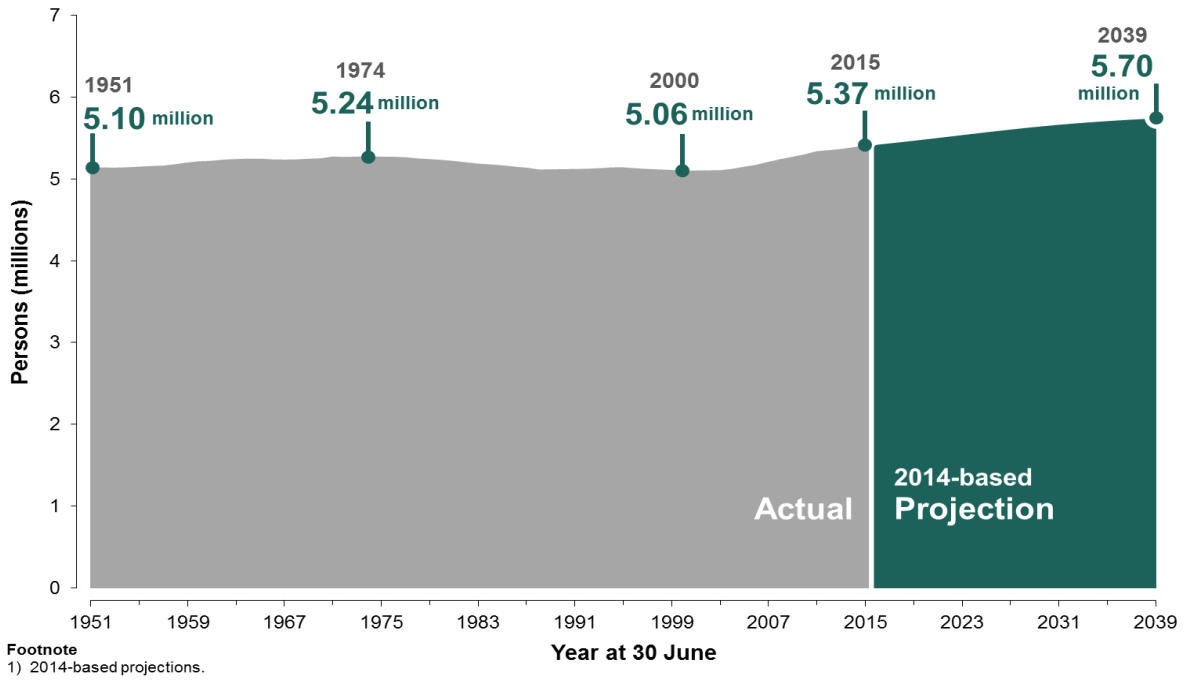
The increase in Scotland's population between mid-2014 and mid-2015 has been driven by net in-migration, with in-migration exceeding out-migration by approximately 28,000 people. This included a net gain of around 8,400 from the rest of the UK and a net gain of around 19,600 from overseas.

In the year to mid-2015 deaths exceeded births for the first time since the year to mid-2006, by approximately 2,000. Other changes, such as in armed forces and prisoners, resulted in a loss of approximately 500 people.

The population estimates for mid-2011 to mid-2015 have been created from rolling forward the 2011 Census. Corrections to the mid-2012 to mid-2014 estimates were published in April 2016. These corrections were made due to an error which mainly affected the age distribution of the estimated population of Scotland, the total population estimates have not changed. More information is available on the Corrected tables for mid-2012, mid-2013 and mid-2014 page of the National Records of Scotland (NRS) website.

The increase in Scotland's population in the last decade, and projected changes over the next two decades, should be seen in the context of the relative stability of the population over the last 50 years, as shown in Figure 1.1. The population increased to 5.24 million in 1974 before decreasing to 5.06 million in 2000 and then increasing again over the last 15 years to achieve the highest estimate so far, 5.37 million, in 2015. If current trends continue, the population is projected to reach 5.70 million by 2039.

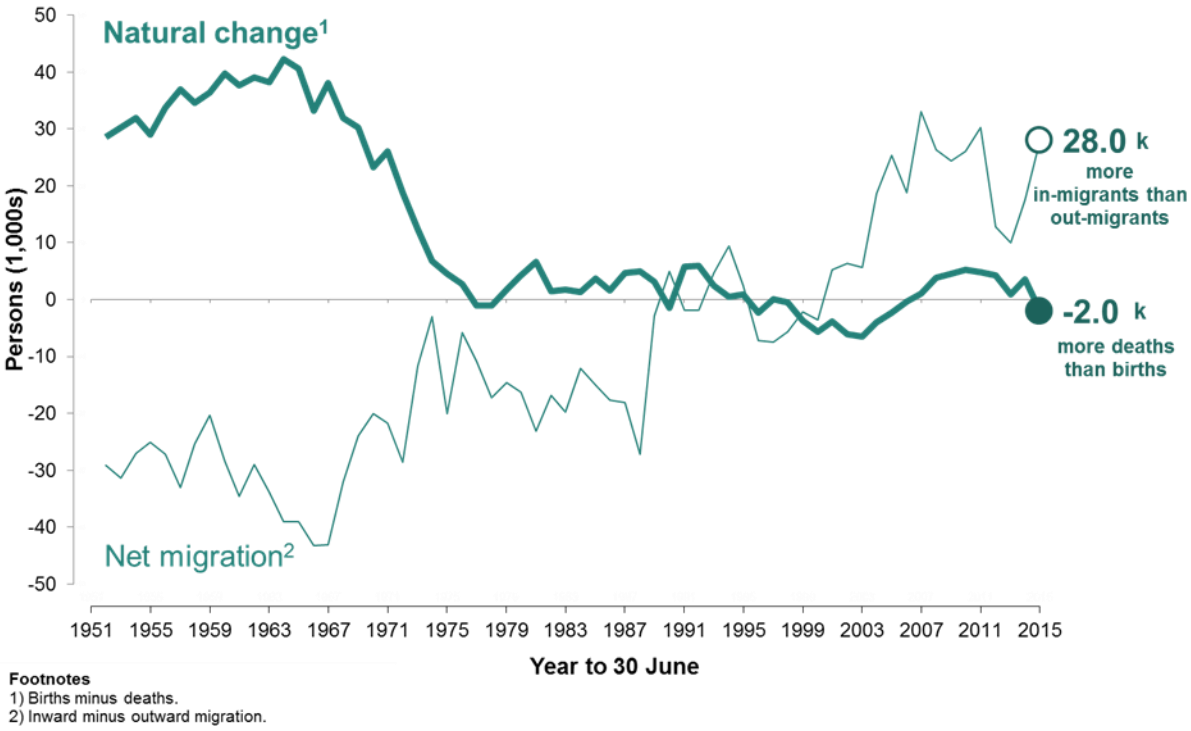
Figure 1.1: Estimated population of Scotland, actual and projected[1], 1951-2039



Footnote
1) 2014-based projections.

Figure 1.2 shows the trends in natural change (births minus deaths) and migration. Between 1963 and 1975, both natural change and net out-migration fell dramatically, although the natural change generally remained greater than net out-migration. This resulted in the growth of the population up to 1974. From that point on, through the late 1970s and the 1980s, up until 1989, net out-migration was higher than the increase due to natural change, causing the population to decline. In recent years, Scotland has experienced record levels of net in-migration resulting in small increases in the population in each of the last 15 years.

Figure 1.2: Natural change[1] and net migration[2], 1951-2015



Footnotes
1) Births minus deaths.
2) Inward minus outward migration.

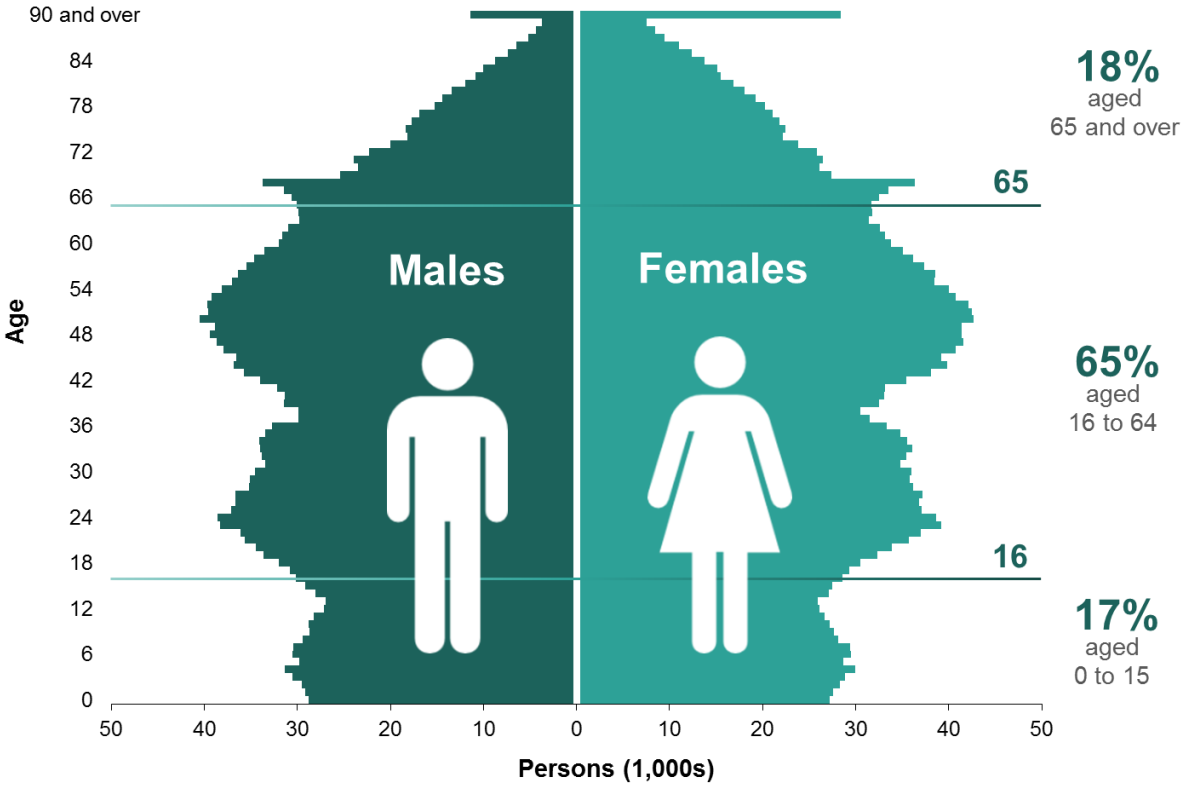
Age Structure

Composition by age and sex is one of the most important aspects of the population, as changes in the number of males and females in different age groups will have different social and economic impacts. For example, increases in the elderly population are likely to place a greater demand on health and social services.

Figure 1.3 shows the age structure of the population in 2015. Seventeen per cent of the population were aged under 16; 65 per cent were aged 16 to 64 and 18 per cent were aged 65 and over. Amongst older people, particularly those aged over 75, the higher number of females reflects the longer life expectation for females, partly as a result of higher male mortality rates during the Second World War.

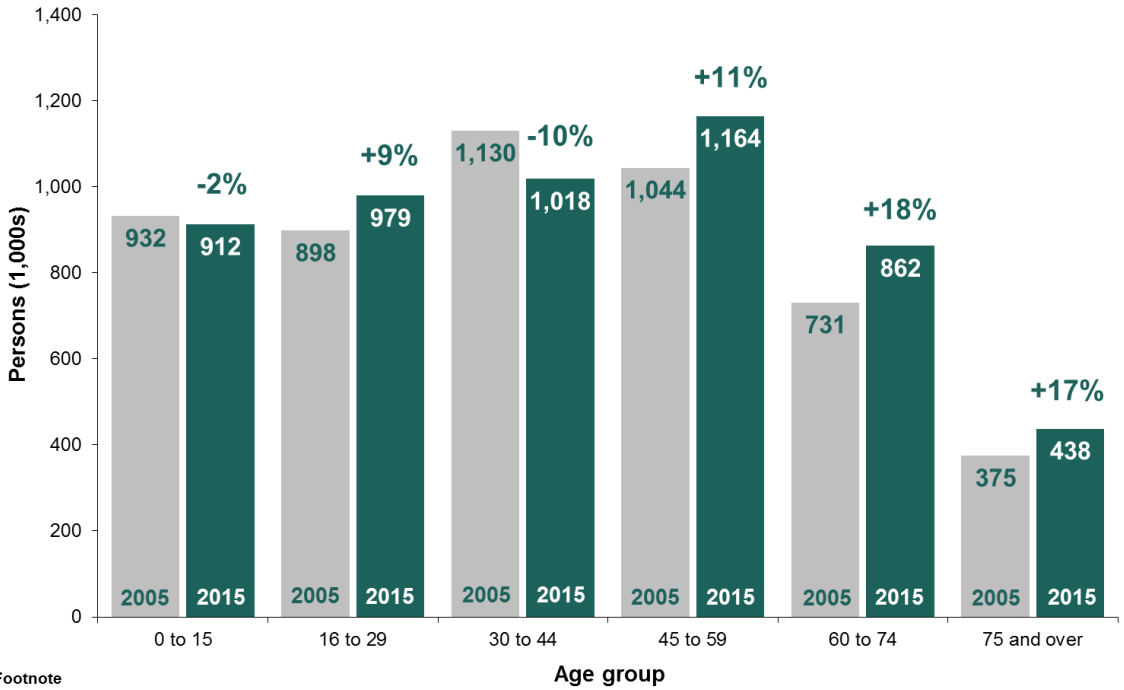
The baby booms of 1947 and the 1960s can be seen as a sharp peak at age 68 and the bulge around age 50. The slightly smaller bulge between 20 and 30 shows the children of the baby boomers, sometimes referred to as the echo effect. People who have migrated to Scotland have tended to be young adults in recent years. More information on the age and sex of migrants is available in Chapter 5 - Migration.

Figure 1.3: Estimated population by age and sex, 30 June 2015



The changing age structure of Scotland's population over the 10 years mid-2005 to mid-2015 is illustrated in Figure 1.4. During this period the population increased by 262,800 (5.1 per cent), from 5.11 million to 5.37 million. The ageing of the population is evident in the rises in the older age groups (an increase of 18 per cent in the 60 to 74 age group and 17 per cent in the 75 and over age group) and the falls in some of the younger age groups (a decrease of two per cent in the under 16 age group and a decrease of 10 per cent in the 30 to 44 age group).

Figure 1.4: The changing age structure of Scotland's population, 2005-2015



Footnote
1) Population figures are in thousands and as at 30 June.

Changes within Scotland

Figure 1.5 shows the percentage change in population between mid-2005 and mid-2015 for each council area.

Since mid-2005 Scotland's population has increased by 5.1 per cent. In most council areas the population has increased. The largest percentage increases have occurred in East Lothian (11.1 per cent), City of Edinburgh (11.0 per cent) and Aberdeen City (10.4 per cent). However, in some council areas the population has decreased, such as Inverclyde (minus 3.8 per cent), Argyll & Bute (minus 3.8 per cent) and West Dunbartonshire (minus 2.1 per cent).

As Table 1.1 shows, the relative importance of migration and natural change differs between council areas. For ease of presentation 'other changes' (including changes in number of prisoners and armed forces) have been included with migration.

In some areas where the population has increased since mid-2005, such as North Lanarkshire, Shetland Islands and West Lothian, the gain is attributable to both net in-migration and natural increase (more births than deaths). East Lothian and Dundee City have experienced a population increase because of in-migration combined with a relatively low (positive) natural change. In other areas, the population increase is due to in-migration, despite the number of deaths exceeding the number of births. These areas included Eilean Siar, Angus and Perth & Kinross.

Inverclyde, Argyll and Bute, and West Dunbartonshire have experienced population decreases both from net out-migration and natural change, whereas in North Ayrshire the population decline is attributable to more deaths than births.

Figure 1.5: Percentage population change by council area, Mid-2005 to Mid-2015

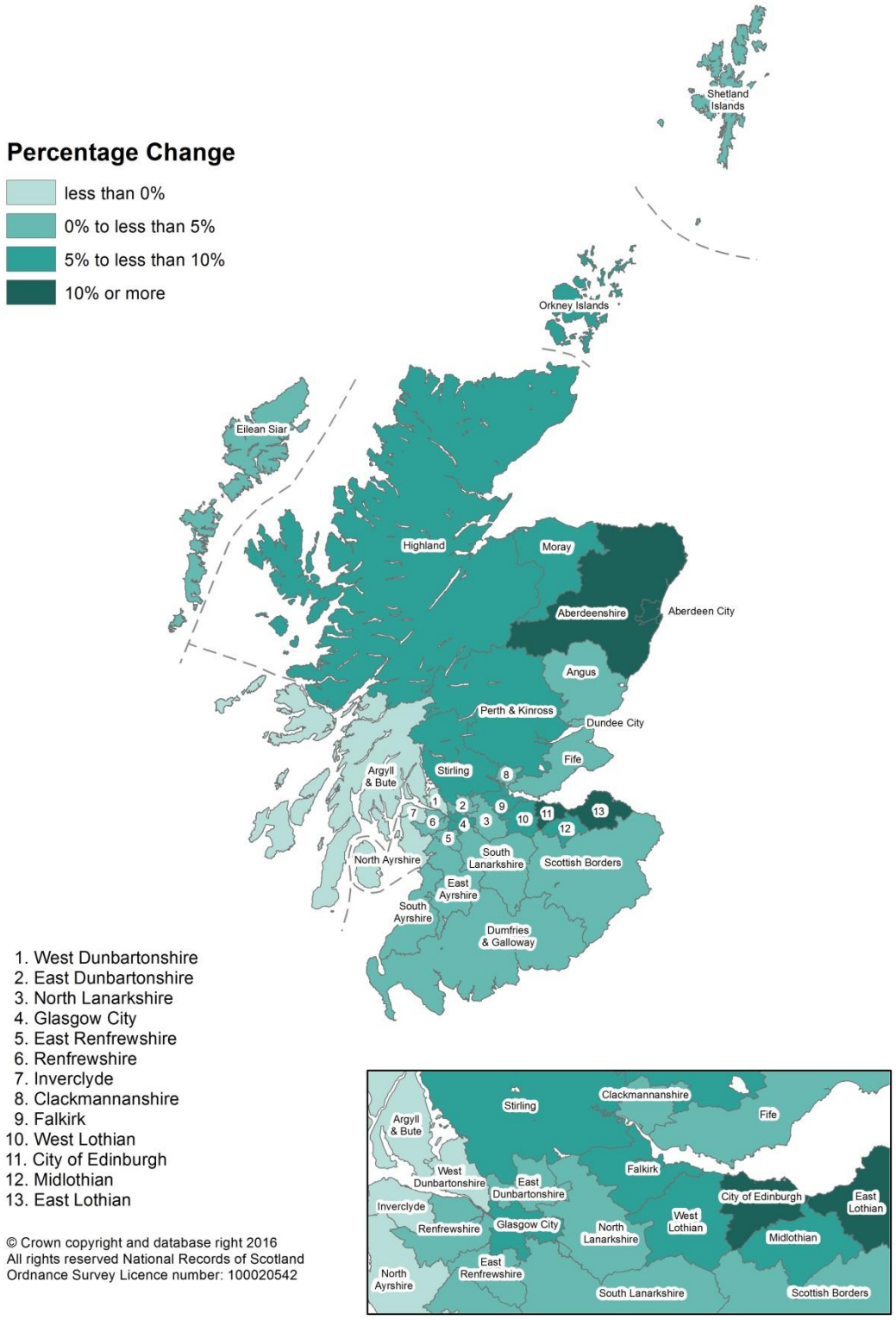


Table 1.1: Components of population change for council areas[2]: mid-2005 to mid-2015

	Natural change[1]	Net civilian migration and other changes[1]	Percentage population change[2]
Scotland	**0.5**	**4.6**	**5.1**
Council areas			
Inverclyde	-2.3	-1.5	-3.8
Argyll & Bute	-3.6	-0.3	-3.8
West Dunbartonshire	-0.5	-1.7	-2.1
North Ayrshire	-1.3	0.9	-0.4
Dumfries & Galloway	-2.8	2.9	0.0
South Ayrshire	-3.3	3.7	0.3
Eilean Siar	-4.4	4.9	0.5
East Dunbartonshire	-0.5	1.4	0.9
East Ayrshire	-0.3	1.8	1.5
Renfrewshire	-0.3	2.1	1.8
South Lanarkshire	0.4	2.7	3.1
Dundee City	0.2	3.1	3.2
North Lanarkshire	1.5	1.9	3.4
East Renfrewshire	0.0	3.4	3.4
Scottish Borders	-1.5	4.9	3.4
Fife	0.7	2.8	3.6
Shetland Islands	2.1	2.1	4.3
Clackmannanshire	1.7	2.8	4.5
Angus	-1.2	6.2	5.0
Falkirk	1.5	4.0	5.5
Moray	-0.1	6.1	6.0
Stirling	-0.1	6.2	6.1
Glasgow City	1.2	5.3	6.5
Highland	-0.1	7.5	7.4
Orkney Islands	-1.2	9.2	8.0
West Lothian	4.4	3.8	8.2
Perth & Kinross	-1.3	9.9	8.6
Midlothian	2.0	7.2	9.2
Aberdeenshire	2.1	8.1	10.3
Aberdeen City	2.0	8.4	10.4
Edinburgh, City of	2.5	8.5	11.0
East Lothian	0.8	10.4	11.1

Footnotes

1) Change per 100 population at mid-2015. The underlying data used to produce these figures can be found in 'Table 6' of the "Mid-Year Population Estimates Scotland, Mid-2015 and Corrected Population Estimates for Mid-2012, Mid-2013 and Mid-2014' publication.

2) Ordered by percentage population change.

Projected population

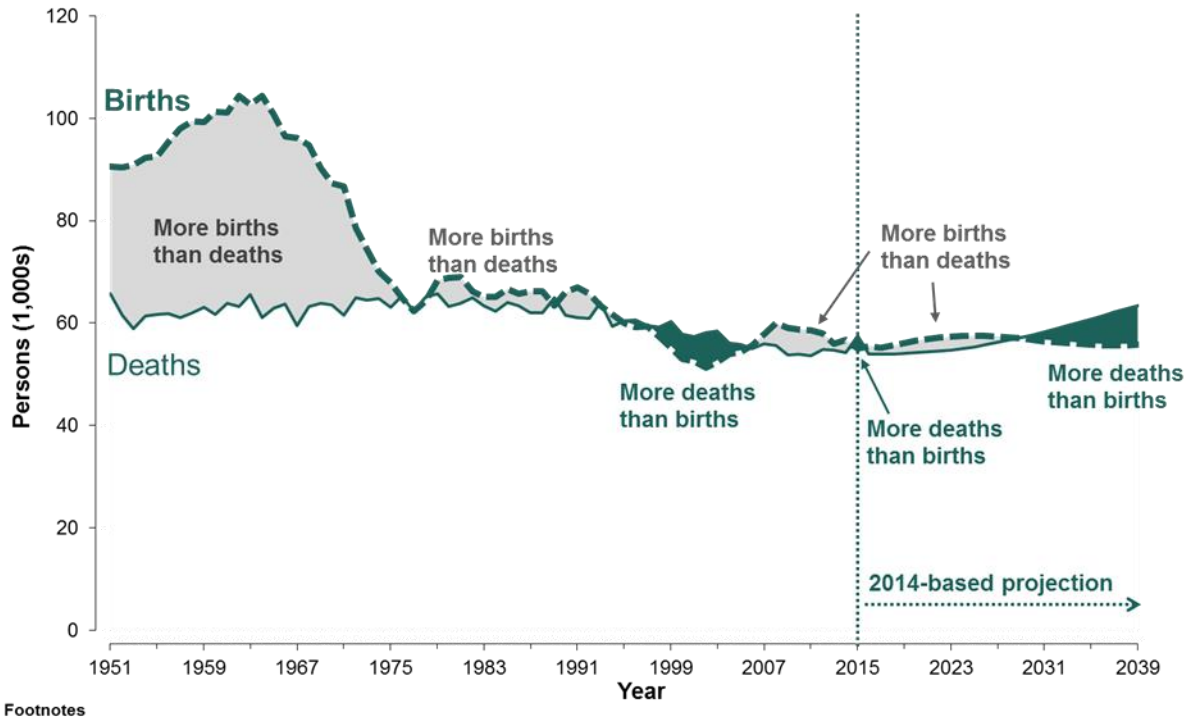
The latest projections of Scotland's future population were published in November 2015 and are based on the estimate of Scotland's population in June 2014, which is itself ultimately based on results from the 2011 Census.

The projections, based on existing trends of migration and natural change and making no allowance for the future impact of government policies and other factors, show the total population of Scotland rising from 5.35 million in 2014 to 5.70 million in 2039 (Figure 1.1).

As demographic behaviour is uncertain, a number of variant projections of the future population have been calculated, based on alternative assumptions of future fertility, mortality and migration, in addition to the 'principal projection' on which the previous paragraphs are based. The variant projections give users an indication of this uncertainty. They illustrate plausible alternative scenarios, rather than representing upper or lower limits of future demographic behaviour. These variant projections, and the assumptions used, can be found on the National Population Projections section of the Office for National Statistics website.

For the principal projection up until 2028, the number of births is projected to exceed the number of deaths and net migration is projected to be positive. After that point, the number of deaths is projected to exceed the number of births, a consequence of the ageing of the population, whilst net migration is projected to remain positive. Figure 1.6 shows the historical and projected future trends of births and deaths in Scotland.

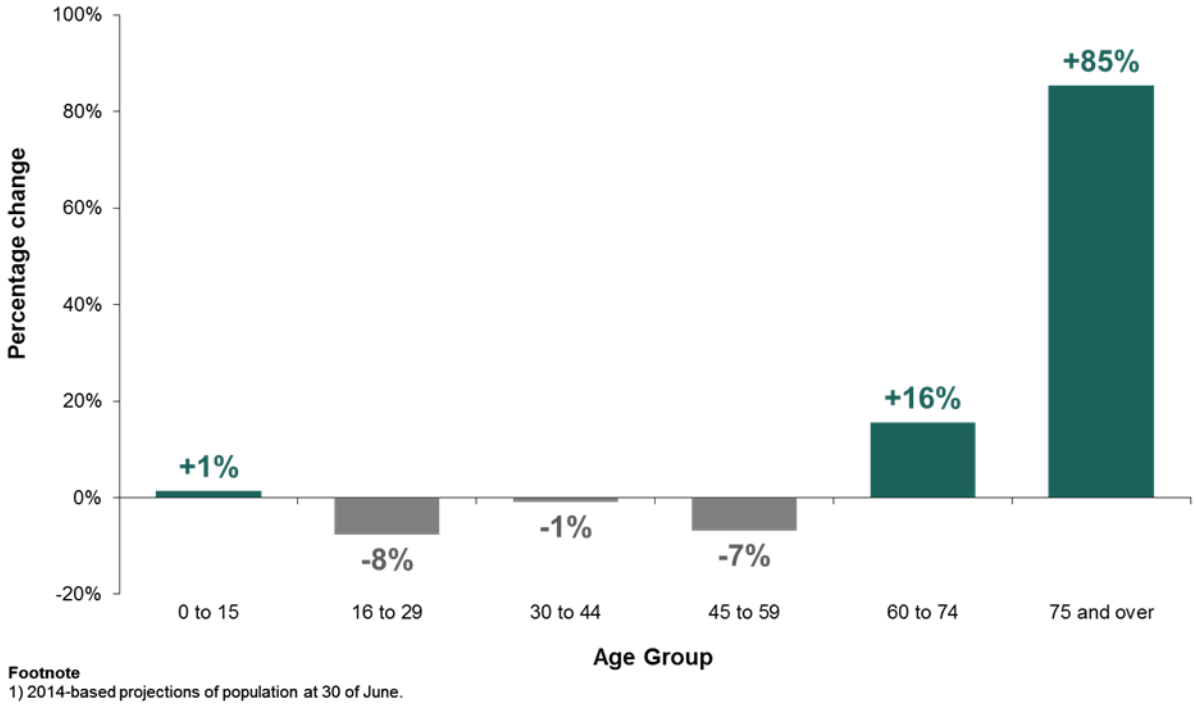
Figure 1.6: Births and deaths, actual[1] and projected[2], Scotland, 1951-2039



Footnotes
1) Figures are for calendar year for 1951 to 2015, and for year to 30 June for 2016 onwards.

Over the next 25 years, Scotland's population is projected to age significantly. As shown in Figure 1.7, the number of children aged under 16 is projected to rise by only one per cent, from 0.91 million in mid-2014 at the start of the projection period to 0.92 million in 2039, while the number of people aged 75 and over is projected to rise by 85 per cent, from 0.43 million to 0.80 million. A decrease in the number of people in the age groups 16 to 29, 30 to 44 and 45 to 59 is projected, while the number of people aged 60 to 74 is projected to increase by 16 per cent, from 0.85 million in mid-2014 to 0.98 million by 2039.

Figure 1.7: The projected[1] percentage change in age structure of Scotland's population, 2014-2039



Footnote
1) 2014-based projections of population at 30 of June.

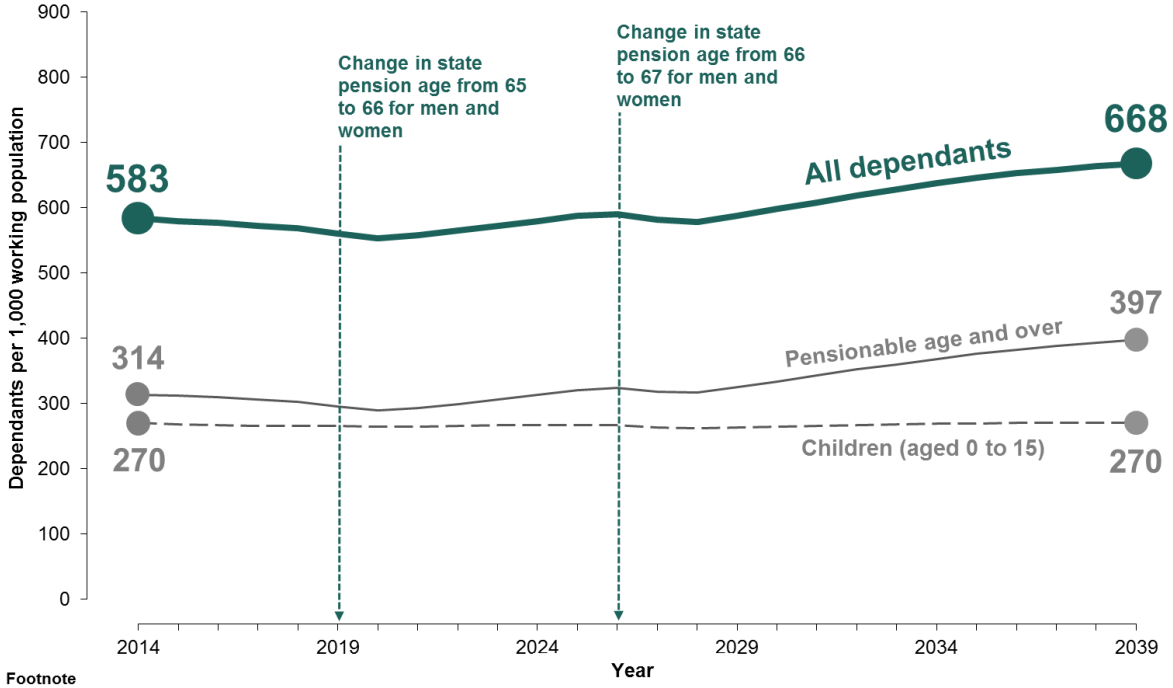
Another way of looking at the age structure of the population is to look at dependency ratios. Dependency ratios can be defined in different ways and should be interpreted with care. For example, a simple interpretation is the number of older people or children who are 'dependent' on people of working age, the assumption being that most older people and children are not economically active. The reality is of course much more complex, since (to give just a few reasons) many people of typical working age are unemployed or economically inactive (for example at school or university), the age at which people retire varies greatly and many retired people are financially independent. However, these 'dependency' ratios provide a useful way to examine the relative age structure of the population.

Three dependency ratios are calculated here:

- the number of people of state pension age and over per 1,000 people of working age (aged 16 to state pension age[1]);
- the number of people aged under 16 per 1,000 people of working age; and
- the number of people aged under 16 plus the number of people of state pension age and over per 1,000 of working age.

Figure 1.8 shows a slight fall in the ratio of 'all dependants' per 1,000 people of working age over the next six years, mainly due to changes in the state pension age[1]. This is followed by an increase in the pension age population relative to the working age population in subsequent years before another increase in the state pension age[1] is projected to cause a slight decline in the 'dependency' ratio starting in 2026. After 2028 the ratio of people of pensionable age relative to the working age population starts to increase again, reaching 397 per 1,000 by 2039. The ratio of children to the working age population is projected to remain stable at 270 per 1,000.

Figure 1.8: Projected dependency ratios[1] (per 1,000 working population), 2014-2039



Footnote
1) 2014-based projections of population at 30 June.

Footnote

1) The figures for working age and pensionable age and over take into account the changes in the State Pension Age (SPA) as set out in the 2014 Pensions Act. Between 2014 and 2018 SPA will rise from 62 to 65 for women. Then between 2019 and 2020, it will rise from 65 years to 66 years for both men and women. A further rise in SPA to 67 will take place between 2026 and 2028. Between 2044 and 2046, SPA will increase from 67 to 68. The UK Government plan to review state pension age every five years in line with life expectancy and other factors. Further information regarding these changes can be found at The new State Pension section of the GOV.UK website.

Scotland's position within Europe

The population of most of the countries in Europe is projected to increase over the next few years. Scotland's population is projected to rise by seven per cent between 2014 and 2039 compared with 17 per cent for England, ten per cent for Northern Ireland and six per cent for Wales. The population of the European Union[2] (EU-28[3]) is projected to increase by three per cent between 2014 and 2039 while certain countries such as Luxembourg, Norway and Switzerland, are projected to have much bigger increases. However, Germany, Greece, Portugal and Spain as well as most of the EU-8[3] countries, the EU-2[3] countries and Croatia, are projected to experience a population decline as Figure 1.9 shows.

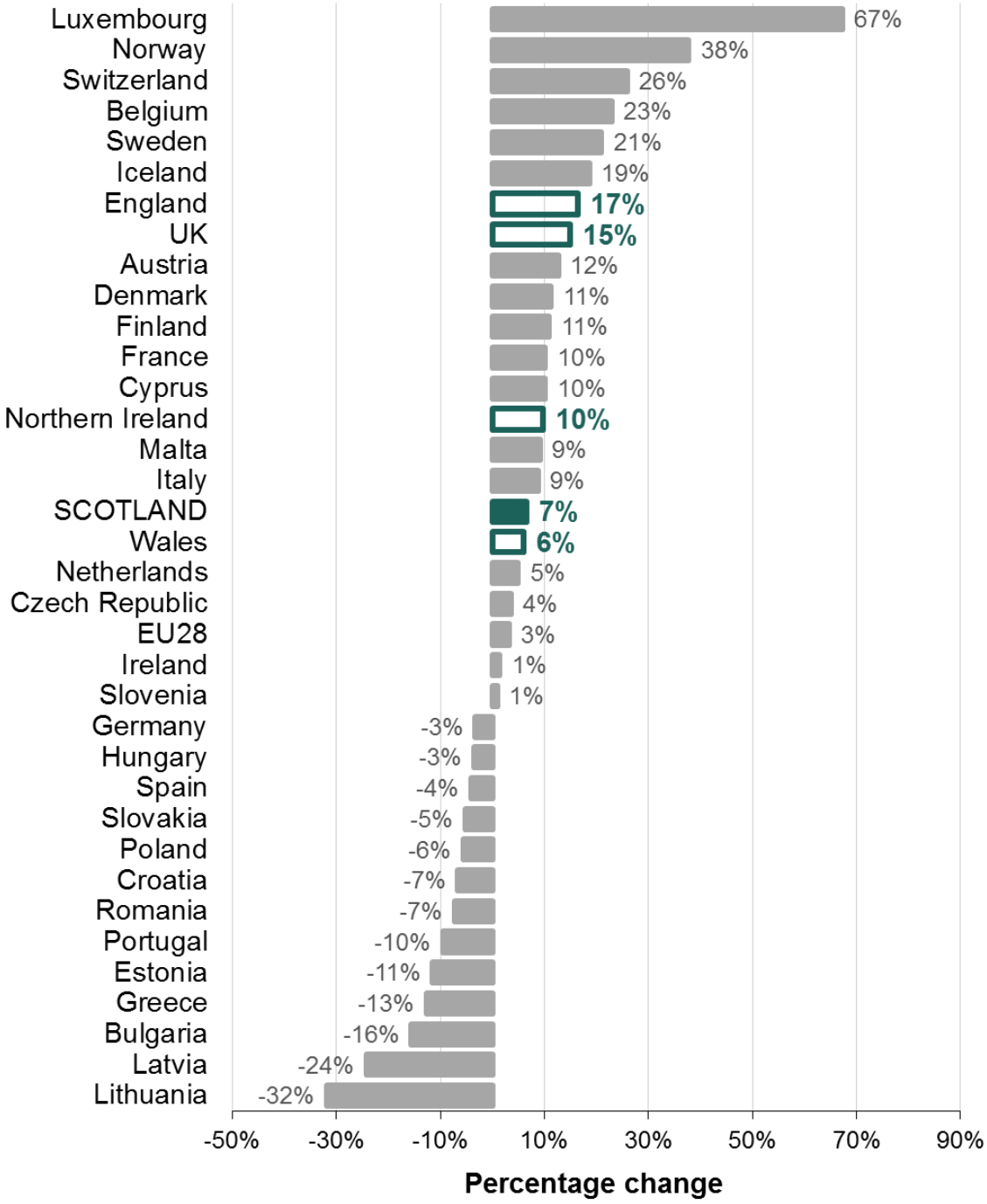
Scotland is not alone in having an ageing population. The pattern of change over the last 20 years, and the projected change in the age distribution, is similar to that of other countries in the UK and Europe, although the rate of change varies.

Footnotes

2) The Eurostat EUROPOP13 projections of population in selected European countries (found on the Eurostat website) are not directly comparable to the Office for National Statistics (ONS) projections of population in the countries of the UK. The Eurostat projections are based on estimates of the population at 1 January 2013 to 1 January 2038 while the ONS projections are based on estimates of the population at 30 June 2014 to 30 June 2039. The methodologies in determining the underlying fertility, mortality and migration assumptions also differ.

3) Refer to Appendix 2 – 'Notes, definitions and quality of statistics' for definition of EU-2, EU-8 and EU-28.

Figure 1.9: Projected percentage population change in selected European countries 2014-2039



Source: Office for National Statistics (ONS) (UK and constituent countries) and Eurostat.

More information about population statistics

More detailed information about Scotland's population, including estimates and projections at national and sub-Scotland level, as well as estimates of specific population groups, can be found within the Population section of the National Records of Scotland website.

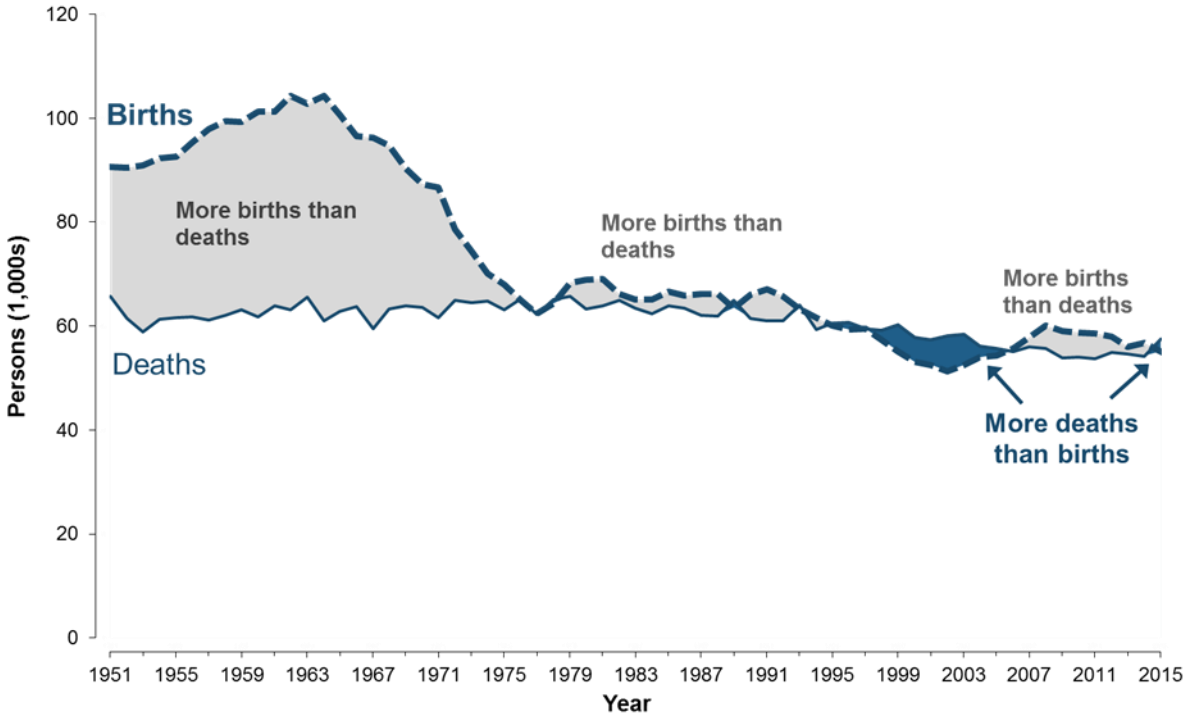
Chapter 2 – Births

Numbers

In 2015, 55,098 births were registered in Scotland, 1,627 (2.9 per cent) fewer than in 2014. This is lowest annual total since 2005. In the last decade there was a peak of 60,041 births in 2008 followed by a mainly downward trend to the 2015 level. The total in 2015 was 4,943 (8.2 per cent) lower than the 2008 peak, and it was well below the peak of over 100,000 per year in the early 1960s, and the level of around 65,000 to 70,000 per year between the mid-1970s and the early 1990s, as Figure 2.1 shows.

In the 1950s, 1960s and the first half of the 1970s there were considerably more births each year than deaths. This had been the case every year since records began (with the introduction of civil registration in 1855). 1976 was the first year with more deaths than births. The following 15 or so years mostly had more births than deaths, followed by a period from 1995 to 2005 with more deaths than births. Since 1996 there had again been more births than deaths until 2015 which had around 2,500 more deaths than births.

Figure 2.1: Births and deaths, Scotland 1951-2015



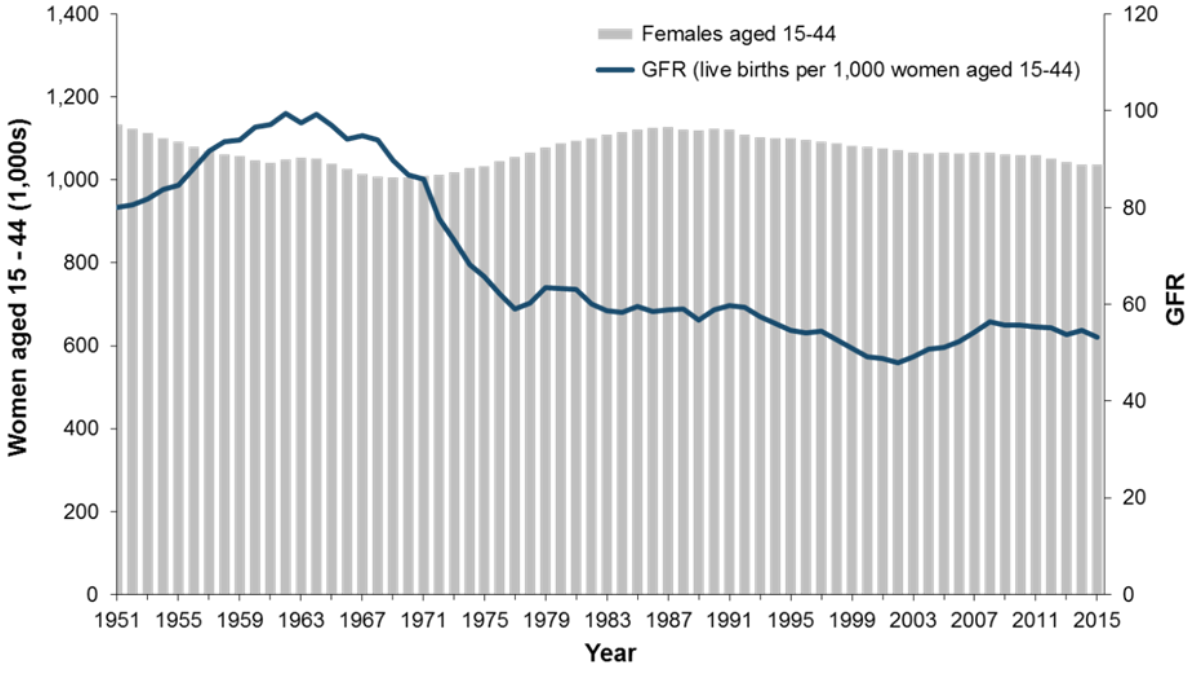
The proportion of births to unmarried parents (including births registered solely in the mother's name) was 51.2 per cent in 2015 compared to 47.1 per cent 10 years earlier and 33.7 per cent in 1995. However, the proportion of births registered solely in the mother's name – generally around six to seven per cent in the 1980s and 1990s – has fallen in more recent years to 4.6 per cent in 2015, suggesting that the increase in births to unmarried parents has been in babies born to unmarried partners who are in a relationship.

Fertility Rates

The simplest fertility rate is the crude birth rate, which is defined as the number of live births per 1,000 total population. Appendix 1, Table 1 shows that in 2015 the crude birth rate for Scotland stood at 10.3 compared to roughly 18 around the end of the 1960s. Appendix 1, Table 2 and Appendix 1, Table 3 show crude birth rates for administrative areas in Scotland and selected European countries. Because it takes no account of the age/sex structure of the population, the crude birth rate has only limited value (for example giving rough comparisons between areas with broadly similar age/sex structures). Appendix 1, Table 2 also gives standardised birth rates for the administrative areas of Scotland; these adjusted birth rates take account of the population structures in the different areas. The overall rate for Scotland, 10.3 births per 1,000 population, can be compared with a low of 7.9 in Argyll and Bute, and a high of 12.4 for Midlothian.

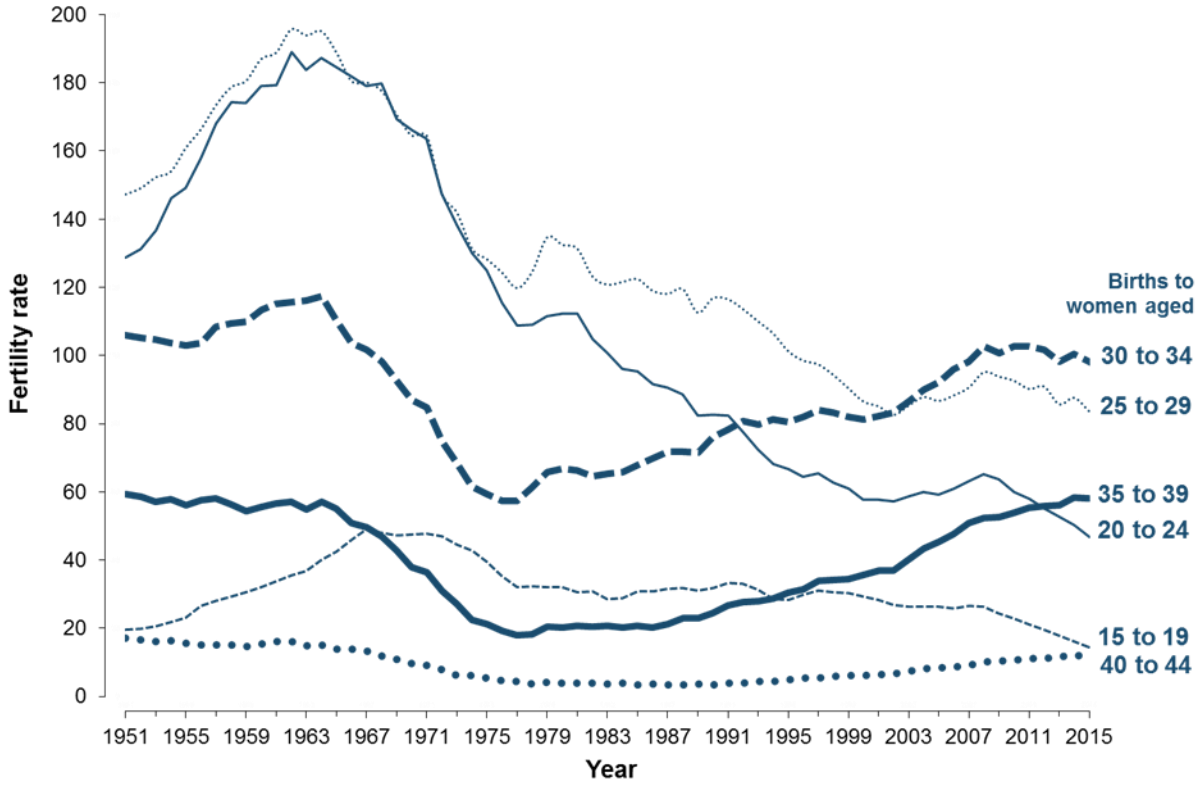
Another approach is to consider the General Fertility Rate (GFR) which is based on the numbers of females of childbearing age. Figure 2.2 shows the general fertility rate (births per 1,000 females aged 15 to 44), along with the number of females aged 15 to 44. During the 'baby boom' of the 1960s, the GFR reached 99.5 (in 1962). It then fell sharply to around 60 in the late 1970s and stabilised at this level during the 1980s before declining further during the 1990s, eventually dipping below 50 at the start of the 21st century. It then rose slightly to 56.4 in 2008, and fell in most of the following years to stand at 53.2 for 2015. Interestingly, the female population aged 15 to 44 was relatively low during the baby boom of the 1960s. Moreover, in the 1980s the relatively large number of females born in the 1950s and 1960s were passing through what were their peak childbearing years. However, those ages' fertility rates were falling during that period, resulting in a levelling off of the number of births rather than the increase that may have been expected.

Figure 2.2: Estimated female population aged 15-44 and general fertility rate (GFR), Scotland, 1951-2015



A more detailed picture is given by the Age Specific Fertility Rates (ASFRs) by mother's age, in five-year age groups, in Figure 2.3. This shows many significant age-related features of the pattern of childbearing over the last sixty years. As well as having fewer babies, females are also having them later in life.

Figure 2.3: Live births per 1,000 women, by age of mother, Scotland, 1951-2015



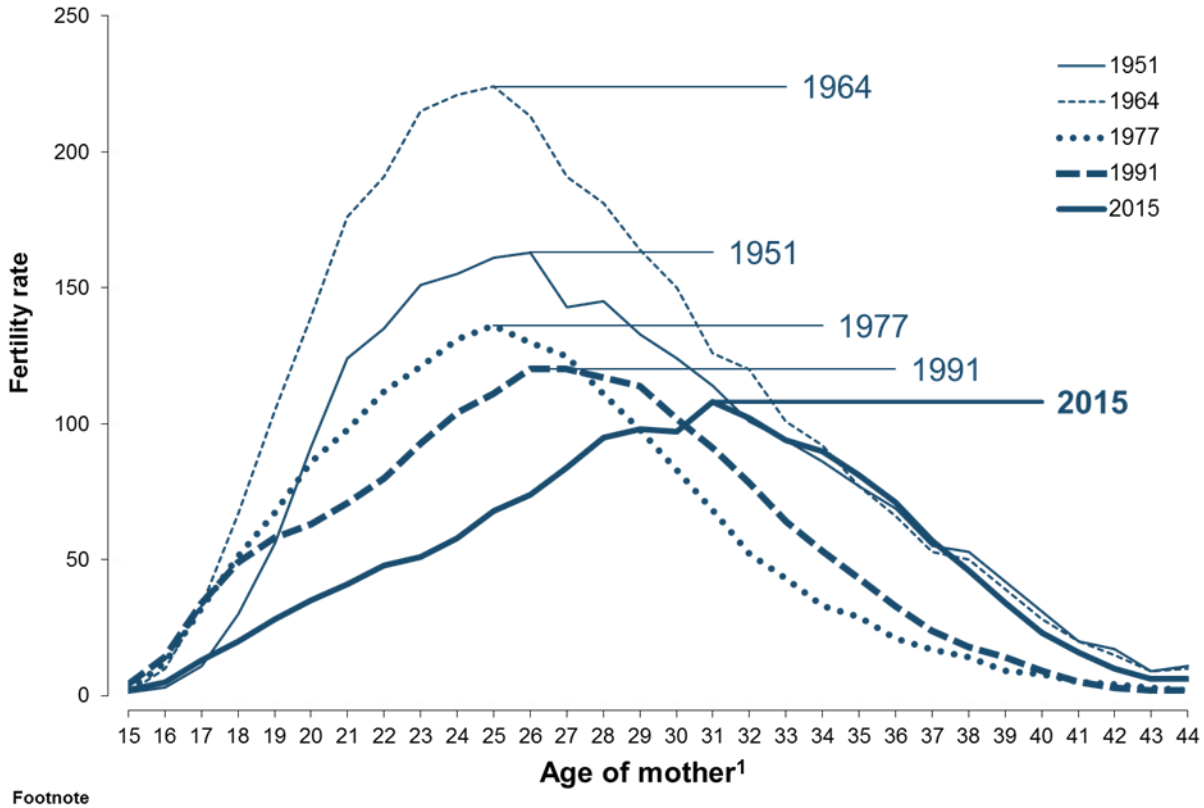
Other points of interest are:

- The 'baby boom' of the 1960s was mostly due to increased birth rates of females in their twenties.
- Since the early 1960s, females in their twenties have experienced a dramatic fall in fertility. For females aged 20 to 24 the fertility rate has fallen by around three-quarters, and for those aged 25 to 29 it has fallen by over a half.
- The rate for 15 to 19 year olds fell by around one-third during the 1970s and remained around 30 births per 1,000 females for the following 20 years, before falling by around half, over the past fifteen years, to under 15 births per 1,000 females.
- Fertility rates for females aged 30 and above have gradually increased over the last 40 years. In particular, the rate for 30 to 34 year olds overtook that of 25 to 29 year olds in 2002 and now stands at around 100 births per 1,000 females. Similarly, the rate for females aged 35 to 39 has nearly trebled since the mid-1980s and is now higher than that for those aged 20 to 24. The 15 to 19 and 20 to 24 age-groups account for most of the reductions in the numbers of births between 2008 and 2015.

Since the mid-1970s, there has been a trend towards having children at older ages. The percentage of births to mothers aged under 20 fell from an average of about 11 per cent between 1976 and 1980 to around four per cent in 2015. Mothers aged 20 to 24 accounted for roughly a third of all births in 1976 to 1980 and 16 per cent in 2015. The percentage of births to mothers aged 25 to 29 has also fallen, from around 35 per cent in 1976 to 1980, to 28 per cent in 2015. As a result, females aged over 30 accounted for over half of all births in 2015; 32 per cent were to mothers aged 30 to 34, 17 per cent were to 35 to 39 year olds and four per cent were to females aged 40 and over.

Figure 2.4 further illustrates the ageing pattern of fertility by showing detailed ASFRs for selected years: 1951, 1964 (peak number of births), 1977 (end of steep decline), 1991 recent peak) and 2015. Though the levels differed considerably, the age patterns of fertility for 1951, 1964 and 1977 were roughly the same. However, the age distributions for 1991 onwards show distinctly older peaks and that for 2015 reveals a further reduction in fertility of females in their twenties, mirrored by an increase for females in their thirties, compared with 1977 and 1991.

Figure 2.4: Live births per 1,000 women, by age, selected years



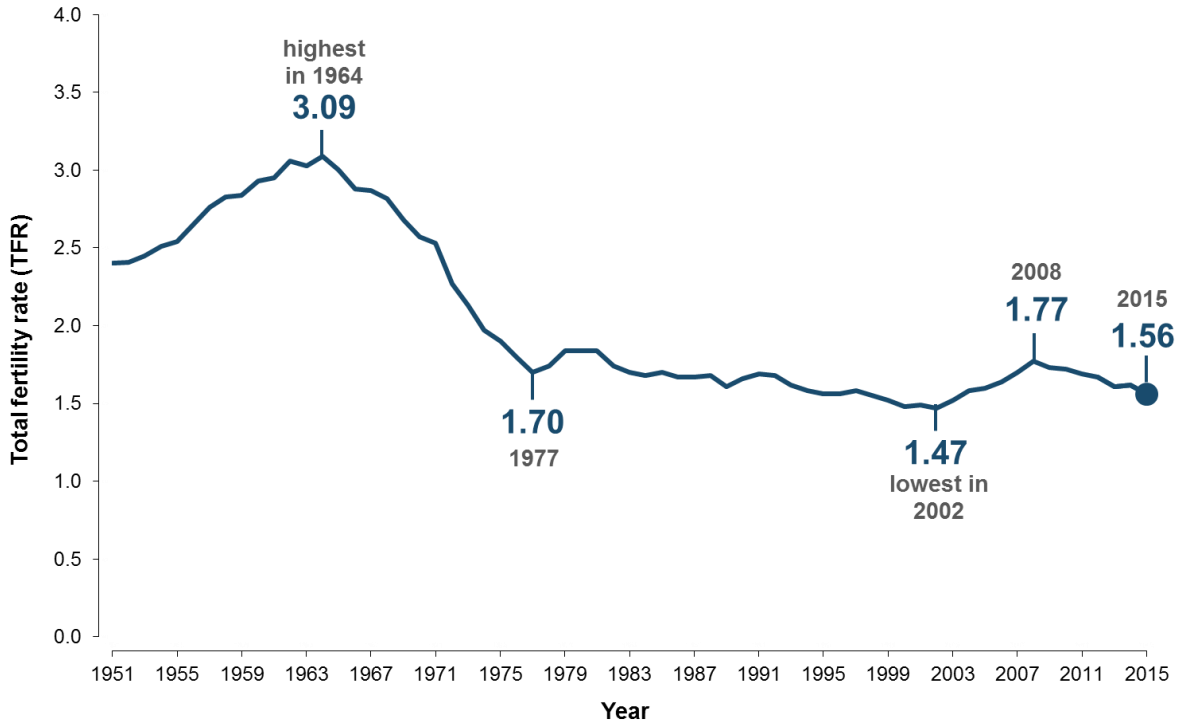
Footnote
1) The rate for age 15 includes births at younger ages and for age 44 includes births at older ages.

The trend towards later childbearing is underlined by changes in the average age of all females giving birth. This was 30.2 in 2015, compared to 27.4 in 1991, 26.1 in 1977 and 27.4 in 1964. Similarly, the average age of fathers (excluding births registered in the mother's name only, where the father's details were not provided) was 32.8 in 2015 compared to 30.0 in 1991 and 28.6 in 1977.

The Total Fertility Rate (TFR) is a commonly used summary measure of fertility levels calculated by summing the age specific rates for a single year. It gives the average number of children that a group of females would expect to have if they experienced the observed ASFRs in each of their childbearing years. For a population to replace itself, the TFR needs to be around 2.1.

The TFR for Scotland since 1951 is plotted in Figure 2.5. Not surprisingly, it follows the same general pattern as the GFR described above. It rose to 3.09 in 1964 before dropping sharply to 1.70 in 1977. Since then, with a few minor fluctuations, it fell more slowly to the 2002 rate of 1.47 before increasing to 1.77 in 2008 – its highest level for 26 years. Since then it has generally declined, reaching 1.56 in 2015.

Figure 2.5: Total fertility rate, Scotland, 1951-2015

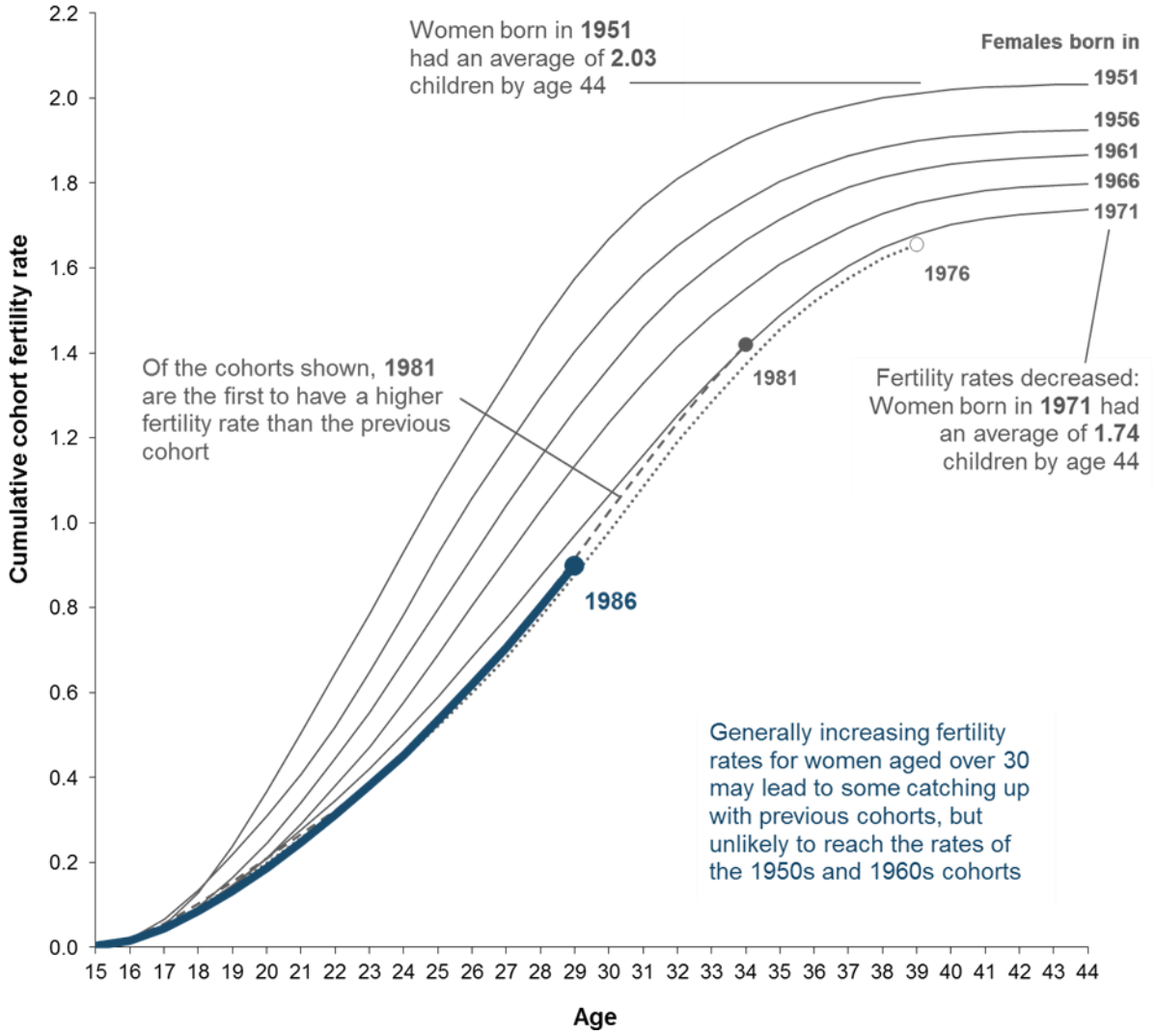


Though widely used, in part because it is relatively easy to calculate, the TFR has serious deficiencies as it is based on only one year's observations. For example, when females are delaying childbearing, as it appears that they have been in Scotland (given the trend towards later childbearing), the TFR is likely to underestimate the number of children females will eventually have.

A more satisfactory measure is average completed family size. Figure 2.6 shows the completed family size (or cumulative cohort fertility) by age for females born in selected years. Those born in 1951 had attained an average completed family size of 2.03 by the time they reached 45, whereas for those born in 1956 and 1961 the figures were 1.93 and 1.87 respectively. The figure also permits the comparison of family size at selected ages for the various cohorts as they pass through the childbearing ages. Of crucial importance is the extent to which the later cohorts are falling behind in family building. For example, by age 30 the cumulative childbearing of females born in 1976 was about 0.5 lower than that of the 1956 cohort. Of the

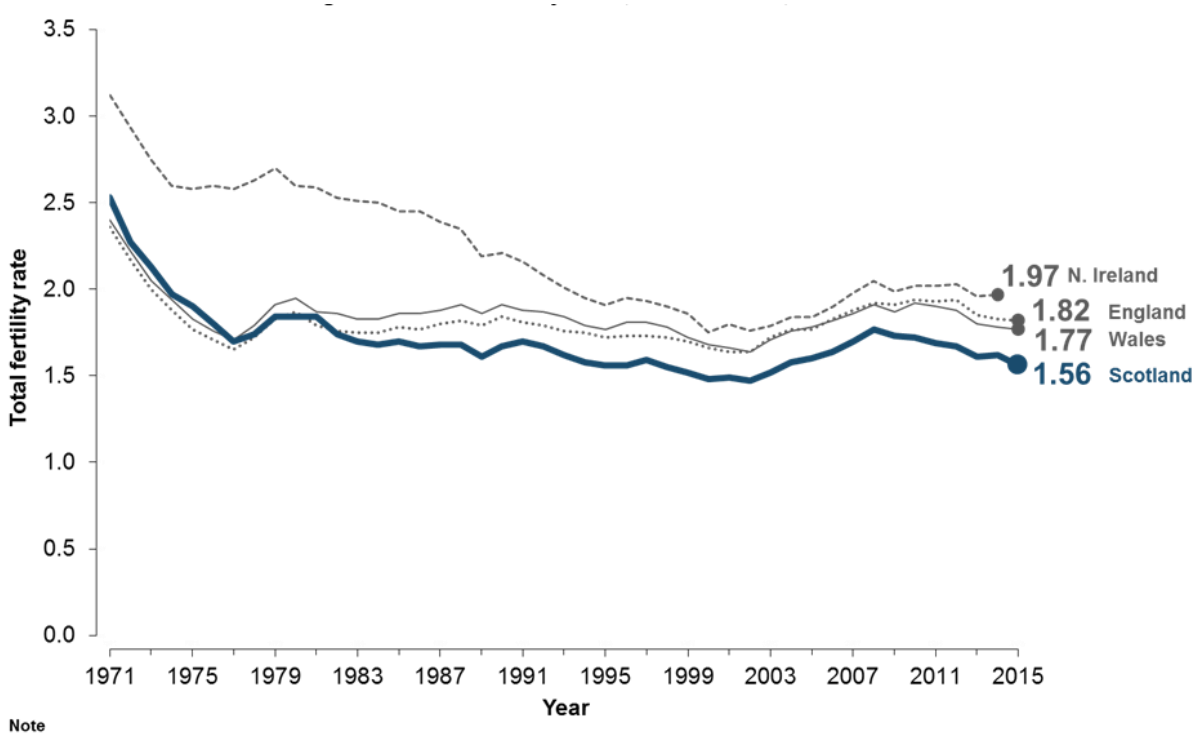
cohorts shown, the 1981 cohort is the first to show a higher fertility rate than the previous cohort. However, by age 27 the fertility rate of the 1986 cohort was very similar to, but fractionally lower than that of the 1981 cohort. Whilst the generally increasing fertility rates of those aged over 30 may lead to further catching-up, it is unlikely that this will increase the average completed family size to the levels attained as recently as the cohorts of females born in the 1960s.

Figure 2.6: Cumulative cohort fertility rate for selected birth cohorts, Scotland



Since the early 1980s, Scotland's fertility has been lower than fertility in the other parts of the United Kingdom (UK). Figure 2.7 compares the TFRs for England, Wales and Northern Ireland since 1971 with those for Scotland. Until the late 1970s, Scotland's TFR was slightly higher than that for England and Wales. However, since the early 1980s, Scotland's TFR has dropped steadily below the levels for England and Wales. In 1971, the TFR for Northern Ireland was markedly higher than for the other three countries but since then the differential has been significantly reduced. The rise in fertility levels in Scotland between 2002 and 2008 was broadly paralleled elsewhere in the UK. Fertility rates for all UK countries have fallen since 2008 with Scotland falling at a faster rate than the other countries.

Figure 2.7: Total fertility rates, UK countries, 1971-2015



Note
The label for Northern Ireland quotes the 2014 total fertility rate because at the time of publishing the 2015 figure was not available.

Country of birth of parents

Eighty four per cent of births in 2015 were to mothers who had been born in the UK, including 75 per cent to females who were born in Scotland. A further eight per cent of mothers had been born elsewhere in the European Union (EU), including five per cent from the countries which joined the EU in 2004 (the largest number were to mothers born in Poland). Commonwealth countries were the birthplace of five per cent of mothers, including two per cent from the Indian sub-continent. In the cases where the father's country of birth was known, 84 per cent had been born in the UK, including 74 per cent who were born in Scotland.

Considering only births for which both the mother's and the father's countries of birth were known, in 15 per cent of births in 2015 neither parent was born in Scotland, and in 11 per cent of births neither parent was born in the UK. These figures compare to nine per cent and four per cent respectively in 2005.

More information about birth statistics

More detailed information about Scotland's births can be found in the Vital Events – Births section or in the Births section of the Vital Events Reference Tables of the National Records of Scotland (NRS) website.

Chapter 3 – Deaths

Numbers

In 2015, 57,579 deaths were registered in Scotland. This was 3,340 (6.2 per cent) more than in 2014. It represented 10.7 deaths per 1,000 population in 2015.

Figure 2.1 shows that from 1951 up to the early 1990s the annual number of deaths remained relatively stable at about 60,000 to 65,000 a year. The total then declined slowly to 53,661 in 2011 which was the lowest total recorded since the introduction of civil registration in 1855. The overall 'crude' death rate (10.1 per 1,000 population) was also at its lowest recorded level in 2011. It increased slightly in subsequent years and in 2014 it fell back to the 2011 level. The 2015 crude rate is around the same level as in 2006 to 2008, although the actual number of deaths is higher. The population increase over the same period (2006 to 2015) means the rate is at the same level despite the increase in the number of deaths.

Causes of death

In 2015 just under half of all deaths were due to the so-called 'three big killers'. There were 16,093 deaths from cancer (28 per cent of all deaths), 7,142 deaths from ischaemic (coronary) heart disease (12 per cent of all deaths) and 4,303 deaths from cerebrovascular disease (seven per cent of all deaths).

Since 1980, the total number of deaths from these causes has reduced, as shown in Table 3.1, falling from 65 per cent of all deaths during 1980-82 and 1990-92, to 58 per cent during 2000-02 and to 48 per cent in 2015. The proportion of deaths caused by coronary heart disease has fallen from 29 per cent in 1980-82 to 12 per cent in 2015, and by cerebrovascular disease from 14 per cent to seven per cent. However, the number of deaths from cancer has risen (from an average of 13,903 per year in 1980-1982, to 16,093 in 2015); as a proportion of all deaths, it increased from 22 per cent to 28 per cent.

Crude death rates, by sex, for some of the most common causes of death are shown in Tables 3.2a and 3.2b.

Cancer

Of the 16,093 deaths from cancer in 2015, cancer of the trachea, bronchus and lung was the most common type, with 4,047 deaths (2,075 males and 1,972 females), accounting for a quarter of all cancer deaths.

The next most frequent type of cancer death was prostate for males (986 deaths) and breast for females (989 deaths). Bowel cancer caused 1,601 deaths (860 males and 741 females) and cancers of the lymphoid, haematopoietic and related tissue caused 1,149 deaths (648 males and 501 females).

Table 3.2a shows that, over the last 30 years or so, male death rates from lung cancer have fallen by 34 per cent (from 119 per 100,000 population in 1980-82 to 79 in 2015). By contrast, the rates for females, though still lower than those for males, have increased by 73 per cent (from 41 per 100,000 population in 1980-82 to 71 in 2015).

Although overall death rates from cancer have risen since the start of the 1980s, from 291 (per 100,000 population) in 1980-82 to 321 for males and from 247 (per 100,000) in 1980-82 to 279 for females, they have actually fallen for those aged under 75. Table 3.2b shows that for males aged under 75 the rate fell from 214 (per 100,000 population) in 1980-82 to 178 in 2015 (although there was a slight rise between 2010-12 and 2015), and for females aged under 75 it fell from 170 (per 100,000 population) in 1980-82 to 145 in 2015. The average age of death from cancer has risen (Figure 3.1), and the under 75 age-standardised death rate (available on the National Records of Scotland (NRS) website) for cancer (which takes account of the change in the age-distribution of the population) has fallen considerably over this period.

Circulatory Diseases (heart disease and cerebrovascular disease)

Table 3.2a shows that, in contrast to the rises for cancer, death rates for coronary heart disease (ischaemic heart disease) and cerebrovascular disease have significantly declined. Between 1980-82 and 2015, rates for males fell by 61 per cent for coronary heart disease and 53 per cent for cerebrovascular disease, compared with reductions of 64 and 56 per cent respectively for females. Table 3.2b shows that the improvement was proportionately greater for people aged under 75, with the coronary heart disease and cerebrovascular disease death rates falling by 73 per cent and 74 per cent respectively for males aged under 75. For females aged under 75 the improvement was greater at 81 per cent for coronary heart disease and 77 per cent for cerebrovascular disease.

Table 3.1: Number of deaths from selected causes, by sex, 1980-2015

	Cancer		Coronary (Ischaemic) heart disease		Cerebrovascular disease		Total deaths from these causes			These causes as a per cent of all deaths	All deaths
Year	Males	Females	Males	Females	Males	Females	Males	Females	Persons	Persons	Persons
1980-82[1]	7,269	6,634	10,173	8,150	3,470	5,638	20,912	20,422	41,334	65%	64,050
1990-92[1]	7,664	7,324	8,964	7,846	2,913	5,029	19,541	20,199	39,740	65%	61,168
2000-02[1]	7,674	7,394	6,342	5,664	2,465	4,250	16,481	17,308	33,789	58%	57,761
2010-12[1]	7,930	7,618	4,392	3,379	1,780	2,831	14,102	13,828	27,930	52%	54,188
2015	8,378	7,715	4,168	2,974	1,728	2,575	14,274	13,264	27,538	48%	57,579

Footnote
1) Average over three year period.

Table 3.2a: Crude death rates from selected causes, by sex, Scotland, 1980-2015

Males - rates per 100,000 population

Year	Cancer: All types	Cancer: Trachea, bronchus and lung	Cancer: Prostate	Coronary (Ischaemic) heart disease	Cerebrovascular disease
1980-82[1]	291	119	19	408	139
1990-92[1]	314	111	27	367	119
2000-02[1]	315	93	32	261	101
2010-12[1]	309	83	34	171	69
2015	321	79	38	160	66

Females - rates per 100,000 population

Year	Cancer: All types	Cancer: Trachea, bronchus and lung	Cancer: Breast	Coronary (Ischaemic) heart disease	Cerebrovascular disease
1980-82[1]	247	41	45	304	210
1990-92[1]	278	57	48	297	191
2000-02[1]	281	64	43	216	162
2010-12[1]	279	74	38	124	104
2015	279	71	36	108	93

Footnote

1) Average over three year period.

Table 3.2b: Death rates from selected causes, aged under 75, by sex, Scotland, 1980-2015

Males aged under 75 - rates per 100,000 population

Year	Cancer: All types	Cancer: Trachea, bronchus and lung	Cancer: Prostate	Coronary (Ischaemic) heart disease	Cerebrovascular disease
1980-82[1]	214	92	9	290	72
1990-92[1]	210	79	11	231	50
2000-02[1]	195	61	12	142	36
2010-12[1]	171	49	10	85	21
2015	178	48	13	78	19

Females aged under 75 - rates per 100,000 population

Year	Cancer: All types	Cancer: Trachea, bronchus and lung	Cancer: Breast	Coronary (Ischaemic) heart disease	Cerebrovascular disease
1980-82[1]	170	34	36	145	69
1990-92[1]	175	42	34	115	46
2000-02[1]	158	41	28	63	31
2010-12[1]	150	43	24	31	17
2015	145	41	21	27	16

Footnote

1) Average over three year period.

Some other major causes of deaths

Whilst the focus in recent years has been on cancer and circulatory diseases as the main causes of death, the proportion of deaths from respiratory system diseases (for example pneumonia or chronic obstructive pulmonary disease) has increased from 11 per cent of all deaths in 1980-82 to 13 per cent of all deaths in 2015. In 2015 the number of deaths from respiratory system diseases (7,669) was greater than the number from coronary heart disease (7,142) for the first time.

There has also been an increase in recent years in the number of deaths from mental and behavioural disorders (for example dementia) with 4,427 deaths in 2015 (eight per cent of all deaths compared to one per cent in 1980-82) and diseases of the nervous system and sense organs (for example Alzheimer's Disease) with 3,228 deaths in 2015 (six per cent of all deaths compared to one per cent in 1980-82).

Diseases of the circulatory system other than coronary heart disease and cerebrovascular disease (for example other forms of heart disease) accounted for 4,323 deaths (eight per cent) and there were 2,926 deaths from diseases of the digestive system (for example chronic liver disease) accounting for five per cent of all deaths.

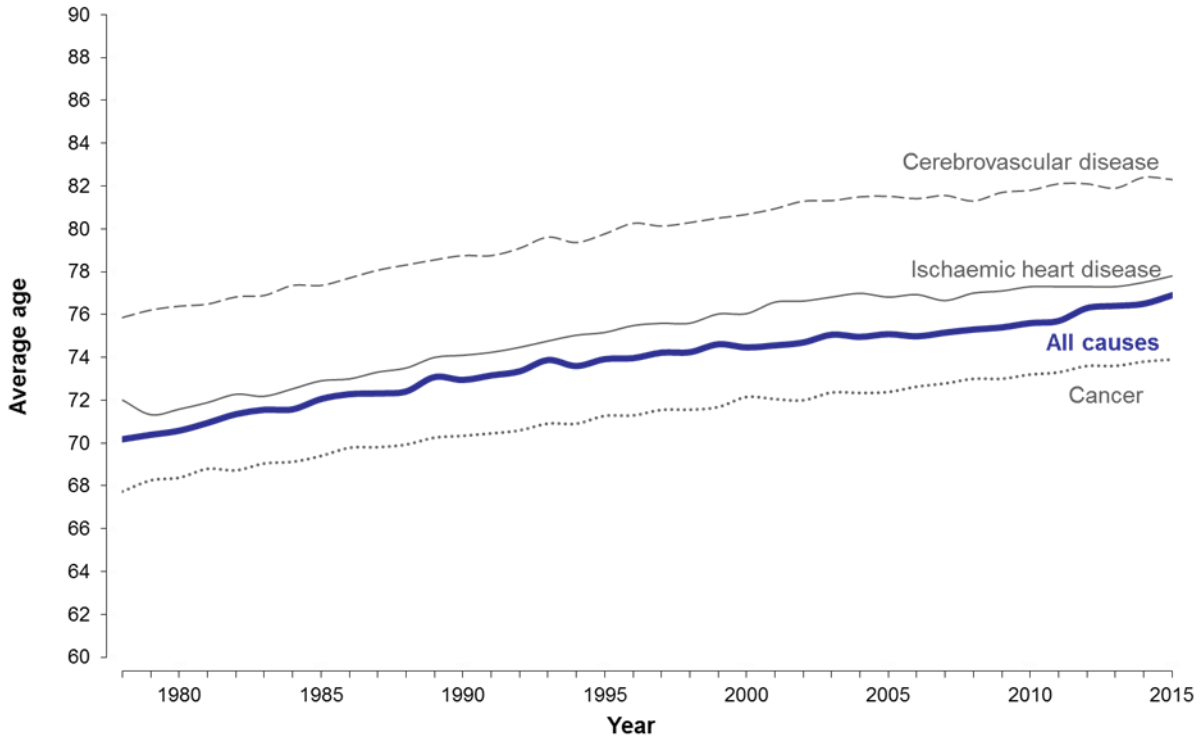
National Records of Scotland (NRS) publishes a wide range of other statistics on causes of death. They are available from the relevant parts of our website (which include some background information on the basis of the statistics):

- drug-related deaths
- alcohol-related deaths
- deaths involving healthcare associated infections (Clostridium difficile and MRSA)
- suicides
- accidental deaths
- hypothermia
- winter mortality.

Mortality by age

The average age at death has increased fairly steadily for many years. Figure 3.1 shows that the average ages at death for cancer, heart disease and cerebrovascular disease have generally increased in line with the average for all deaths.

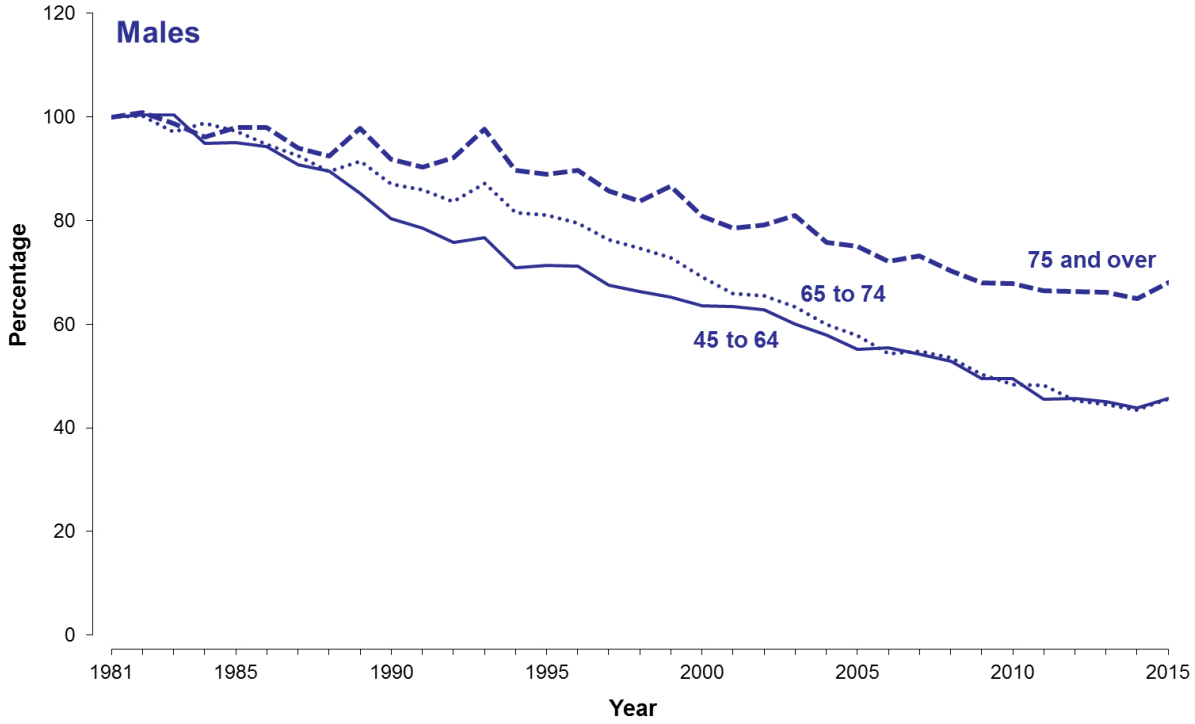
Figure 3.1: Average age at death, selected causes, Scotland, 1978-2015

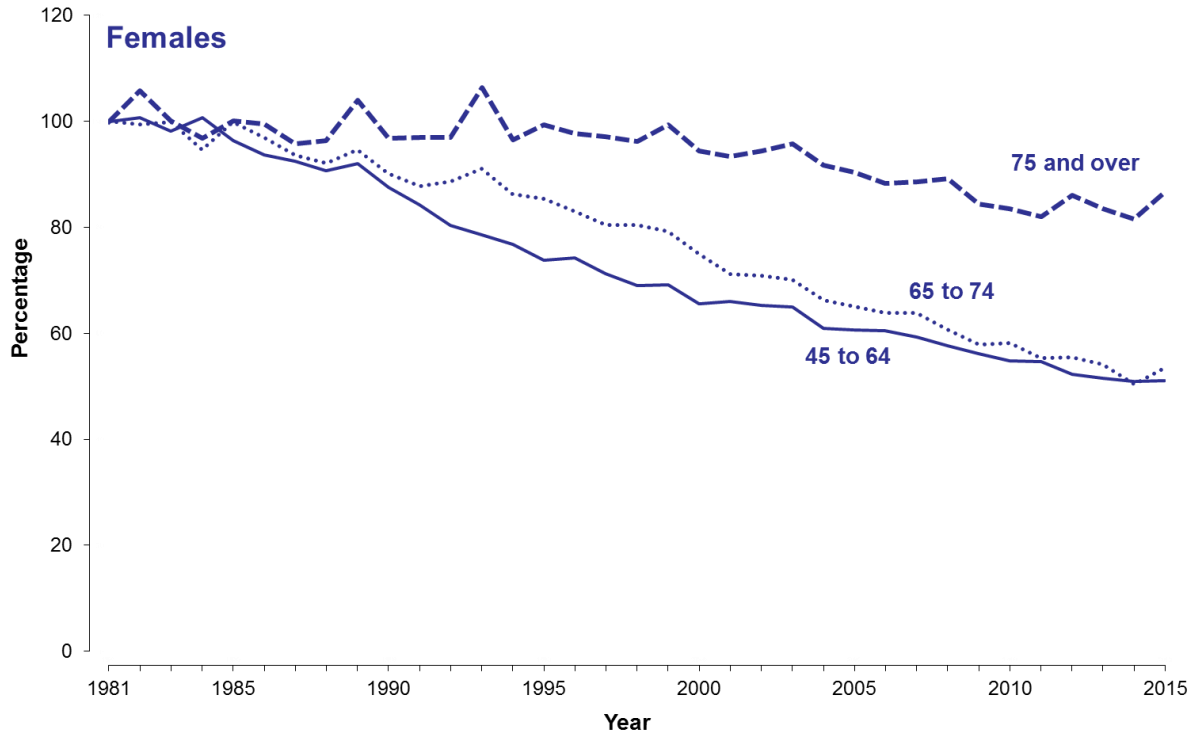


About 64 per cent of deaths in 2015 were of people aged 75 and over, and a further 19 per cent were between the ages of 65 and 74. The relative stability in the total number of deaths over recent years masks significant reductions in age-specific mortality. Figure 3.2 shows, for both males and females, selected age-specific mortality rates over the last 30 years relative to the 1981 rates. The three age groups shown (45 to 64, 65 to 74 and 75 and over) accounted for 96 per cent of all deaths in 2015.

At all these ages, there have been greater improvements in male than in female mortality. In the 45 to 64 age group, the death rates for males and females dropped by 54 per cent and 49 per cent respectively. In the 65 to 74 age group, male rates decreased by 54 per cent compared to 45 per cent for females. The greatest differential is in the 75 plus age group, where male mortality has fallen by 32 per cent compared to only 13 per cent for females. These changes have narrowed the difference between female and (traditionally higher) male mortality.

Figure 3.2: Age specific mortality rates as a proportion of 1981 rate, 1981-2015

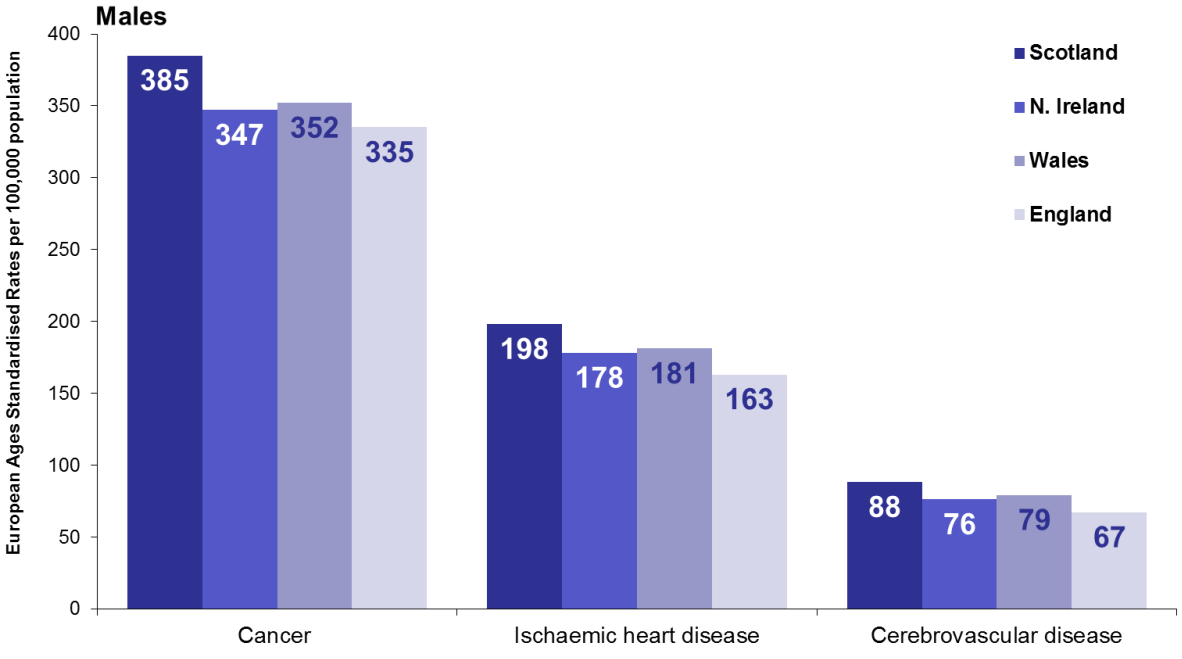




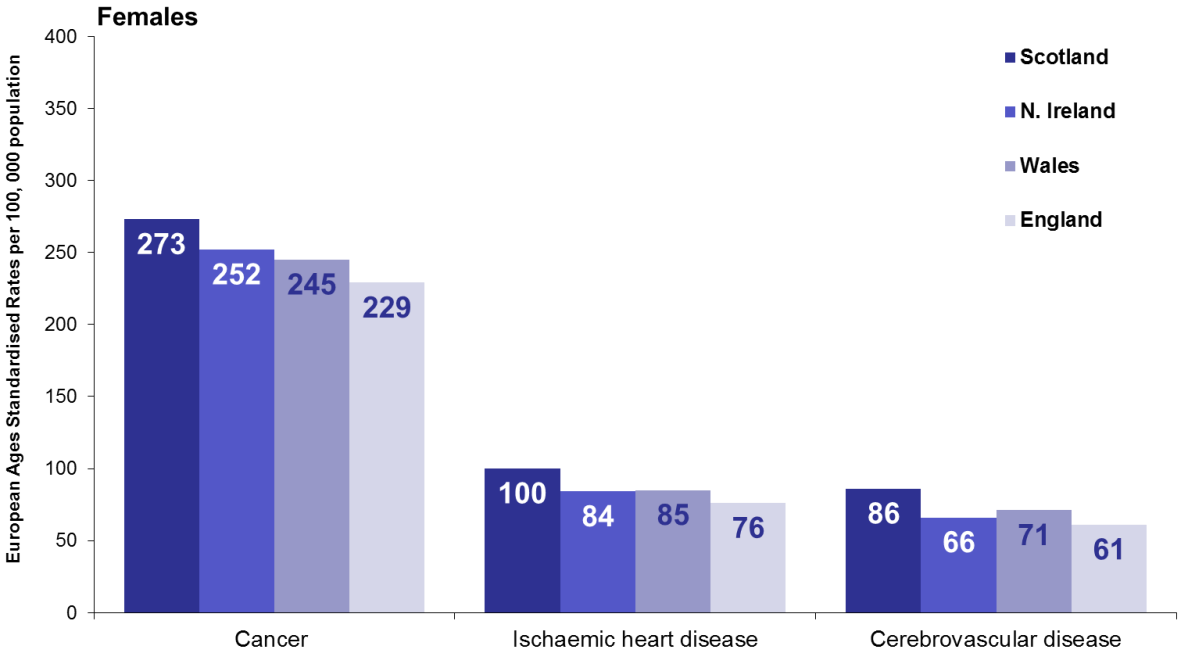
Geographical variations in mortality

Using 2014 data, the latest available, Figure 3.3 compares the death rates for the constituent countries of the UK for selected causes after adjusting for differences in age structure, by applying the European Standard Population age structure. The Scottish rates for cancer, ischaemic heart disease, and cerebrovascular disease are well above the rates for the other countries of the United Kingdom, for both males and females. The methodology for calculating age-standardised rates is available on the age-standardised death rates section of the NRS website.

Figure 3.3: Age standardised[1] mortality rates, by selected cause and sex, 2014



Footnote
1) European Ages Standardised Rates (EASRs). These age standardised mortality rates are based on the 2013 version of the European Standard Population.



Footnote
1) European Ages Standardised Rates (EASRs). These age standardised mortality rates are based on the 2013 version of the European Standard Population.

Appendix 1, Table 3 shows the death rate for each of the European Union (EU) member states, and for some other countries in Europe. These are so-called 'crude' death rates. They are calculated by expressing the number of deaths per 1,000 population. As a result, they do not take account of differences in the sex and age structures of the countries' populations. All else being equal, a country with an unusually high proportion of its population in the younger age groups could have an unusually low 'crude' death rate. So, though the figure for Scotland is higher than those for most of the countries that are shown, this could to some extent be due to the structure of the Scottish population. A better way to compare Scotland's mortality with other countries' is to use the estimates of life expectancy for each country (please refer to Chapter 4 - Life Expectancy) or to consider age-standardised death rates (available on the NRS website).

Stillbirths, perinatal deaths and infant deaths

There were 211 stillbirths registered in Scotland in 2015. Stillbirths (where a child born after the 24th week of pregnancy does not breathe or show any other sign of life) are registered separately from live births and from deaths, and so are not included in either of those figures.

Perinatal deaths consist of stillbirths plus deaths in the first week of life (the latter are registered as live births and as deaths). There were 80 deaths of children who were aged under one week old, so there was a total of 291 perinatal deaths.

Infant deaths are deaths in the first year of life, all of which are registered as live births and as deaths. In total, 175 infant deaths were registered in Scotland in 2015 (including those who died in the first week of life).

Appendix 1, Table 1 shows that in 2015 the stillbirth rate (3.8 per 1,000 live and still births) and the infant death rate (3.2 per 1,000 live births) were both at their lowest levels ever recorded. Both rates have fallen greatly since the Second World War. The stillbirth rate has fallen slowly in the past 30 years but the infant death rate has continued a steeper decline over the same period.

Appendix 1, Table 3 shows that the stillbirth rate for Scotland in 2015 (3.8) was lower than that for the UK as a whole (4.6) but higher than those of 13 of the 28 European Union (EU) countries. The infant death rate for Scotland in 2015 (3.2) was below the UK rate (3.9) but higher than those of 11 of the 28 EU countries.

More information about death statistics

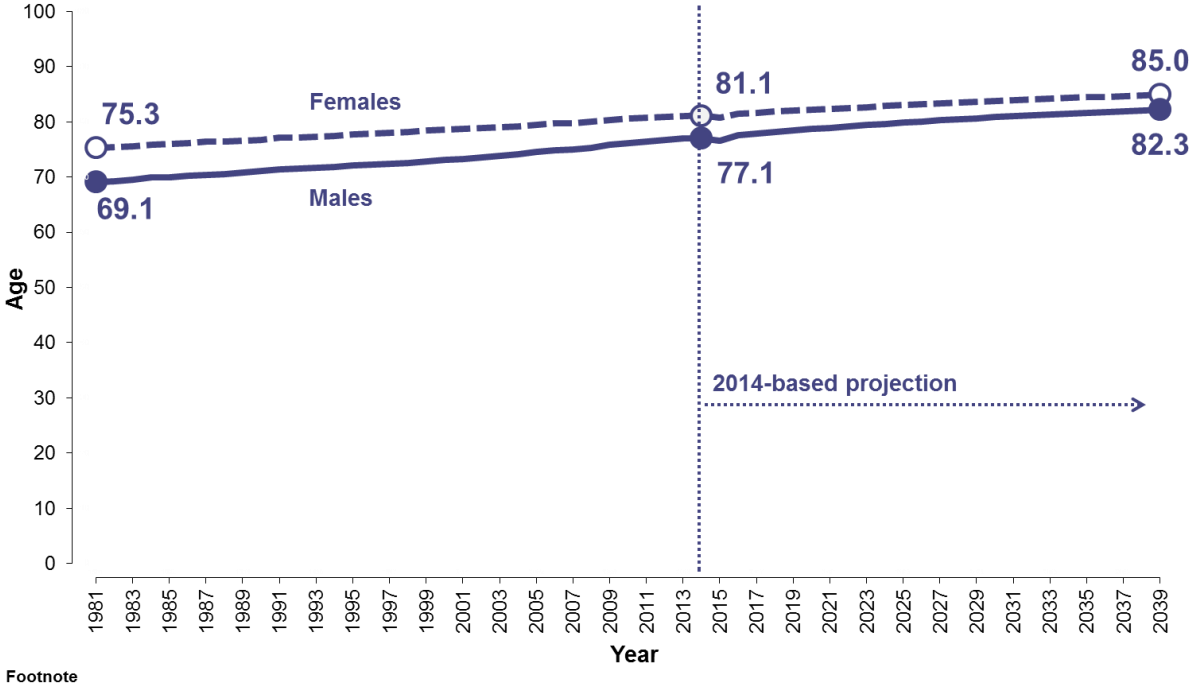
More detailed information about Scotland's deaths can be found in the Vital Events - Deaths section or in the Deaths section of the Vital Events Reference Tables of the NRS website.

Chapter 4 - Life Expectancy

Although mortality rates in Scotland have generally fallen more slowly than in the rest of the UK and elsewhere in Europe, the improvements are still considerable and the impact is reflected in the steadily rising expectation of life.

The expectation of life at birth is a commonly used measure of mortality which is particularly helpful in comparing the 'health' of a nation over time and for making comparisons with other countries as well as for areas within Scotland. Figure 4.1 shows that the expectation of life at birth in Scotland has improved over the last 33 years, increasing from 69.1 years for males and 75.3 years for females born around 1981 to 77.1 years and 81.1 years respectively for those born around 2014. Figure 4.1 also illustrates that improvements in life expectancy at birth are projected to continue, rising to 82.3 years for males and 85.0 years for females by 2039.

Figure 4.1 Expectation of life at birth[1], Scotland, 1981-2039



Footnote
1) Figures to 2014 are from National Life Tables produced by the Office for National Statistics (ONS). They are based on three years of data. For example, the 2014 figure uses data for 2013-2015. Figures from 2015 are projected single year life expectancies, ONS.

Life expectancy at birth has stabilised for both males and females over the past year (for those born around 2013 compared to those born around 2014). There was an increase in the number of deaths over winter 2014 to 2015 compared to the previous fourteen winters. Estimates of life expectancy for Scotland take account of deaths at all ages, along with births and population estimates, over a period of three consecutive years.

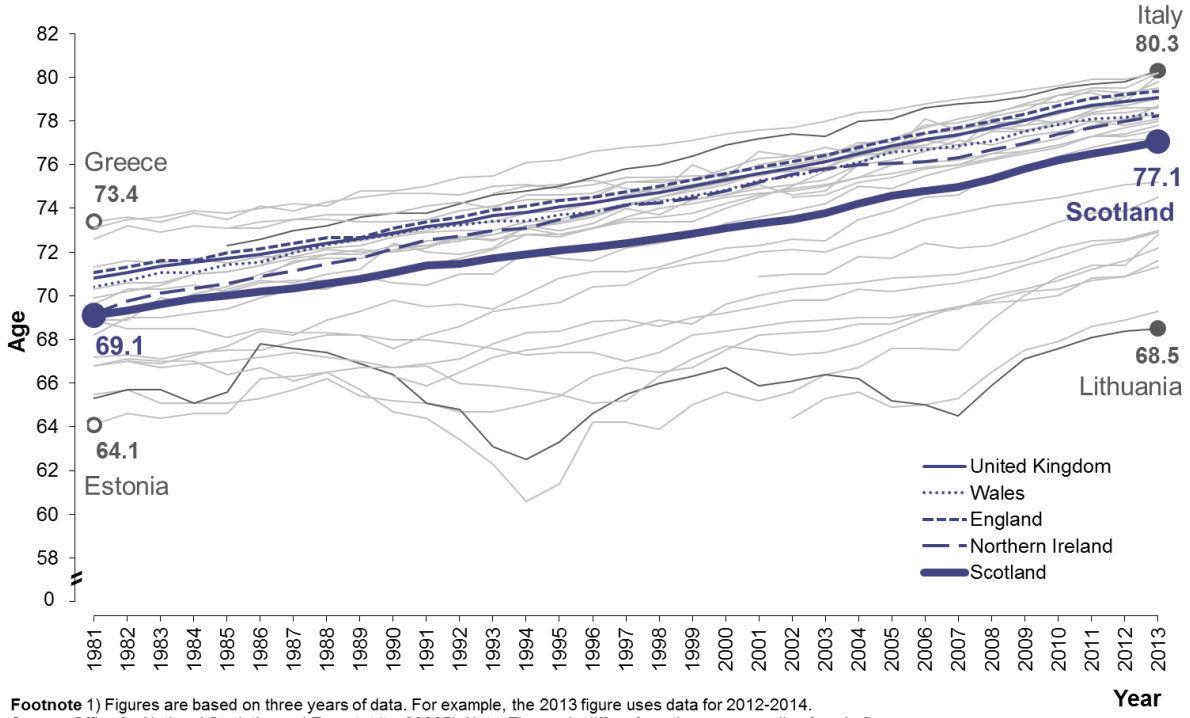
In addition, Figure 4.1 shows that the gap between male and female life expectancy at birth has been steadily decreasing from 6.2 years for people born around 1981 to 4.1 years for people born around 2014. The gap between males and females is projected to reduce to 2.7 years by 2039.

The improvement in life expectancy at birth for males and females in Scotland since the period 1980-82 can also be seen in Figure 4.2a (males) and Figure 4.2b (females). Comparisons are given with life expectancy in the United Kingdom (UK), countries within the UK and the other European Union 28 (EU-28) countries.

For males, the gap between Scotland and the country with the highest life expectancy in the EU-28 has narrowed over the past 32 years. In 1980-82 the gap between Greece (highest at the time) and Scotland was 4.3 years while in 2012-14 the gap between Italy (current highest) and Scotland was 3.2 years. Over the same period, the gap between Scotland and the country with the lowest male life expectancy has widened. In 1980-82 the gap between Scotland and Estonia was 5 years while in 2012-14 the gap between Scotland and Lithuania was 8.6 years.

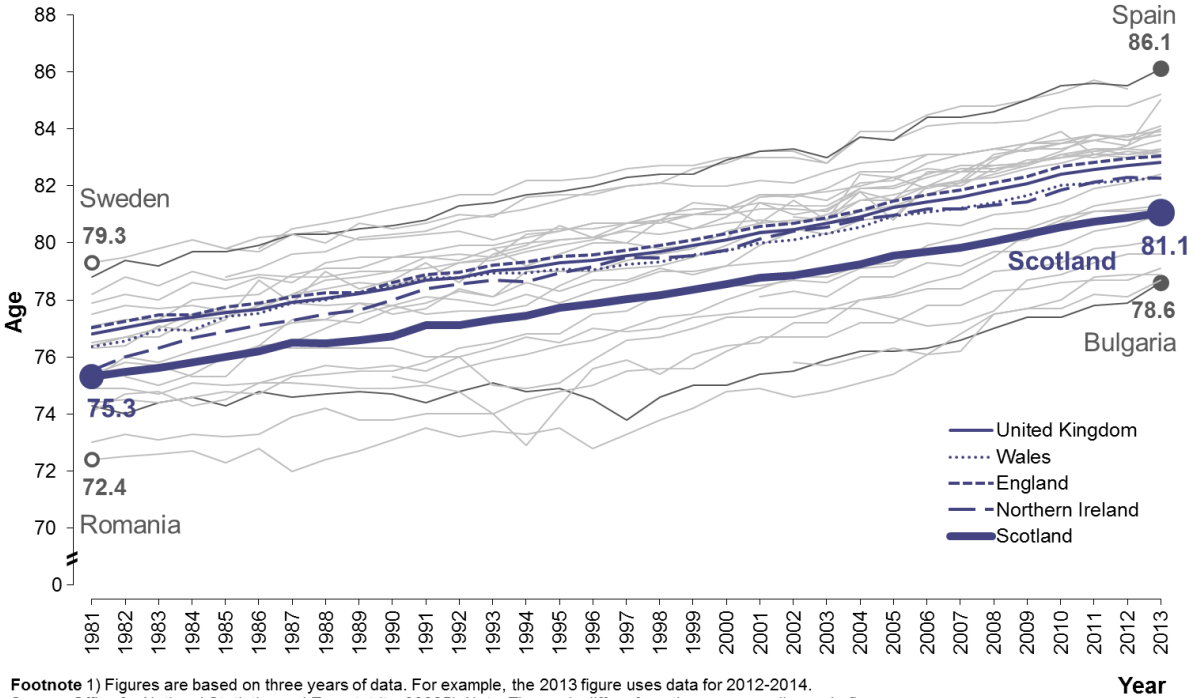
On the other hand, for females the gap between Scotland and the country with the highest life expectancy in the EU-28 has become wider over this period. In 1980-82 the gap between Sweden and Scotland was 4.0 years while in 2012-14 the gap between Spain and Scotland was 5.0 years. Meanwhile the gap between Scotland and the country with the lowest female life expectancy has narrowed slightly. In 1980-82 the gap between Scotland and Romania was 2.9 years while in 2012-14 the gap between Scotland and Bulgaria was 2.5 years.

Figure 4.2a: Life expectancy at birth[1] in European Union countries, 1981 to 2013, males



Footnote 1) Figures are based on three years of data. For example, the 2013 figure uses data for 2012-2014.
Source: Office for National Statistics and Eurostat (tps00025). Note: The scale differs from the corresponding female figure.

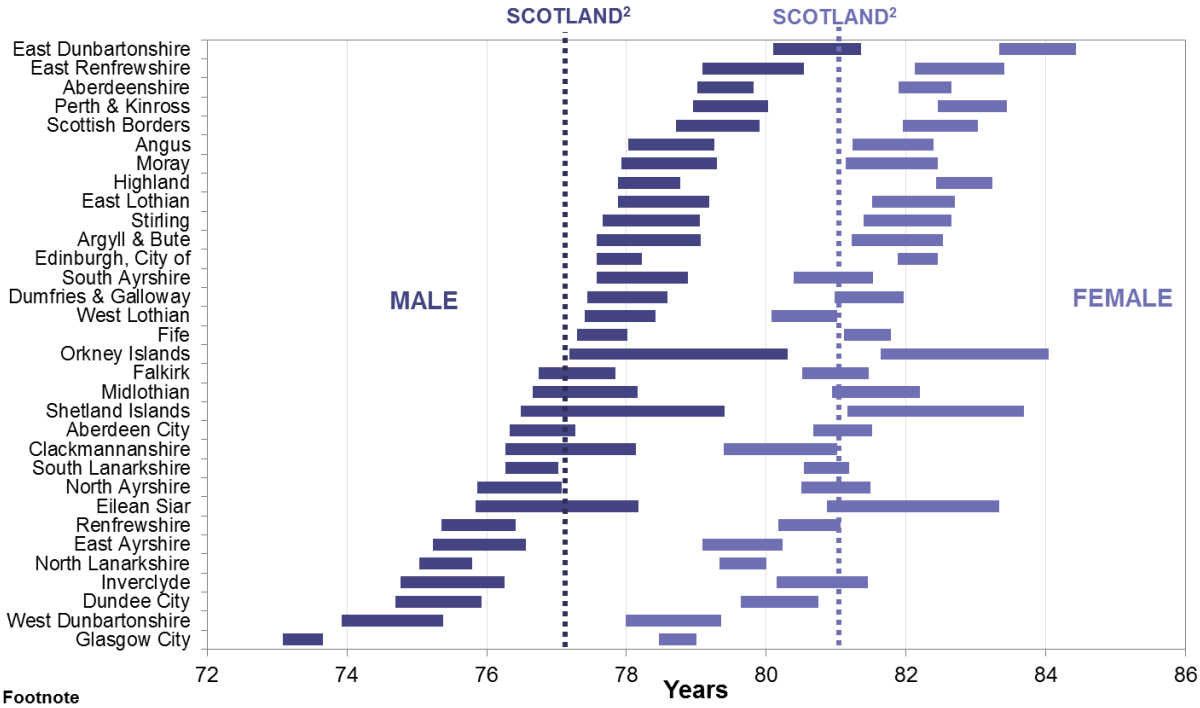
Figure 4.2b: Life expectancy at birth[1] in European Union countries, 1981 to 2013, females



Footnote 1) Figures are based on three years of data. For example, the 2013 figure uses data for 2012-2014.
Source: Office for National Statistics and Eurostat (tps00025). Note: The scale differs from the corresponding male figure.

Within Scotland, there are considerable differences in life expectancy at birth between different council areas as illustrated in Figure 4.3. For males, the council area with the lowest life expectancy was Glasgow City (73.4 years), and the council area with the highest life expectancy was East Dunbartonshire (80.7 years), 7.4 years more than Glasgow City. For females, East Dunbartonshire also had the highest life expectancy (83.9 years), 5.2 years more than West Dunbartonshire, the area with the lowest figure (78.7 years).

Figure 4.3: Life expectancy at birth, 95 per cent confidence intervals (CI)[1] for council areas, 2012-2014 (males and females)[3]

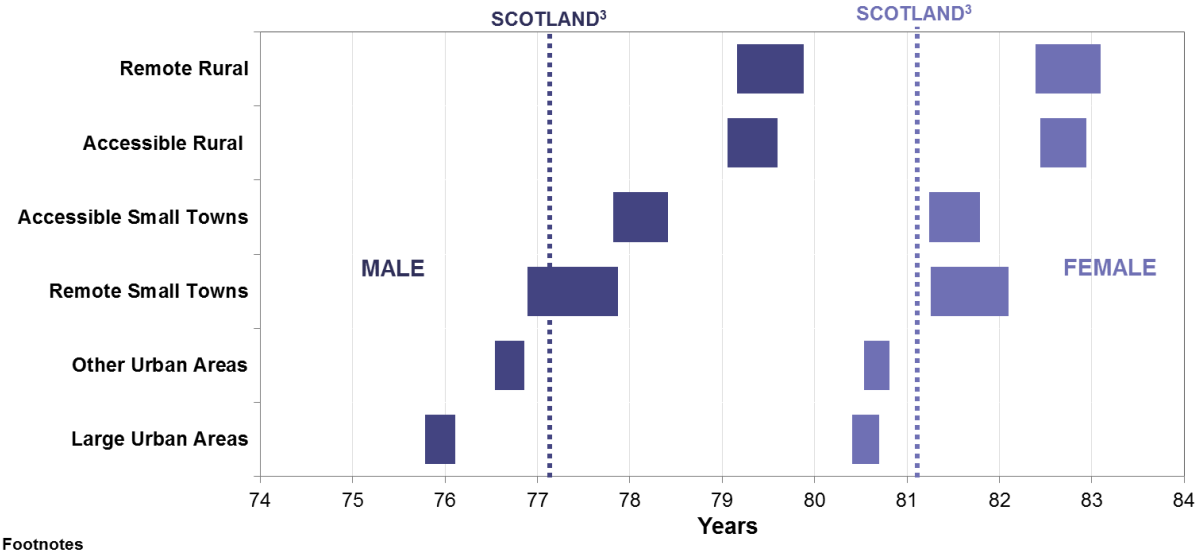


Footnote

1) Life expectancy at birth is an estimate which is subject to a margin of error. The accuracy of results can be indicated by calculating a confidence interval which provides a range within which the true value underlying life expectancy would lie (with 95 per cent probability).
2) The Scotland-level life expectancy estimates are for use only as a comparator for the corresponding sub-Scotland-level figures. The definitive Scotland-level life expectancy estimate (based on National Life Tables) is published by the Office for National Statistics.
3) Ordered by lowest male life expectancy to highest.

There are also differences between urban and rural areas as shown in Figure 4.4. Males in rural areas – remote and accessible – can expect to live around 3.5 years longer (79.5 and 79.3 years respectively) than males in large urban areas (76.0 years). Females in rural areas – remote and accessible – can expect to live over two years longer (both 82.7 years) than females in large urban areas (80.6 years).

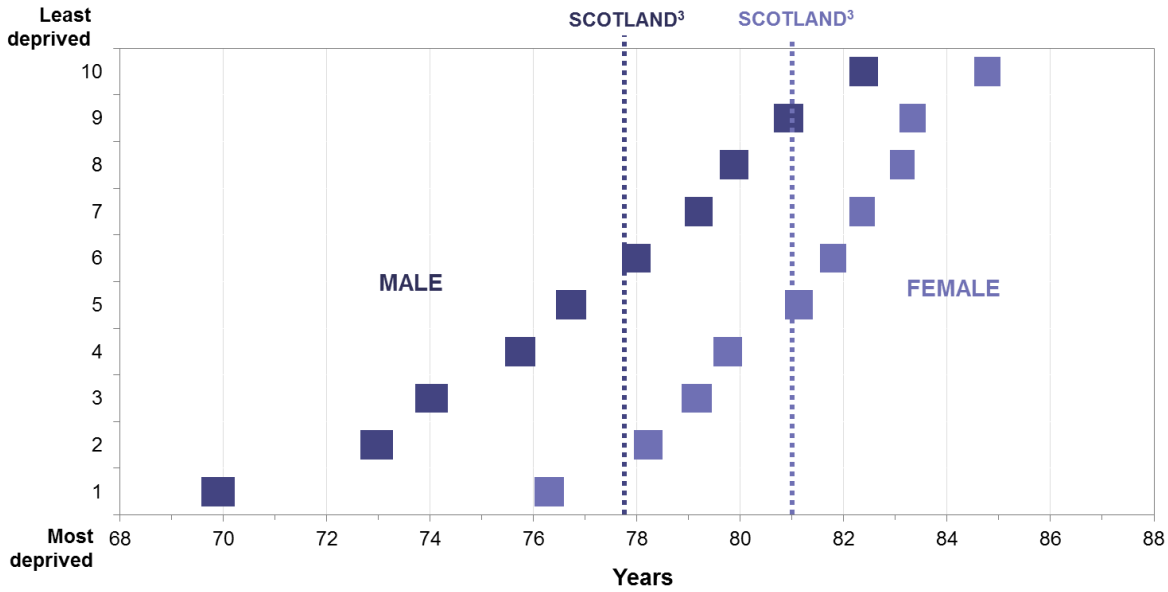
Figure 4.4: Life expectancy at birth, 95 per cent confidence intervals (CI)[1] for urban / rural[2] classification, 2012-2014 (males and females)



Footnotes
1) Life expectancy at birth is an estimate which is subject to a margin of error. The accuracy of results can be indicated by calculating a confidence interval which provides a range within which the true value underlying life expectancy would lie (with 95 per cent probability).
2) Scottish Government's 6-fold Urban/Rural Classification version 2014.
3) The Scotland-level life expectancy estimates are for use only as a comparator for the corresponding sub-Scotland-level figures. The definitive Scotland-level life expectancy estimate (based on National Life Tables) is published by the Office for National Statistics.

Life expectancy increases as deprivation decreases, as illustrated by Figure 4.5. Males born around 2012 in the 10 per cent least deprived areas of Scotland can expect to live around 12.5 years longer than those in the 10 per cent most deprived areas (82.4 years compared with 69.9 years). Females in the 10 per cent least deprived areas of Scotland can expect to live around 8.5 years longer than those in the 10 per cent most deprived areas (84.8 years compared with 76.3 years).

Figure 4.5: Life expectancy at birth, 95 per cent confidence intervals (CI)[1] by level of deprivation[2], 2011-2013 (males and females)



Footnotes
1) Life expectancy at birth is an estimate which is subject to a margin of error. The accuracy of results can be indicated by calculating a confidence interval which provides a range within which the true value of underlying life expectancy would lie (with 95 per cent probability).
2) Scottish Index of Multiple Deprivation (SIMD) 2012. 2011-2013 is the latest available data for life expectancy by SIMD 2012.
3) The Scotland-level life expectancy estimates are for use only as a comparator for the corresponding sub-Scotland-level figures. The definitive Scotland-level life expectancy estimate (based on national life tables) is published by the Office for National Statistics.

The gap between male and female life expectancy is also larger in the 10 per cent most deprived areas (6.4 years) than in the 10 per cent least deprived areas (2.4 years).

More information about life expectancy statistics

A useful extension of life expectancy estimates is information on Healthy Life Expectancy (HLE) which is published by the Information Services Division (ISD) of the NHS. HLE is defined as the number of years people can expect to live in good health. The difference between HLE and life expectancy indicates the length of time people can expect to spend in poor health. More information on HLE in Scotland is available on the website of the Scottish Public Health Observatory (ScotPHO).

More detailed information about Scotland's life expectancy can be found within the Life Expectancy section of the National Records of Scotland (NRS) website.

Chapter 5 - Migration

Unlike some countries, the United Kingdom (UK) does not have a comprehensive system of recording migrants, particularly those leaving the country, nor any legal requirement to notify change of address. Therefore, migration is the most difficult component of population change to measure and project. Migration and the reasons for migrating are also much more susceptible to short-term changes in social and economic circumstances than births and deaths. More detailed information on the methodology for estimating migration is available on the Migration - Methodology section of the National Records of Scotland (NRS) website.

Trends in migration since 1951

Historically, Scotland has been a country of net out-migration, with more people leaving to live elsewhere than moving to live in Scotland. As Figure 5.1 shows, net out-migration fell in the late 1960s and the 1970s and was later followed by a few years of net in-migration during the early 1990s. Since the year to mid-2001 Scotland has been in a period of net in-migration. From the year to mid-2004 until the year to mid-2011 there were net gains of at least 18,600 people per year, and in the year to mid-2007 the net migration gain was 33,000, the highest since these estimates began. In the year to mid-2015 net in-migration increased to 28,000, up from 17,600 in the previous year and the highest since the year to mid-2011.

Figure 5.1: Estimated net migration, Scotland, 1951-2015

Net migration can be significantly affected by relatively small changes in the much larger flows of migrants into or out of Scotland from year-to-year, particularly if one flow rises while the other falls. Between the year to mid-2004 and mid-2011 in-migration to Scotland was typically around 90,000 per year, whilst out-migration from Scotland was around 70,000.

In the last four years in-migration to Scotland has been lower than the levels seen between the year to mid-2004 and mid-2011. In the year to mid-2015 around 85,000 people came to Scotland, a rise of around 2,600 from the previous year. Following a recent peak of 68,300 people leaving Scotland in the year to mid-2012, in the last three years there have been falls in out-migration. Around 57,000 out-migrants left Scotland in the year to mid-2015, approximately 7,900 fewer than the previous year.

Origins and destinations of migrants

In the year to 30 June 2015, around 47,200 people came to Scotland from England, Wales and Northern Ireland and around 38,800 people left Scotland for the rest of the UK, resulting in a net gain of approximately 8,400 people. During the same period, around 37,800 people came to Scotland from overseas and around 18,200 left Scotland to go overseas, resulting in a net gain of approximately 19,600 people.

Table 5.1 summarises the migration flows between Scotland and the rest of UK and Scotland and overseas between mid-2014 and mid-2015. The in-flows from both the rest of the UK and overseas are larger than the out-flows to the rest of the UK and overseas, resulting in net migration gains.

Table 5.1: Migration between Scotland and rest of UK/overseas: 2014-2015

	In	Out	Net
Rest of UK	47,200	38,800	8,400
Overseas	37,800	18,200	19,600
Total	85,000	57,000	28,000

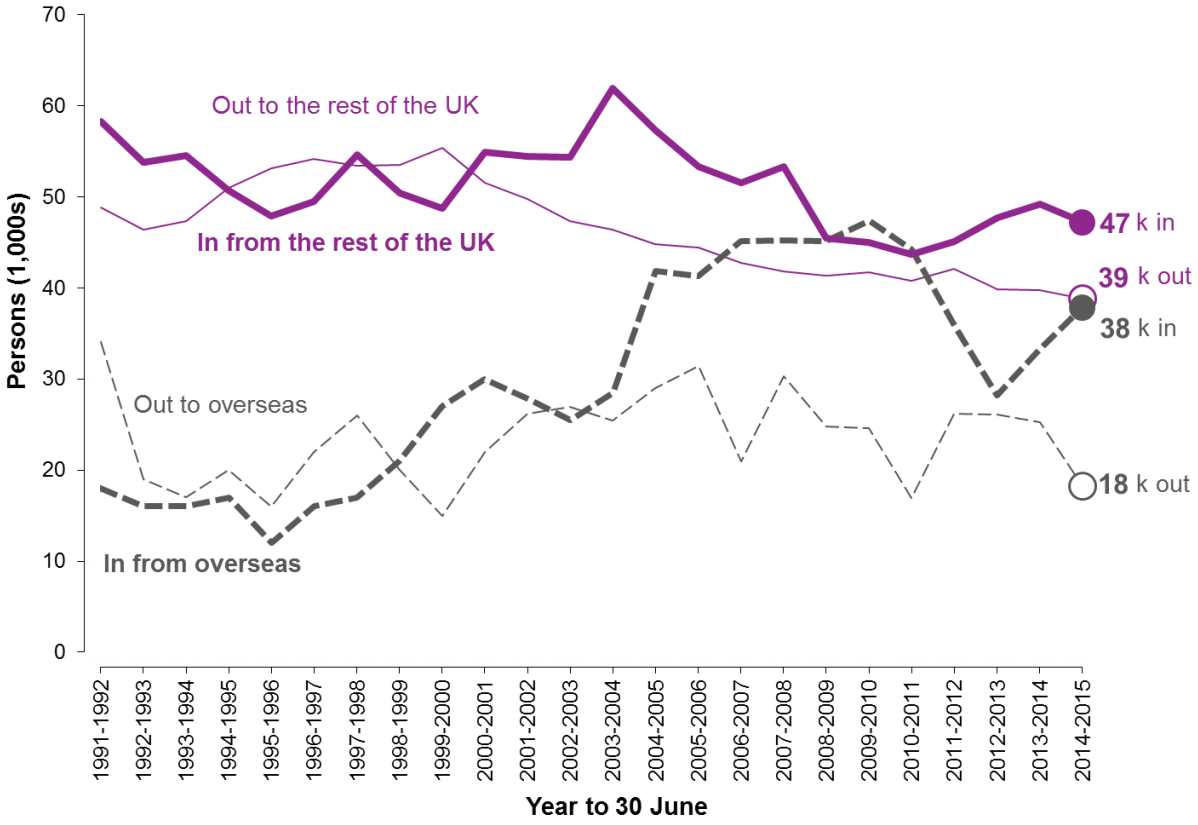
Note
1) Numbers have been rounded to the nearest hundred.

International migration is the most difficult to estimate as it is based primarily on the International Passenger Survey (IPS). This is a sample survey conducted at the channel tunnel, main airports and ports across the UK, and the sample size for Scotland is very small (around 220 migrant contacts between mid-2014 and mid-2015).

Internationally, a migrant is defined as someone who changes country of usual residence for 12 months or more, so a short-term seasonal migrant worker will not be counted in the migration estimates or in the mid-year population estimates. More information about the migration data sources and definitions used can be found in the Migration - Methodology section of the NRS website.

Figure 5.2 illustrates the trend in flows of people to and from the rest of the UK and overseas since the year to 30 June 1992. Since the year to mid-2001, in-migration to Scotland from the rest of the UK has been higher than out-migration to the rest of the UK. Similarly, since the year to mid-2004, in-migration to Scotland from overseas has been higher than out-migration to overseas. In-migration from the rest of the UK has been higher than in-migration from overseas in every year except for the years to mid-2010 and to mid-2011.

Figure 5.2: Movements to/from the rest of the UK and overseas, 1991-2015



For mid-2015 an improved method has been used to estimate migration within the UK, further details on the change of method can be found in the Migration - Methodology section of the NRS website.

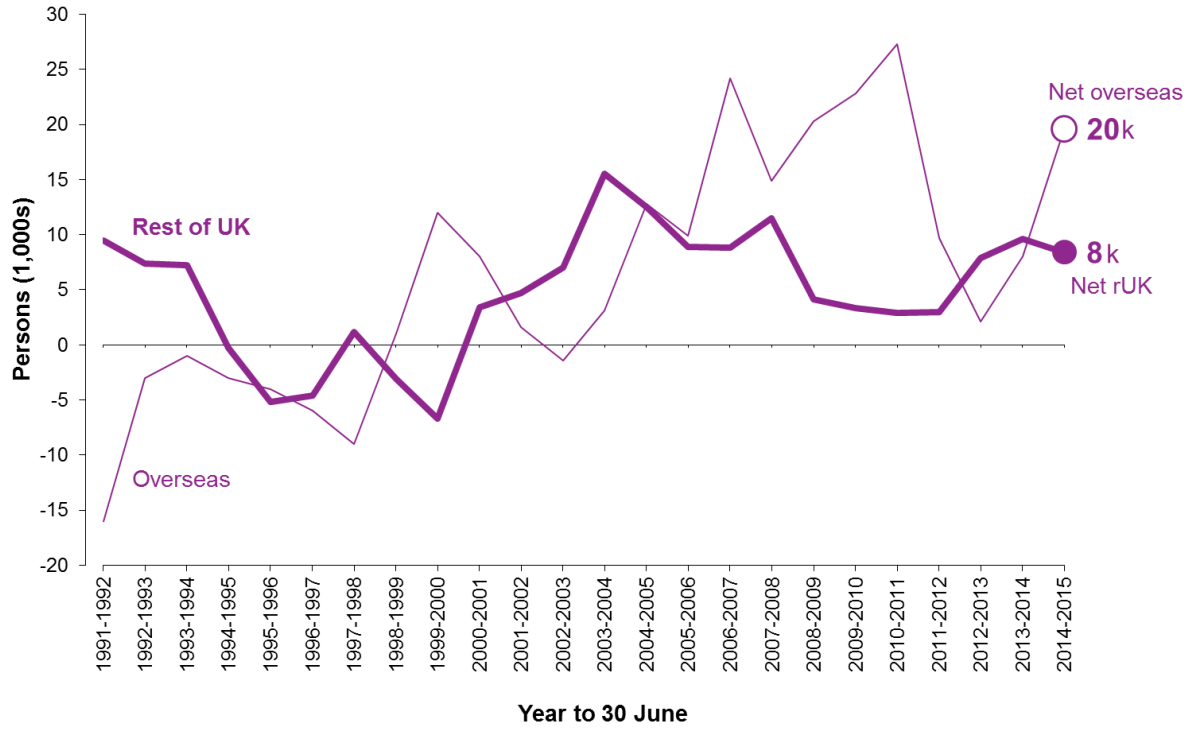
In the last year there has been a fall in the number of people coming to Scotland from the rest of the UK following increases in the previous three years. This estimated reduction of 2,100 in-migrants from the rest of the UK to Scotland between the year to mid-2014 and mid-2015 is largely due to the improvement in the method for estimating within UK migration. In the year to mid-2015 it was estimated that around 47,200 people came to Scotland from the rest of the UK, and around 38,800 people left Scotland in the opposite direction. A peak of 61,900 people coming to Scotland from the rest of the UK was estimated in the year to mid-2004. Migration from Scotland to the rest of the UK has fallen from a peak of around 55,000 in the year to mid-2000 to its present level of 38,800, the lowest estimated.

In the latest year in-migration to Scotland from overseas increased and out-migration to overseas fell, resulting in the net gain increasing from 8,000 in the year to mid-2014 to 19,600 in the year to mid-2015. In the year to mid-2015 it was estimated that around 37,800 people came to Scotland from overseas (approximately 4,600 higher than the previous year), and around 18,200 people left Scotland in the opposite direction (approximately 7,000 fewer than the previous year). A peak of 47,400 people coming to Scotland from overseas was estimated in the year to mid-2010. The highest estimated level for people leaving Scotland to move overseas was 34,000 in the year to mid-1992.

Figure 5.3 illustrates the trend in net migration between Scotland and the rest of the UK and Scotland and overseas over the last twenty years. Since the year to mid-2001 there has been net in-migration from the rest of the UK, with a peak of around 15,500 more people moving to Scotland than leaving in the year to mid-2004. Following a period of net out-migration from Scotland to overseas in the year to mid-2003 there have been net migration gains in each subsequent year, with a peak of around 27,300 more people moving into Scotland than leaving in the year to mid-2011.

In the year to mid-2015 the net migration gain from overseas was higher than from the rest of the UK, following the two previous years where the opposite was true. This is a return to the pattern generally seen over the last 10 years where net migration from overseas has been higher than from the rest of the UK.

Figure 5.3: Estimated net migration with the rest of the UK and overseas, 1991-2015



Age and sex of migrants

Figure 5.4 illustrates the age distribution of people moving between Scotland and the rest of the UK between mid-2014 and mid-2015. The peak age for migration into Scotland is 19 and there is a pronounced net migration gain at this age. The peak ages for migration out of Scotland are 23 and 24, resulting in notable net migration losses at these ages. These large in- and out-flows are the result of an influx of students from outside Scotland starting higher education in Scotland, followed by moves out of Scotland after graduation.

Figure 5.4: Movements between Scotland and the rest of the UK, by age, 2014-2015

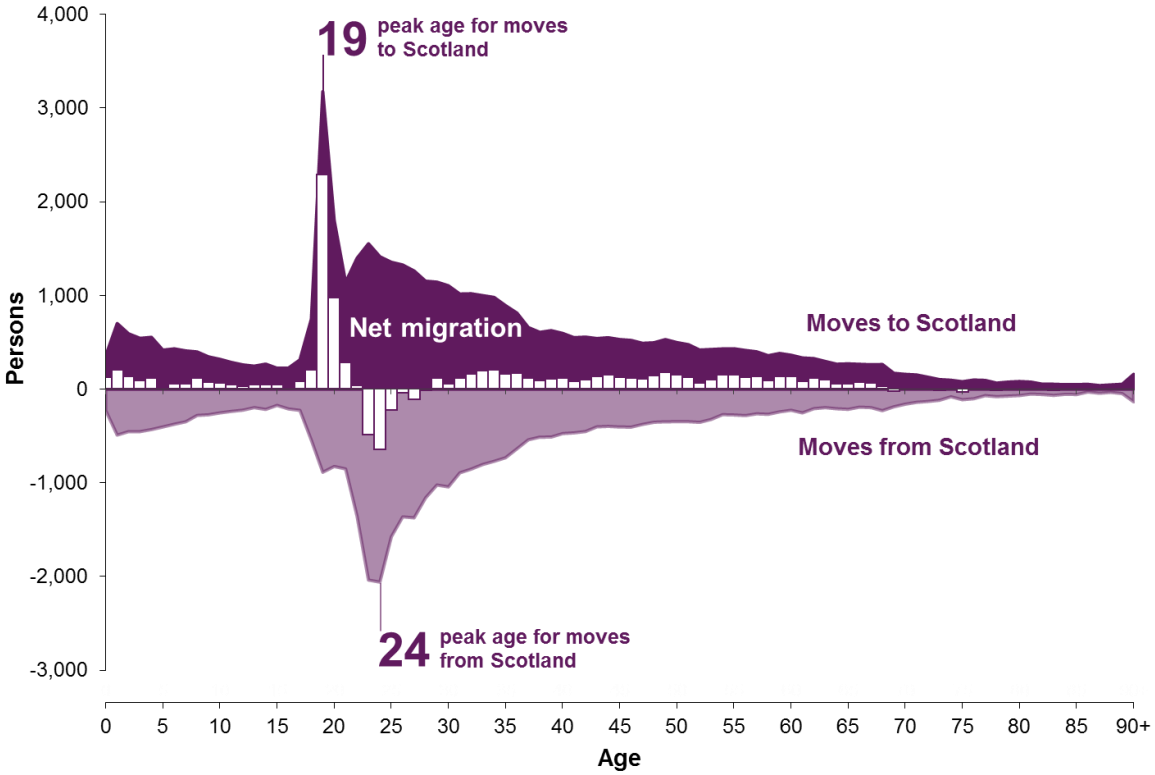


Figure 5.5: Movements between Scotland and overseas, by age, 2014-2015

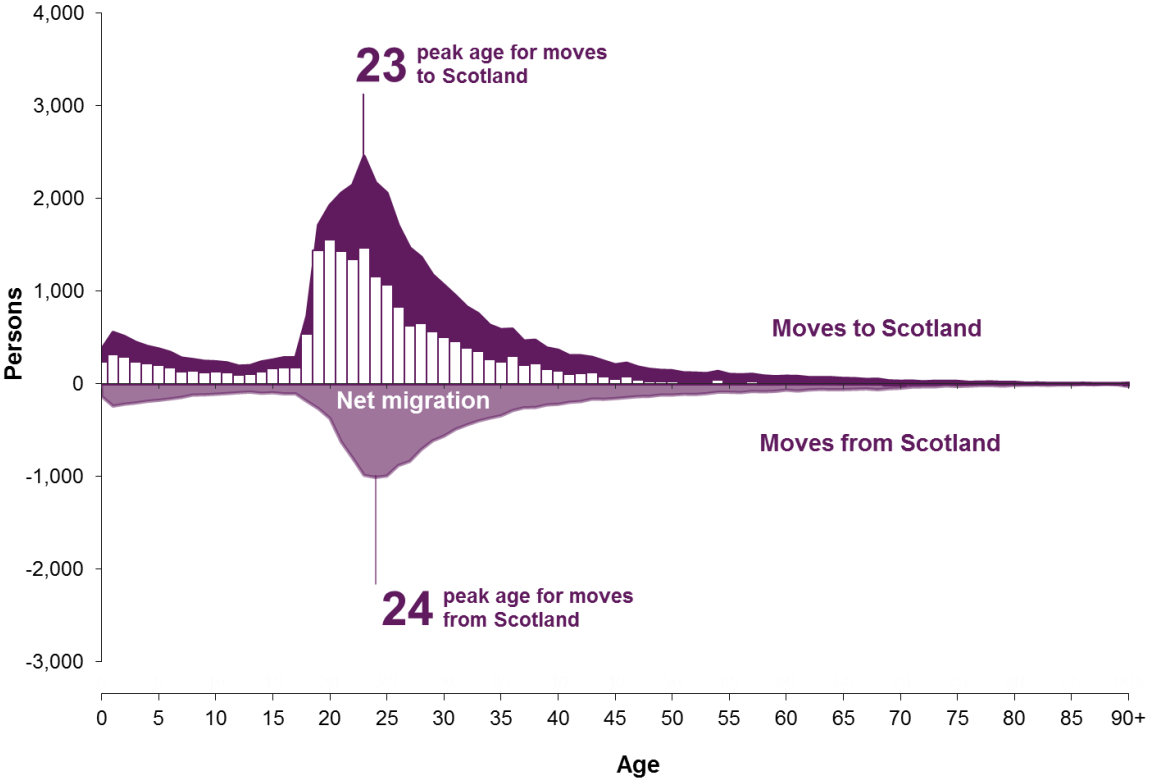


Figure 5.5 shows the age distribution of people moving between Scotland and overseas from mid-2014 to mid-2015. The peak age for migration into Scotland from overseas is 23. There are also high numbers of in-migrants (500 or more) for each

age from 18 to 36. The peak ages for migration out of Scotland to overseas are between 23 and 25. There are high numbers of out-migrants (500 or more) from age 21 to 30. The number of in-migrants is higher over these age ranges, resulting in net in-migration for all ages through to age 57.

Both Figure 5.4 and Figure 5.5 represent migrants by age at mid-year. The age at which the migrants actually move can be younger than their age at mid-year. For example students from the rest of the UK often move to Scotland around August and September when they are still aged 18, but turn 19 prior to the mid-year point the following June when the population is estimated by NRS. They are therefore counted as in-migrants at age 19 even though they were aged 18 when they made their move to Scotland.

Migrants to Scotland tend to be younger than the general population. Of in-migrants to Scotland, 49 per cent from the rest of the UK and 68 per cent of those from overseas were aged 16 to 34 years, compared with 25 per cent of the resident population. Additionally, only six per cent of people coming to Scotland from the rest of the UK and one per cent of people entering from overseas were aged 65 and over, compared with 18 per cent of the resident population. In the year to mid-2015, Scotland had a net gain of UK migrants in all age groups below 75 and net gain of international migrants for all age groups below 65.

Migration and the distribution of people in Scotland

In many parts of Scotland migration is the most important component of population change. Net migration rates (the amount of net migration between mid-2014 and mid-2015 as a proportion of the mid-2014 population) are a useful indicator when comparing migration between areas of different sizes. Net migration rates for council areas are shown in Figure 5.6. This includes migration between council areas within Scotland and migration between Scotland and the rest of the UK and overseas.

The patterns of migration over the period mid-2014 to mid-2015 indicate that the highest net out-migration rates were in Argyll and Bute, Inverclyde and Shetland Islands. The highest net in-migration rates were in Stirling, City of Edinburgh and Midlothian.

Looking at only migration with areas outside Scotland (the rest of UK and overseas) shows a slightly different pattern. Figure 5.7 displays the migration rates for the period mid-2014 to mid-2015 with areas outside Scotland. The highest net out-migration rates were in East Renfrewshire, South Lanarkshire and Midlothian. The highest net in-migration rates were in the City of Edinburgh, Aberdeen City and Glasgow City.

Further information on migration and the distribution of people within Scotland is available from the NRS website in a local area migration spreadsheet. This allows the comparison of migration estimates at council and NHS board area level with other data sources, such as National Insurance Number allocations to adult overseas nationals (NINo) and births to non-UK mothers. There is also an interactive map available showing internal migration within Scotland. More information is located on the Migration Statistics section of the NRS website.

Figure 5.6: Net migration as percentage of population by council area, 2014-2015

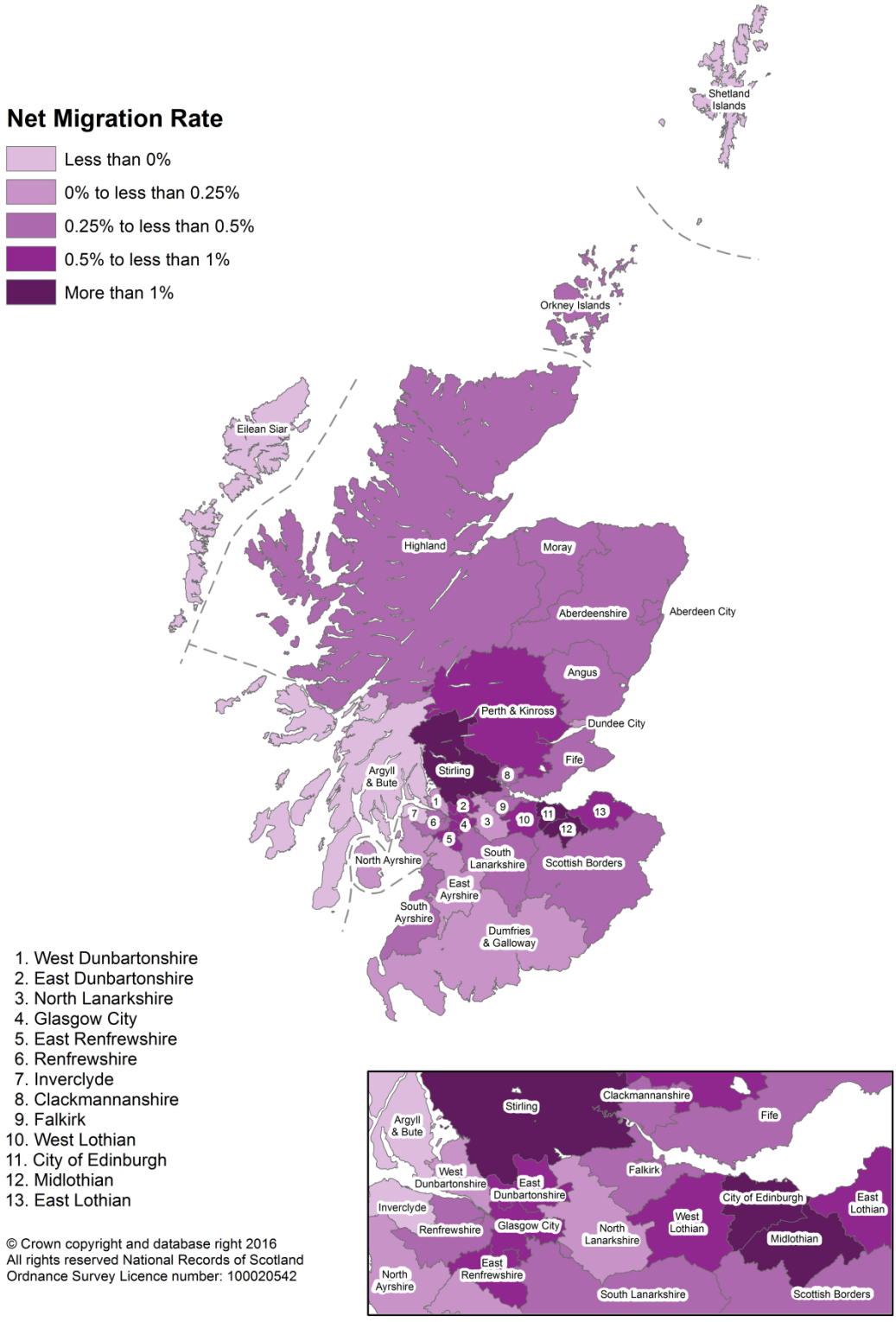
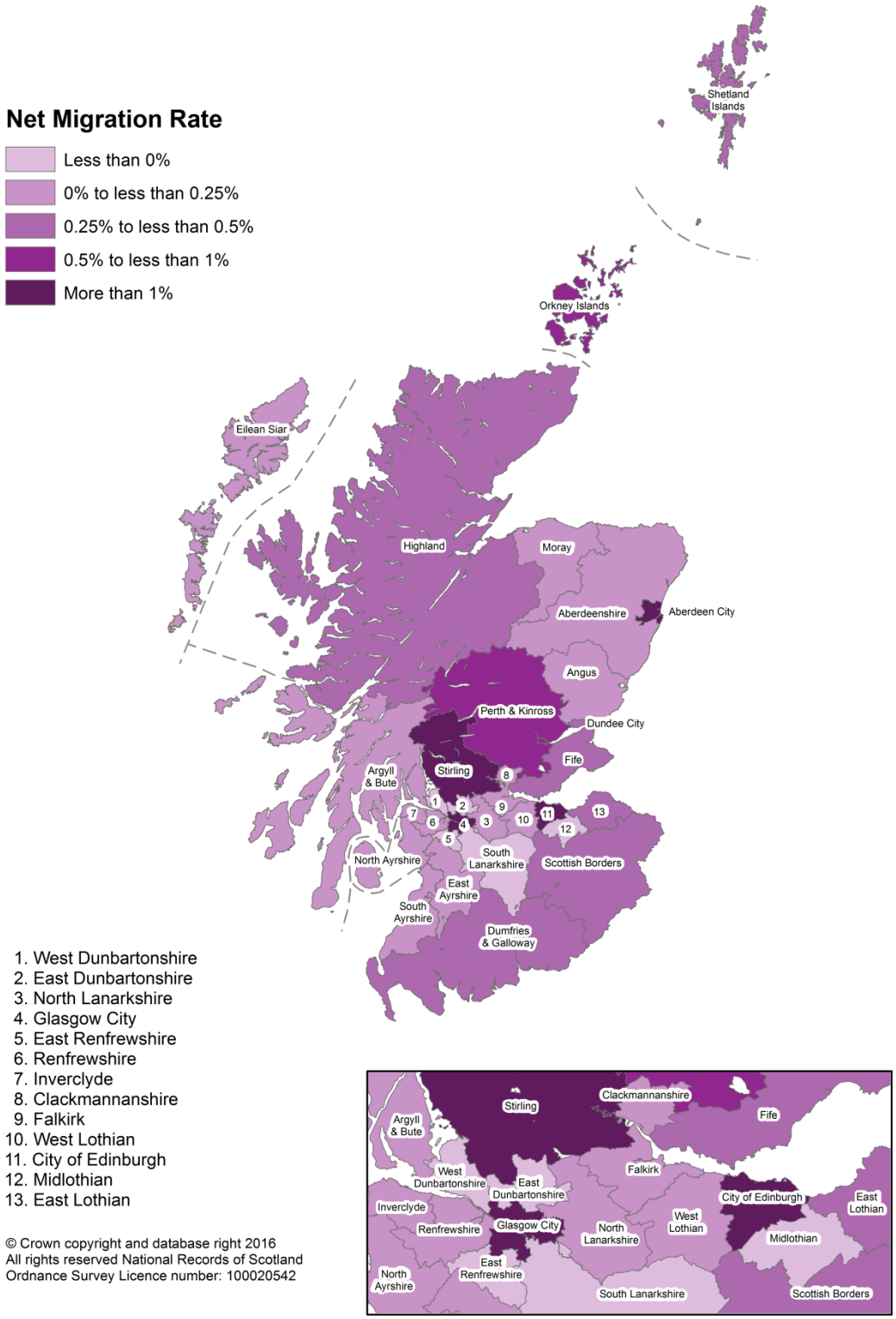


Figure 5.7: Net migration with areas outside Scotland as percentage of population by council area, 2014-2015



Information from the 2011 Census on migration

The 2011 Census provides us with a wealth of information about the characteristics of Scotland's population. Scotland's population on Census Day 2011 was estimated to be 5,295,403, an increase of 233,400 (five per cent) since 2001. Some findings which shed light on the impact of migration on Scotland's population have been presented here. More detailed information on other characteristics can be found on the Scotland's Census website.

Country of birth

Ninety-three per cent of the people in Scotland on Census Day 2011 stated they were born within the UK, a decrease of three percentage points since 2001. Eighty-three per cent of the population were born in Scotland, nine per cent in England, 0.7 per cent in Northern Ireland and 0.3 per cent in Wales. Of the seven per cent (369,000) of people in Scotland who were not born in the UK, 15 per cent (55,000) were born in Poland, and six per cent (23,000) were born in each of India and the Republic of Ireland. Every council area of Scotland saw an increase between 2001 and 2011 in the proportion of their population who were born outside the UK as shown in Figure 5.8.

Age and year of arrival in the UK

Over two-thirds (69 per cent) of people living in Scotland on Census Day 2011 who were born abroad were of working age (16 to 64 years old) when they arrived in the UK. Over half (55 per cent) of people living in Scotland who were born abroad arrived in the UK between 2004 and March 2011.

Ethnic group

Four per cent of people in Scotland on Census Day 2011 were from minority ethnic groups[4] – an increase of two percentage points since 2001. The Asian population was the largest minority ethnic group (2.7 per cent of the total population or 141,000 people) and has seen an increase of one percentage point (69,000) since 2001.

In Glasgow City, 12 per cent of the population were from a minority ethnic group, in City of Edinburgh and Aberdeen City it was eight per cent and in Dundee City it was six per cent. These areas also saw the largest increases since 2001 in the proportion of their population who are from minority ethnic groups.

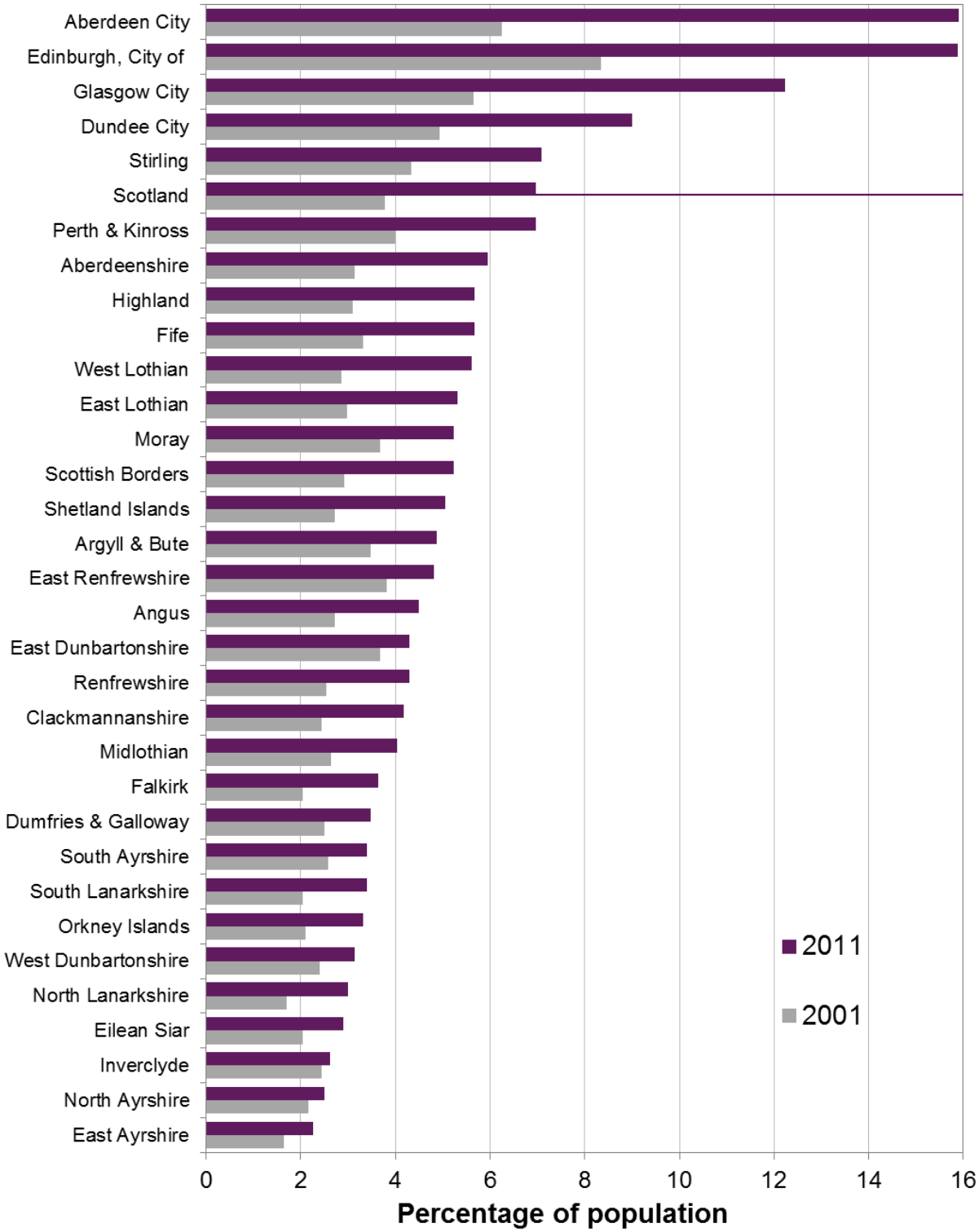
Of the 96 per cent of the population (5.1 million) who recorded their ethnicity as white, just over one per cent (1.2 per cent or 61,000) were White: Polish. This proportion was highest in the City of Edinburgh and Aberdeen City at three per cent of their total populations.

A 'White: Gypsy / Traveller' response category was also added in 2011. There were 4,200 people who recorded their ethnic group in this category (0.1 per cent of all people in Scotland). The highest number was in Perth & Kinross (400 people; 0.3 per cent of the total population of that area).

Footnote

4) Minority ethnic groups do not include Gypsy Travellers, as there was a separate tick box under the 'White' category for this ethnic group in 2011.

Figure 5.8: People born outside the UK by council area, 2001 and 2011



Improvements in migration statistics

Since the early 2000s, and especially since the EU-8[5] countries joined the European Union (EU) in May 2004, migration into Scotland has played a larger part in the country's demographic change than the recent past. So it has become even more important to have high quality statistics on migration and the population, for policy development and for planning and providing public services. NRS was part of an inter-departmental effort, led by the Office for National Statistics (ONS), to improve the estimates of migration and migrant populations in the UK, both nationally and at a local level. More information on the Migration Statistics Improvement programme including the programme's final report is available on the ONS website.

The new information provided by the 2011 Census, as well as revising our population estimates for mid-2002 to mid-2011, has allowed us to review our methodology and make improvements to elements of the rolling-forward process. Further analysis of census data, particularly relating to migration, and continuing work to incorporate new data sources (for example student data from Higher Education Statistics Authority), will help us to improve our methods and be confident that we continue to capture population change into the next decade and beyond.

For mid-2015 onwards an improved method for estimating internal migration within the UK has been introduced. A direct extract from the National Health Service Central Register (NHSCR[6]) is now used to identify moves between NHS Board areas and the Community Health Index (CHI[6]) is used to identify moves between council areas. This improvement is the first stage of further planned improvements. The improved methodology has had a small impact on both the within Scotland migration estimates and the in-migration from the rest of the UK. It has resulted in a slightly lower net migration gain from the rest of the UK. Further details on the change of method can be found in the Migration - Methodology section of the NRS website.

More information about migration statistics

More detailed information about Scotland's migration can be found on the Migration section of the NRS website.

Footnote

5) Refer to Appendix 2 – 'Notes, definitions and quality of statistics' for definition of the EU-8.
6) Refer to Appendix 2 – 'Notes, definitions and quality of statistics' for definitions of the NHSCR and CHI.

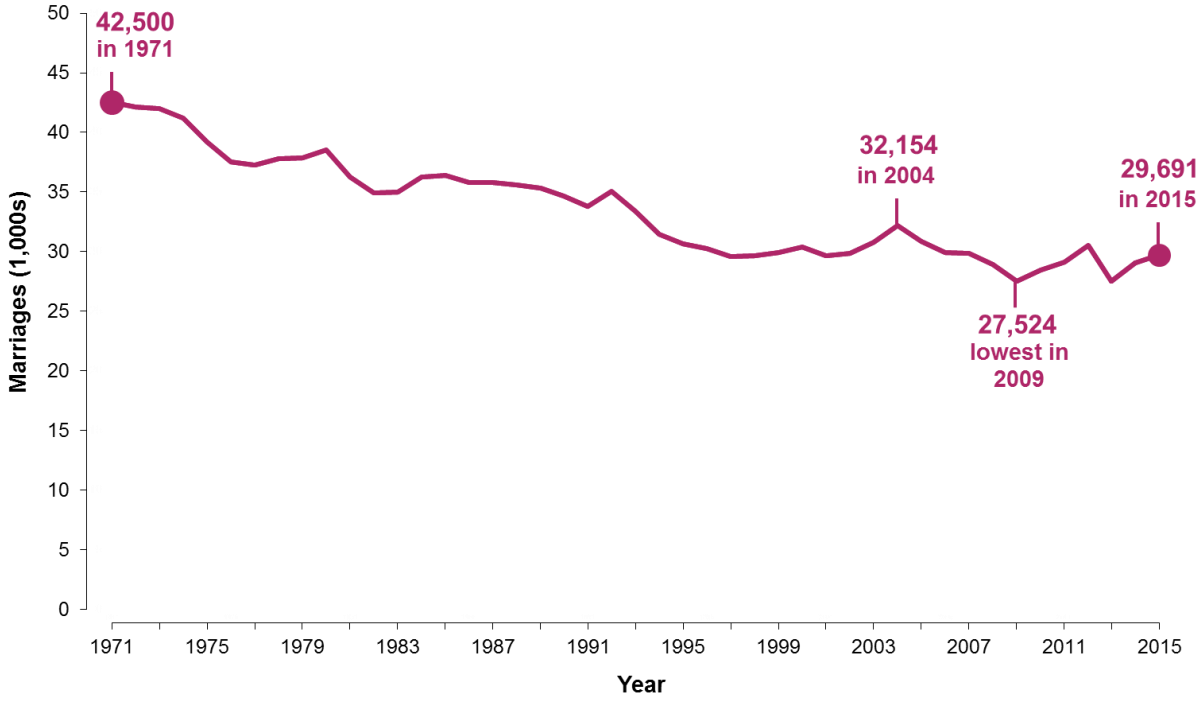
Chapter 6 – Marriages and Civil Partnerships

Marriages

There were 29,691 marriages in Scotland in 2015, 622 (2.1 per cent) more than in 2014. Of these, 1,671 were same-sex marriages (involving 696 male couples and 975 female couples) following The Marriage and Civil Partnership (Scotland) Act 2014 coming into force on 16 December 2014. More than half of all same-sex marriages were of couples who changed their existing civil partnership to a marriage (936, 56 per cent).

Figure 6.1 shows that, following a decline from over 40,000 marriages a year in the early 1970s, the annual total levelled out at around 30,000 in the mid-1990s. The highest total recorded in recent years was 32,154 in 2004 (the highest total since 1993), whilst the highest ever recorded was 53,522 in 1940. The 2009 total (27,524) was the lowest since Victorian times, and the lowest ever recorded was 19,655 in 1858.

Figure 6.1: Marriages, Scotland, 1971-2015



The information in this section covers all marriages registered in Scotland, regardless of where the couple lived. In 2015, there were 6,232 'tourism' marriages (21 per cent of all marriages) where neither partner was resident in Scotland. This represents a very slight fall in number from 6,241 (21 per cent of all marriages in 2014). Almost half (47.2 per cent) of the 'tourism' marriages in 2015 were at Gretna.

Gretna continues to be a popular venue for marriages, and the 3,511 registered in 2015 (12 per cent of all marriages) was slightly higher than the 3,499 registered in 2014. However, the 2015 total is more than a third down on the record total of 5,555 in 2004 (17 per cent of all marriages in Scotland in 2004). Over the longer term, the

number of marriages at Gretna increased from only 226 in 1981 through to 1,876 in 1991 and 5,033 in 2001. In 2015, 84 per cent (2,940) of the marriages at Gretna did not involve a resident of Scotland.

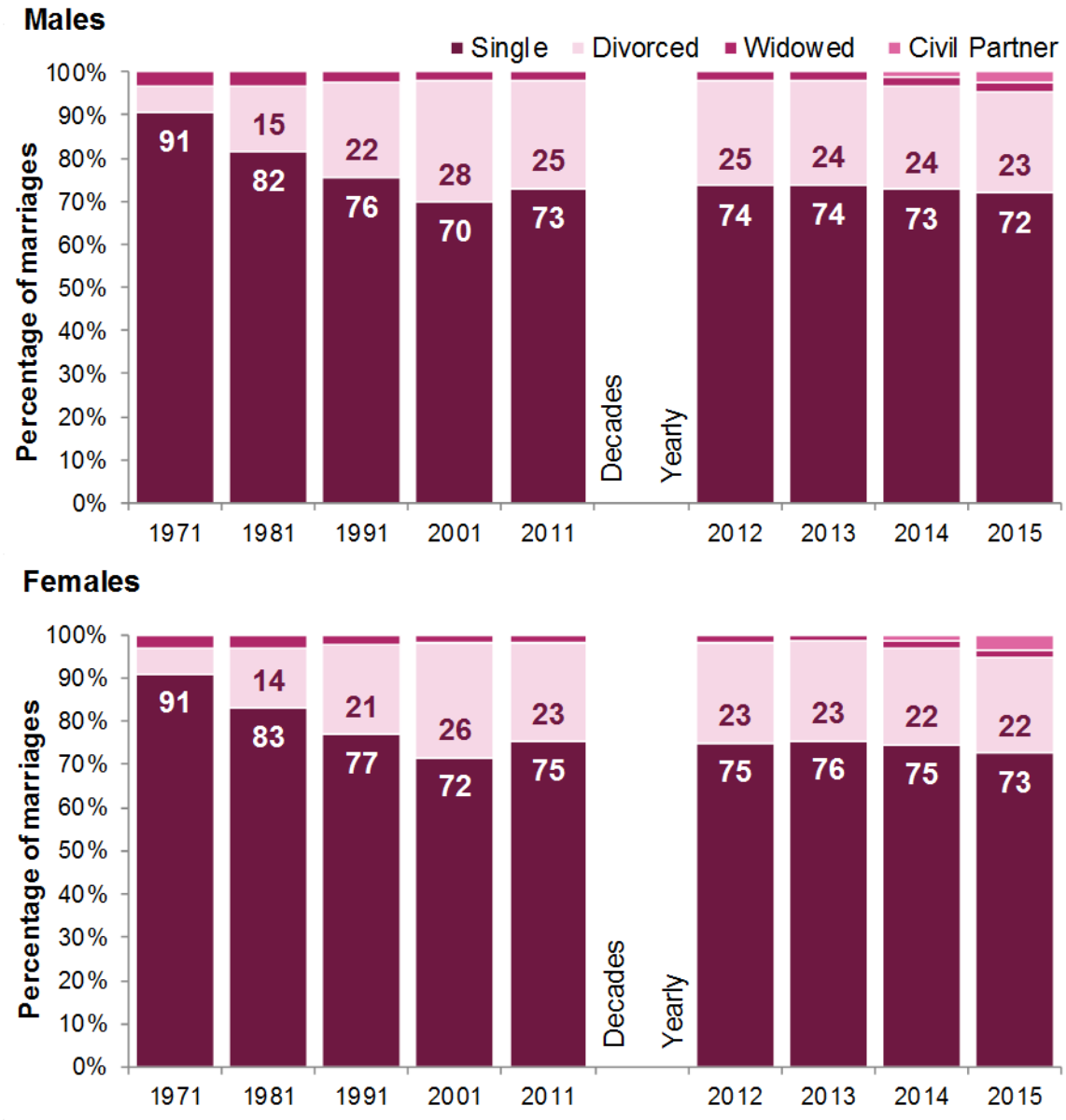
Of course, many couples who live in Scotland go abroad to be married. These marriages are not included, and only some come to the attention of the Registrar General through notification to British consular authorities.

Marital status at marriage

Figure 6.2 shows the percentage of marriages by marital status at the time of marriage between 1971 and 2015. The percentage of people marrying who had been divorced rose from just under six per cent in 1971, to over a quarter in 2001 (28 per cent for grooms and 26 per cent for brides). The majority of this shift reflects a reduction in the proportion of marriages where one of the partners had never been married.

The proportion of those marrying who were divorced was 23 per cent in 2015 (23 per cent for males and 22 per cent for females). The proportion of those marrying who were widowed (two per cent in 2015) has hardly changed since 2001. Following the introduction of same-sex marriage, the additional marital status of civil partner is now included in Figure 6.2. From 16 December 2014, couples in a civil partnership which was registered in Scotland were able to change their civil partnership to a marriage. From 31 October 2015, couples in a civil partnership registered outside Scotland were able to change their civil partnership to a marriage. Of the 1,671 same sex marriages which were registered in 2015, 56 per cent involved couples changing their civil partnership to a marriage.

Figure 6.2: Marriages, by marital status (percentages) and sex of persons marrying, 1971-2015



Note
There is a break here between two time series. 1971 to 2011 are shown for census years, and each year from 2012 is then shown. Only percentages greater than ten are shown on the bars.

Age at marriage

The average age at marriage has risen for both males and females. For first marriages, the average age of males has risen from 31.9 in 2005 to 33.6 in 2015; the comparable figures for females are 29.9 in 2005 and 31.9 in 2015.

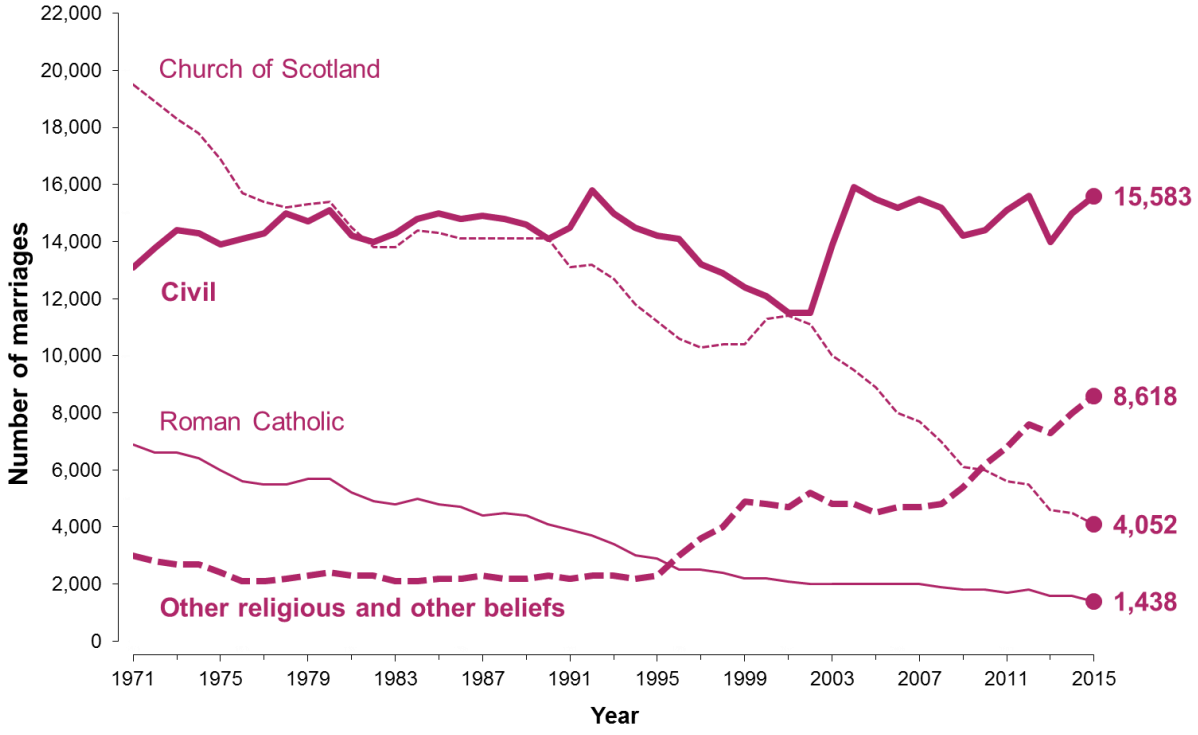
Marriages by type of ceremony

Civil marriages are conducted by registrars, and they have wide discretion over the form of the ceremony, to meet couples' wishes. There were 15,583 civil marriages in 2015, accounting for just over half (52 per cent) of all marriages compared to just under one-third (31 per cent) in 1971, as shown in Figure 6.3.

The trend in civil marriages mainly reflects a decline in the number of religious ceremonies during the past 30 to 40 years. The small increase in religious marriages during the period 1997 to 2002 was largely associated with the increase of 'tourism' marriages, of which a significant proportion were carried out at Gretna. Since then, there has been a decrease in the number of religious and other belief marriages, from 16,890 in 2003 to 13,285 in 2009 although numbers have risen slightly since then, to 14,108 in 2015.

Religious marriages are conducted by a wide range of celebrants. The largest numbers of religious marriages were carried out by ministers of the Church of Scotland, who conducted 4,052 marriages in 2015, followed by clergy of the Roman Catholic Church, who conducted 1,438. The other religious and other belief bodies conducting more than 500 marriages in 2015 were the Humanist Society Scotland (3,378), Independent Humanist Ceremonies (557) and Assemblies of God (524). Humanist celebrants have been authorised to conduct marriages in Scotland since 2005. In 2015 they officiated at 4,775 marriages compared with 4,143 in 2014[7], 1,544 in 2009, and 434 in 2006.

Figure 6.3: Marriages, by type of ceremony, 1971-2015



Footnote

7) The 2014 figure for the number of Humanist ceremonies has been revised from the number published in the 2014 report, due to the inclusion of figures for a wider range of Humanist organisations.

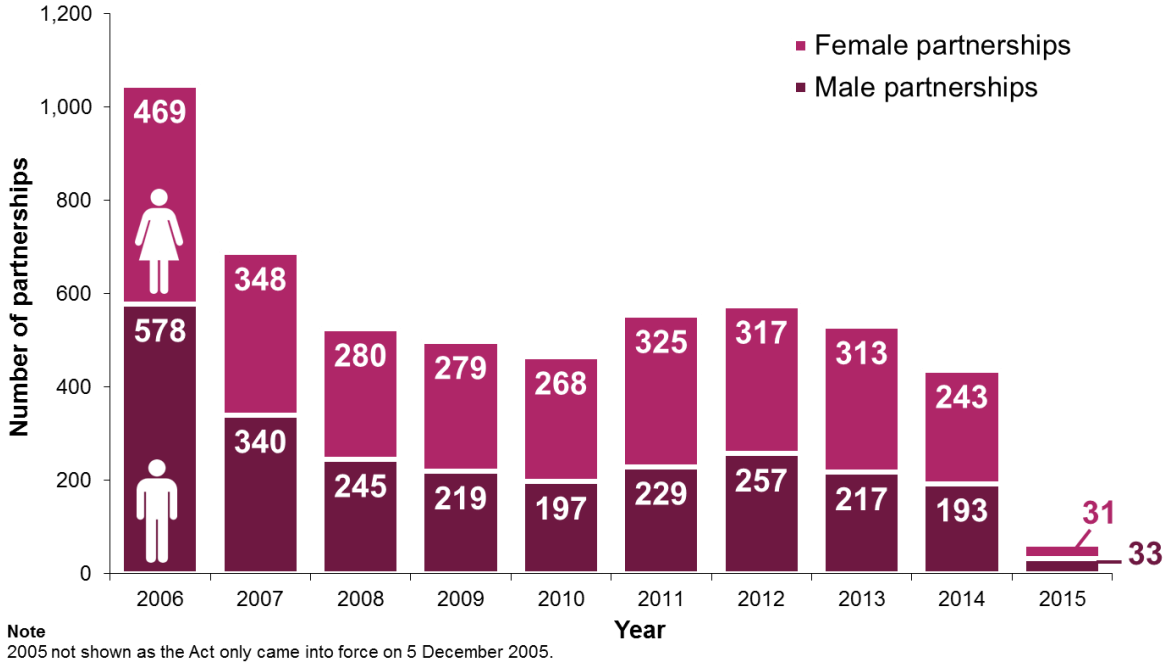
Until 2002, civil marriages could only be held in registration offices. The Marriage (Scotland) Act 2002 allowed registrars to conduct ceremonies in other approved places, from June 2002. In 2003, the first full year of these arrangements, 3,465 ceremonies were carried out at these approved places. Changes in The Marriage and Civil Partnership (Scotland) Act 2014 removed the approved place status. From 1 September 2014, civil marriage may be solemnised at a place agreed between the couple and the local registration authority, other than religious premises. This flexibility already exists in relation to civil partnership ceremonies. In addition, a religious marriage ceremony may take place anywhere agreed between the couple and the celebrant.

Civil partnerships

There were 64 civil partnerships registered in Scotland in 2015, 372 (85 per cent) fewer than in 2014. The Civil Partnership Act 2004, which applies throughout the UK and came into force on 5 December 2005, allows same-sex couples to register their partnership.

During 2006, the first full year of operation, 1,047 partnerships were registered in Scotland. In 2007, 688 partnerships were registered. This decrease was expected, because many long-standing relationships would have been registered as civil partnerships in the first full year of registration. The number of partnerships formed continued to fall to 465 in 2010. In 2011 and 2012 there were 554 and 574 registrations respectively; the first years to show an increase. In 2013 and 2014 there were falls in the number of partnerships formed, to 436 in 2014. This was followed in 2015 by a much larger fall to just 33 male partnerships and 31 female partnerships registered (Figure 6.4). This fall was expected following the introduction of same-sex marriages by the Marriage and Civil Partnership (Scotland) Act 2014 which came into force on 16 December 2014.

Figure 6.4: Civil partnerships, 2006-2015



Note
2005 not shown as the Act only came into force on 5 December 2005.

More information about marriage and civil partnership statistics

More detailed information can be found in the Vital Events - Marriages and Civil Partnerships section or in the Marriages and civil partnership section of the Vital Events Reference Tables on the National Records of Scotland website.

There are no figures for divorces and dissolutions of civil partnerships in this publication, because the Scottish Government is now the only publisher of new statistics of divorces and dissolutions for Scotland.

Chapter 7 – Adoptions

The Registrar General recorded 504 adoptions during 2015, which is 49 more than in 2014, and the highest number recorded since 1996. This is around half the number recorded per year in the mid-1980s, and around a quarter of the number recorded in 1970.

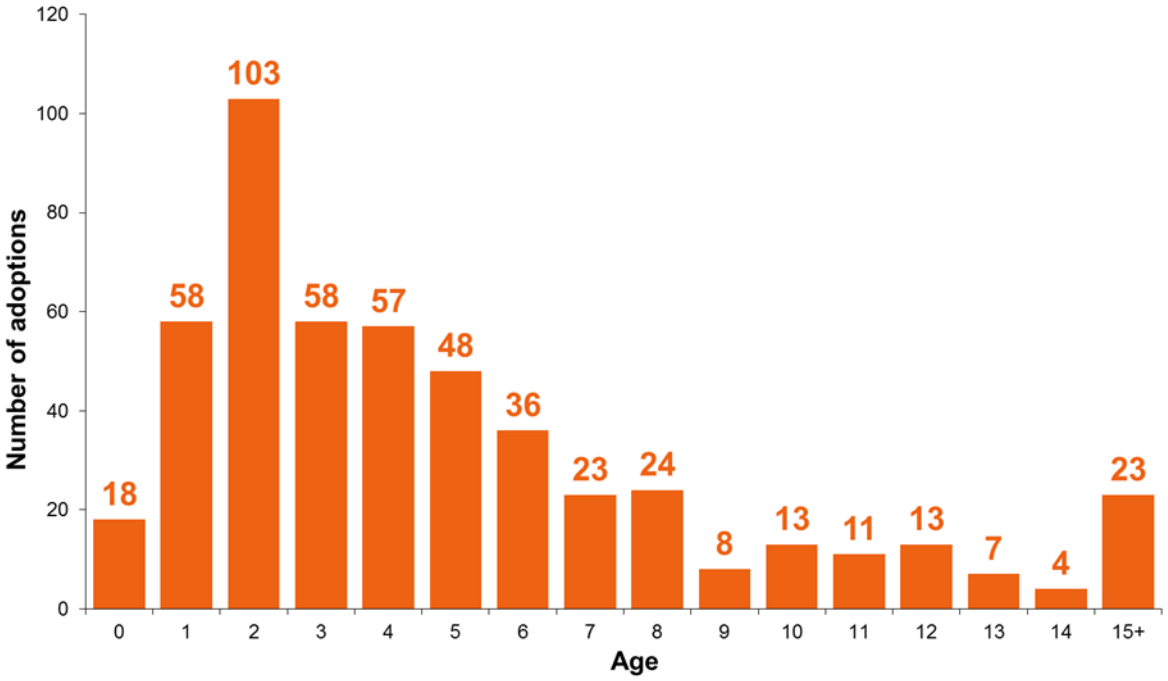
Adoptions of children have been registered by law in Scotland since 1930. Today the Registrar General for Scotland registers them under the Adoption and Children (Scotland) Act 2007.

Adoptions include cases of step-parents adopting their spouse's or partner's children, and relatives adopting children of other family members, as well as people adopting children who are not related in any way to them. The figures include small numbers of foreign adoptions registered in Scotland, and parental orders granted following a birth by a surrogate mother.

Following a steady rise to a post-war peak of 2,292 in 1946, the total number of adoptions fell back to 1,236 in 1959 before peaking again at 2,268 in 1969. Since then, the annual number of adoptions declined fairly steadily to around 400 in 2000 and has been between roughly 400 and 500 in every year since then.

Of the 504 children adopted in 2015, 23 per cent were adopted by a step-parent and 73 per cent were adopted by non-relatives of the child. Figure 7.1 shows the children's ages. Only 15 per cent of children adopted in 2015 were aged under two, 20 per cent were aged two, 23 per cent were aged three to four, 28 per cent were aged five to nine, 10 per cent were aged 10 to 14 and five per cent were aged 15 or over. Of the children aged under two, 82 per cent were adopted by non-relatives. In contrast, only 14 per cent of the 71 children aged 10 or over were adopted by non-relatives.

Figure 7.1 Age at adoption, Scotland, 2015



More information about adoptions

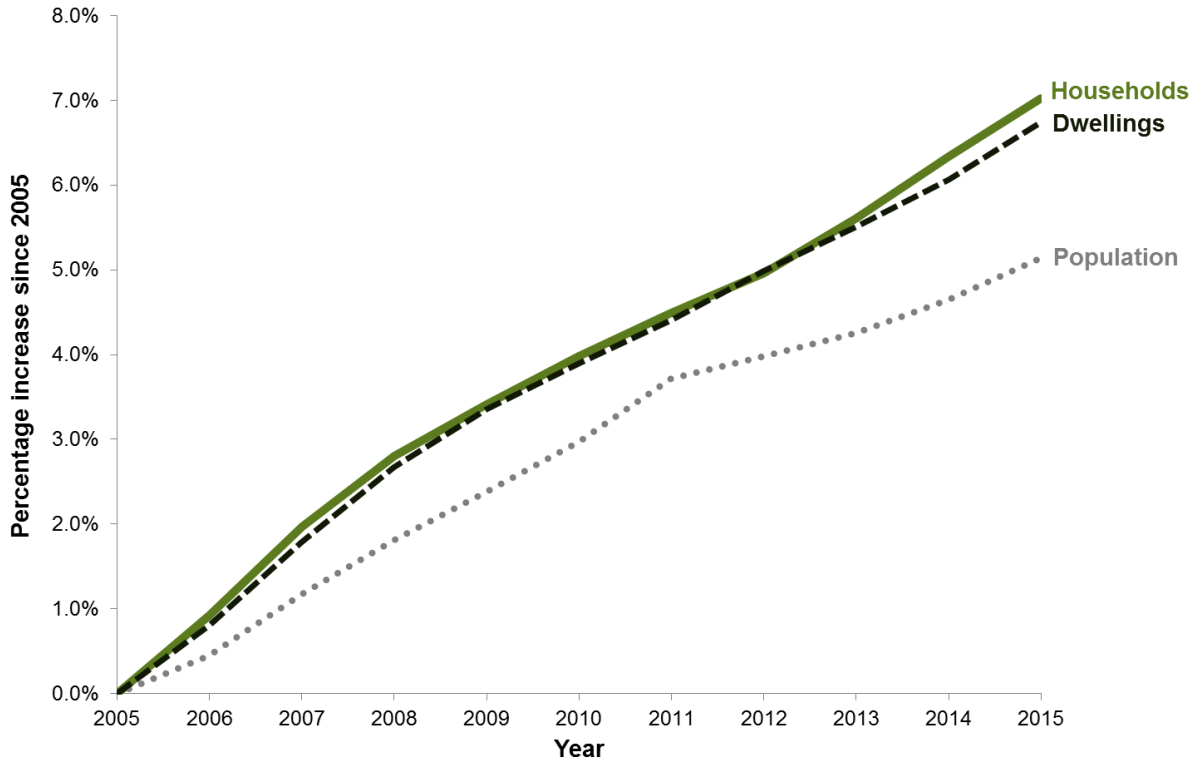
More detailed information about Scotland's Adoptions can be found in the Vital Events - Adoptions section and the Adoptions section of the Vital Events Reference Tables on the National Records of Scotland website.

Chapter 8 - Households and Housing

There were 2.43 million households and 2.56 million dwellings in Scotland in 2015. Ninety-six per cent of dwellings were occupied, while three per cent of dwellings were vacant and one per cent were second homes. Remote rural areas had the highest percentage of dwellings that were vacant and second homes (5.2 and 7.0 per cent respectively, compared to 3.1 and 0.5 per cent in large urban areas).

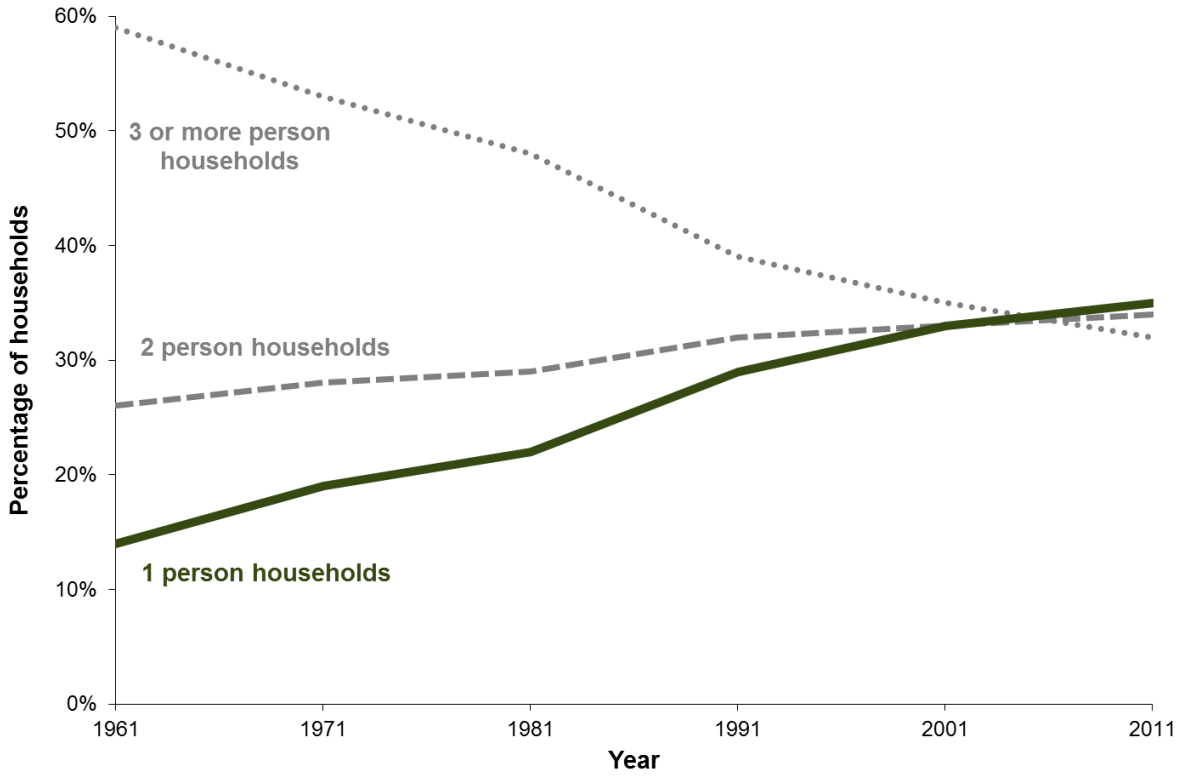
The number of households in Scotland has risen by around 160,000 over the past 10 years. Figure 8.1 illustrates that over the last decade, the number of both households and dwellings rose by seven per cent, which was faster than the increase in population.

Figure 8.1: Trends in households, dwellings and population, June 2005 to 2015



The growth in households has been faster than population because people are increasingly living alone or in smaller households. One person households have become the most common type in recent years, as shown in Figure 8.2. Over the last decade, the average number of people per household ('household size') fell from 2.21 people per household in 2005 to 2.17 people per household in 2015. These changes are partly due to the ageing population, as elderly people are more likely to live alone or with just one other person.

Figure 8.2: Change in household types in Scotland, 1961 to 2011



Looking to the future, Scotland's population is projected to increase, and the greatest increase is projected to occur in the older age groups. Household size is projected to fall further to 2.03 people per household by 2037. Consequently, the number of households in Scotland is projected to increase further, to 2.78 million by 2037, an average annual increase of around 16,000 households.

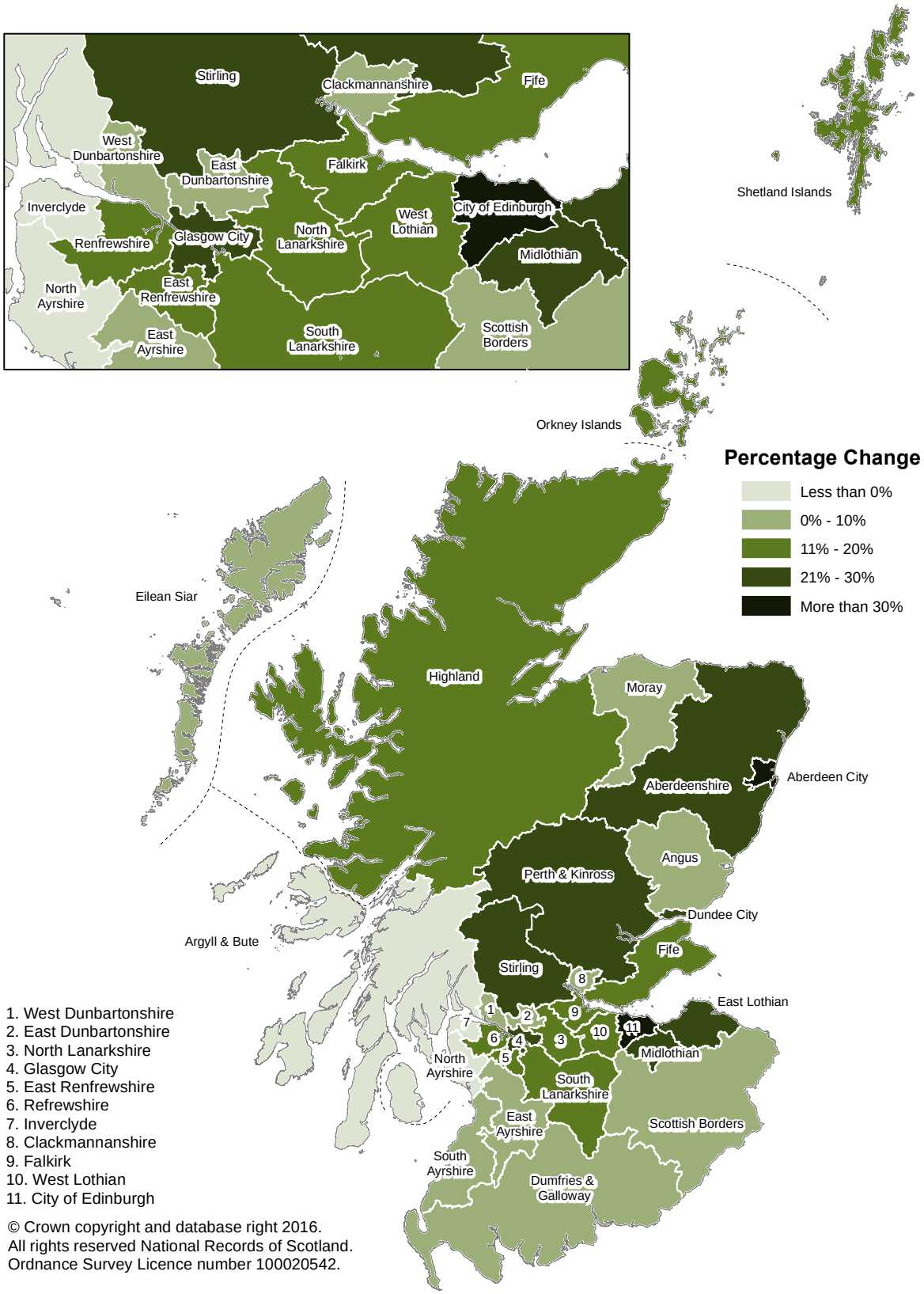
Variation in trends in household numbers within Scotland

The number of households has grown in every council area over the last 10 years. The areas with the greatest increase in households in percentage terms have been the Orkney Islands (an increase of 13.6 per cent, 1,212 households) and Highland (an increase of 12.7 per cent, 12,042 households). The City of Edinburgh has seen the largest increase in terms of absolute numbers (18,283 households, an increase of 8.6 per cent).

Most council areas also saw a reduction in average household size over the last decade. However, in Perth and Kinross and the four city council areas of Aberdeen, Dundee, Edinburgh and Glasgow, household size began to increase after the economic downturn began in 2007/8.

The number of households is projected to increase in the majority of council areas over the 25-year period from 2012 to 2037, as shown in Figure 8.3. The largest projected increases are in the City of Edinburgh (39 per cent), Aberdeen City (35 per cent), Perth and Kinross (27 per cent) and East Lothian (27 per cent). In contrast, household numbers are projected to fall in Inverclyde (10 per cent decrease), Argyll and Bute (six per cent) and North Ayrshire (one per cent).

Figure 8.3: Projected percentage change in households by council area, 2012 to 2037

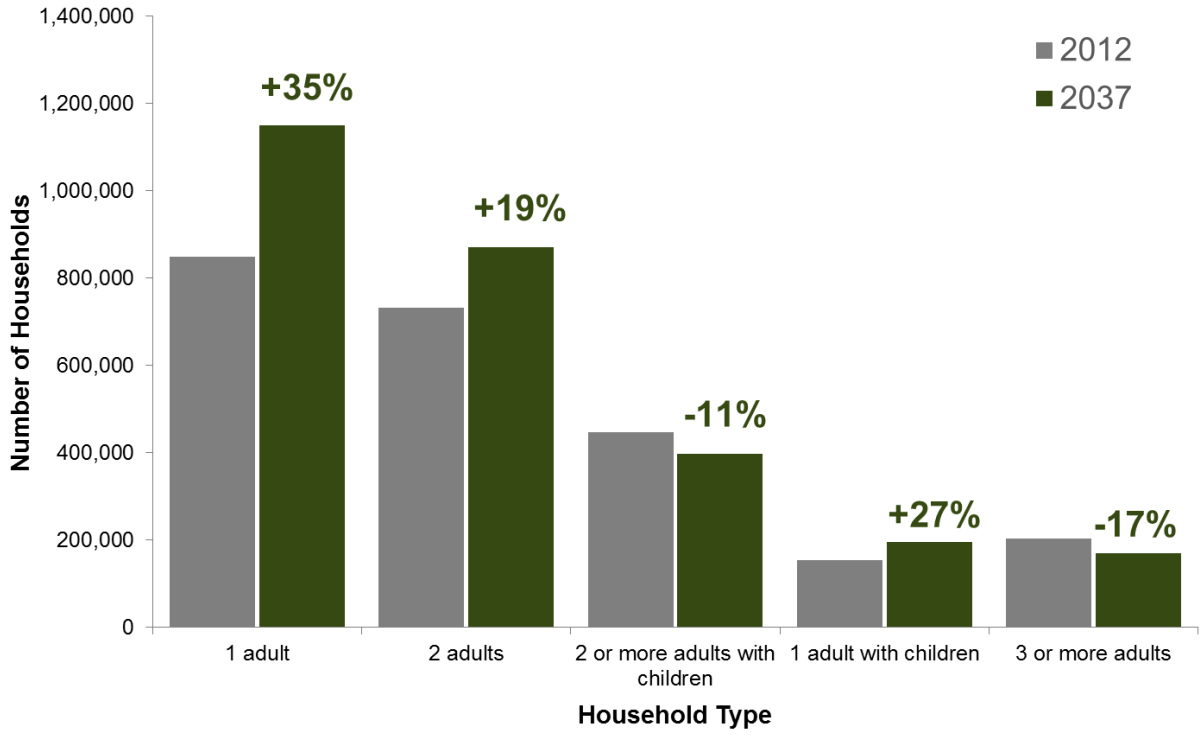


Projected changes in household type

The numbers of some household types are projected to increase more than others by 2037, as illustrated in Figure 8.4, which compares the projected number of households of each type in 2012 and 2037.

There is a large projected increase in households containing just one adult (rising by 35 per cent between 2012 and 2037). There are also increases in households with two adults (a projected increase of 19 per cent) and households with one adult with children (a projected increase of 27 per cent). In contrast, the number of larger households is falling, with households containing two or more adults with children projected to decrease by around 11 per cent between 2012 and 2037. Households with three or more adults are projected to fall by 17 per cent.

Figure 8.4: Households in Scotland by household type: 2012 and 2037



Links between household type and deprivation

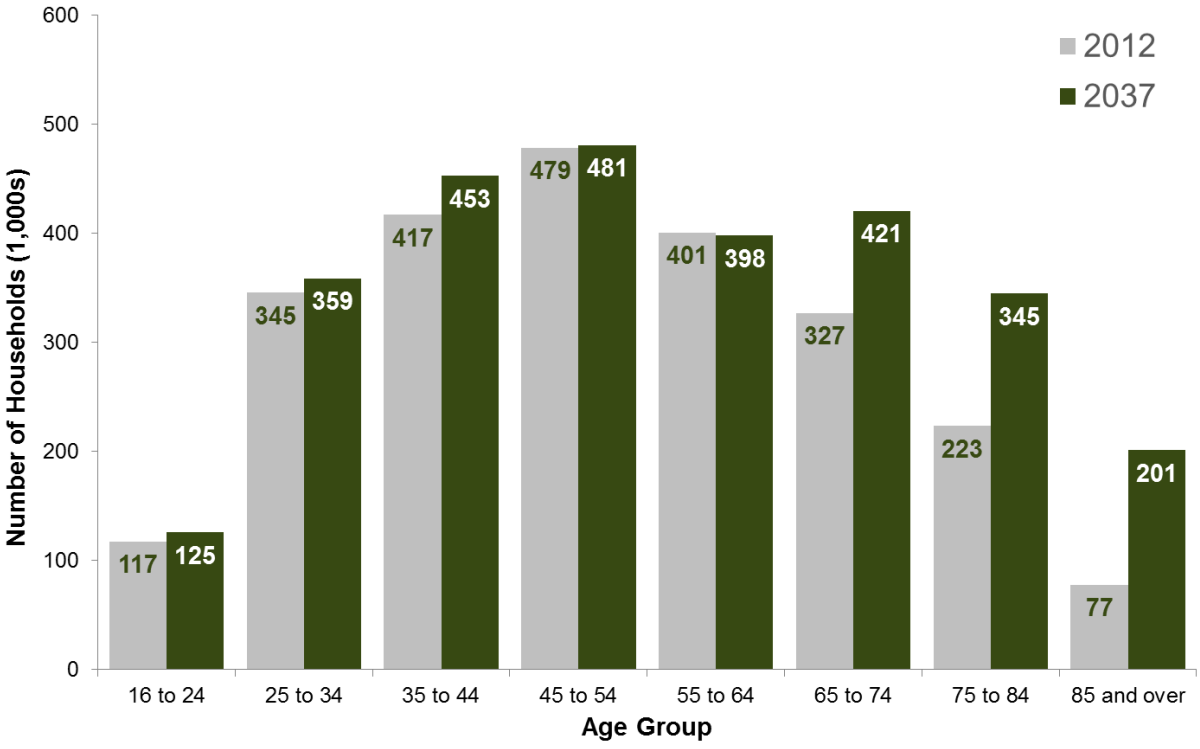
More deprived areas generally contain more households with just one adult (with or without children). This ranges from over half of all households being of this type in the 10 per cent most deprived areas, to just over a quarter of households in the least deprived areas. In contrast, there are more two-adult households (where there is the potential for both adults to be in receipt of an income), in the less deprived areas.

Projected changes to heads of households

The 'head of household' is the first person included on the census form, unless that person was aged under 16 or was not usually resident in the household. Figure 8.5 shows the projected number of households in 2012 and 2037, by the age of the head of household.

The number of households headed by older people is projected to rise, reflecting the ageing population in Scotland. In total, the number of households headed by people aged 65 or over is projected to increase from 628,000 households in 2012 to 966,000 households in 2037, an increase of 54 per cent. The number of households headed by someone in the oldest age group (85 and older) is projected to more than double, from 77,400 to just over 200,000. In contrast, households headed by someone aged under 65 are only projected to increase by three per cent, to around 1.82 million.

Figure 8.5: Households in Scotland by age of head of household: 2012 and 2037



More information about households and housing statistics

More detailed information about Scotland's households and housing, including estimates and projections can be found in the Households section on the National Records of Scotland website.

Chapter 9 - Statutory Registration

Statutory Registration

Statutory registration in Scotland was introduced in 1855, with the representative body for registrars – the Association of Registrars of Scotland (ARoS) – formed a decade later in 1865, and is still going strong. Following their 150th commemoration last year, National Records of Scotland (NRS) continues to enjoy an excellent working relationship with ARoS that supports the registration service in Scotland.

The uses to which the accurate, reliable data generated by the Registration service is put are many – from extracts from registers (commonly referred to as birth or death certificates), used by members of the public in a wide range of personal circumstances to attest to the existence and detail of different key life events; to forming a data source for statistics produced by NRS; the base for future family history research; and a significant factor in the promotion of positive social goods (such as public health) and the prevention of social ills (such as sham marriage, fraud, immigration offences and so on). In addition, registration data underpins the NHS Central Register (NHSCR) and is shared for a range of useful purposes with other government departments, such as the Office for Work and Pensions (DWP), via the Tell Us Once scheme. This service continues to share, on a consent basis, key data on the death of individuals with a wide range of public sector bodies – from local authority housing to the Driver and Vehicle Licensing Agency (DVLA) – and saves informants a large amount of time and stress in winding up the myriad aspects of a person's life.

Responsibility for registering events in Scotland sits with the 32 local authorities. The Registration service is small relative to the sizeable number of events it records (around 145,000 across births, deaths and marriages) and in the current challenging climate is likely continue at this size, with both NRS and local authorities looking to make processes as efficient as possible while continuing to serve users of our services.

As a group of professionals, registrars possess expert knowledge in the law and practice of registration, as well as a wide set of interpersonal skills allowing them to support families and individuals through what can be difficult circumstances. To ensure high standards of service and data are upheld, registrars are encouraged to study for the Certificate of Proficiency in the Law and Practice of Registration. We are currently working towards the first computerised sitting of this long-standing registration qualification, with the electronic sitting potentially launching in November 2016. (This will allow registrars to demonstrate their levels of knowledge and skill in a setting more akin to the digital world in which they ordinarily operate, than the more old-fashioned pen and paper format the examination has taken to date.)

The Certificate of Proficiency in the Law and Practice of Registration in Scotland is recognised by ARoS, the Convention of Scottish Local Authorities (CoSLA) and NRS as the professional qualification for registration staff. The certificate is awarded by an Examination Board consisting of representatives of ARoS, CoSLA and NRS. It was inaugurated in 1937 and the first examination was held in 1938, and the Board continues to engage with a range of issues around examination, question setting, standards and so on.

The landscape of registration is, as ever, complex and fast-moving. Over the last decade or so a number of major Acts have shaped registration law and practice. These key pieces of legislation include:

- **The Marriage (Scotland) Act 2002** (the 2002 Act) – provided for civil marriage at approved places.
- **The Human Fertilisation and Embryology (Deceased Fathers) Act 2003** – enabled deceased fathers to be recorded in birth entry.
- **The Immigration and Asylum (Treatment of Claimants) Act 2004** – new and very complex Home Office rules affecting the legal preliminaries for foreign nationals who want to marry or enter into civil partnerships in the UK.
- **The Gender Recognition Act 2004** – new provisions to allow individuals to change gender legally and new registration procedures flowing from that.
- **The Civil Partnership Act 2004** – new provisions to allow civil partnerships to be entered into legally and registered.
- **The Family Law (Scotland) Act 2006** – abolition of legitimacy and acquisition of parental rights and responsibilities for unmarried fathers who register the birth jointly with the mother.
- **The Local Electoral Administration and Registration Services (Scotland) Act 2006** – first major overhaul of principal registration statute for over 40 years.
- **The Adoption (Scotland) Act 2007** – new provisions to enable same sex adoption.
- **The Human Fertilisation and Embryology Act 2008** – new provisions to allow same-sex couples to have fertility treatment (assisted conception) and to register as parents of a child.
- **The Certification of Death (Scotland) Act 2011** – new death registration provisions to enable checks to be made on causes of death.
- **Marriage and Civil Partnership (Scotland) Act 2014** - introduction of same sex marriage ceremonies

Over the last year, we have undertaken multiple large-scale programmes of change around additional pieces of new legislation affecting registration. The implementation of the Certification of Death (Scotland) Act 2011, which introduced a new system of medical scrutiny to the death certification process, has now gone live, and successfully operated for around a year across the sectors of registration, medical scrutiny and the funeral industry. Similarly, the introduction of same sex marriage ceremonies, and an administrative route to changing Scottish civil partnerships to same sex marriages, following the Marriage and Civil Partnership (Scotland) Act 2014, was successful and quickly became part of the landscape of registration. A Home Office scheme to disrupt sham marriage through greater checking of those subject to immigration control who wish to get married in Scotland has also now bedded in fully. Delivery of these programmes, as well as their initial periods of operation, overlapped considerably, and added to an already complicated picture for registrars. However, as they have done with each wave of previous change, registrars have adapted well and incorporated a raft of significant process change into their practice.

Within NRS, the process of legislative and practice change has thrown up several issues around longstanding policies and processes, including that of how the District Examiners undertake the process of examination, and we are taking the opportunity in this context to develop a review of a range of policy areas, as well as a strategic review of the Examiner role itself. These reviews will unfold over the coming year and should develop useful new understanding of areas of registration as it develops in light of the many changes introduced over the last few years.

Registrars have also, as usual, achieved a high level of overall accuracy in their data. Each year since 2007, registrars across the 32 councils have created around 97 per cent of the records they make error free – an impressive performance, and one which we hope to maintain going forward. As there have been significant challenges over the last year to the staffing of our District Examiner positions -resulting in the appointment following a very competitive process of two excellent examiners seconded from local authorities – we are not currently in a position to complete the examination process to its ordinary timetable. However, NRS is working hard to rectify this position and to arrive as soon as we can at the usual picture of achievement across the Registration service contained in a single chart within this report. Once we have a complete set of figures for 2015 we will make these available. In the List of Tables section of this report on the NRS website.

What is the NHS Central Register?

Background

The NHSCR has been in existence since the 1950s and originates from the population register taken by the Registrar General Offices across the UK in 1939 at the outbreak of World War Two to help facilitate activities such as child evacuation, conscription and rationing. Following the war and the establishment of the National Health Service (NHS) inflation of General Practitioner (GP) patient lists quickly became an administrative problem as the NHS had no central record of the population to ensure that patients were only registered with one doctor at a time. To address this, the 1939 population register was used to create the NHSCR to help the new NHS manage patient registrations. Its primary purpose since then has been to help ensure that the movement of patients between NHS Health Boards are properly recorded and to trigger the patient medical record envelope to move to their new GP practice.

Content

The NHSCR contains a limited set of demographic information to allow it to carry out its purpose:

- NHS Number - for babies born in Scotland, the civil registration number of their birth, or a number given to a patient who was born outside Scotland but who registers with a Scottish doctor;
- Community Health Index (CHI) number – another identifier used by the NHS in Scotland;
- Unique Citizen Reference Number (UCRN) – A unique, anonymous, number associated with one unique individual;

- Surname, forenames and any previous names;
- Mother's birth surname;
- Sex;
- Date and place of birth;
- Postcode and address reference number;
- Unique Property Reference Number (UPRN) - A unique number associated with a property;
- Date of enlistment and discharge for Armed Forces personnel;
- Current and any previous Health Board (or health authority in the rest of the UK) area of GP registration (and equivalent information for Armed Forces personnel and their families);
- Medical research information for people who are registered as having had cancer, or are part of an approved medical research project and
- Date of death or when contact with the patient was lost.

Operating the NHSCR

The Registrar General creates and maintains the register under Section 57 of the Local Electoral Administration and Registration (Scotland) Act 2006 (LEARS) and may add additional information under Schedule 1 of the Act. The Registrar General may share information from the register in ways specified under Schedule 2 of the Act.

The NHSCR is primarily maintained by changes to GP records in Scotland and birth and death records from the civil registration system. Anyone born or registered with a GP in Scotland is included on the NHSCR.

Benefits to the NHS - Quality Assuring Patient Registration and Enabling Cross Border Patient Moves

The NHSCR acts as a Scottish hub for information on births, deaths and changes to GP registrations across the UK and is reconciled on a daily basis with NHS Scotland data to ensure that patient registers are accurate and up to date. This assists the NHS with patient identity verification, the prevention of fraud and in the administration of all parts of the health service.

Where a patient moves in or out of Scotland from/to the rest of UK the NHSCR triggers the health boards to send patient medical record envelopes to the new board. This does not involve the NHSCR having access to any medical records. For all Scottish births and deaths the NHSCR is the formal route to inform the NHS of these events.

This quality assurance, tracing and triggering process is mainly automated and represents the bulk of the work of the NHSCR with the staff resolving cases clerically where automatic matches are not made. This processing includes all Scottish Health Boards, Health Boards across the rest of the UK and the MOD for armed forces personnel.

Benefits to Citizens - Improving Online Access to Public Services

The myaccount service has been developed, and is managed, by the Improvement Service on behalf of the Scottish Government and provides an online account that allows citizens to use a single secure username and password to access a growing range of services provided by the NHS and local authorities.

When an individual applies for a myaccount their personal identifying information (Name, Date of Birth and Gender), which they have consented to be used for this purpose, is verified against NHSCR using a combination of automated and clerical processes. A Unique Citizen Reference Number (UCRN) is attached to their account and is then used to uniquely identify the individual preventing multiple accounts from being created for the same person. By the end of 2015 over 75,000 myaccounts had been created.

To deliver this system the Improvement Service is a data processor providing instant validation for citizens within the myaccount system on behalf of the Registrar General. The limited amount of NHSCR data used by myaccount remains under the control of the Registrar General and is held securely and updated daily to protect privacy and ensure accuracy.

In addition NHSCR can assist health and local authority bodies to quality assure their data to provide valuable public services. They may request their local data to be compared with the NHSCR to allow their data to be corrected. The NHSCR may only return corrected versions of information the authority already holds and may not provide new information or inform the authority of people they do not already know about. NHSCR may inform authorities of deaths in their records and can help to identify duplicate records assisting in the prevention of fraud.

Benefits to Citizens – Tracing Service

Certain organisations including solicitors, the police and charities may approach the NHSCR to help them trace individuals. In the case of solicitors this is normally to help trace those who are beneficiaries of wills. NHSCR may only disclose the fact the individual is contained on the register or fact and date of death. Charities may request help tracing individuals who have lost touch with their families. In these cases when NHSCR traces an individual they will work with trusted partners in health to contact the individual and give them the option of receiving a letter from their family member. Only where the person being traced gives written consent and an address of their choice will the family letter be forwarded to them.

In the case of the Police tracing, the NHSCR is only for the purposes of investigating serious crime as described in the Data Protection Act.

In the financial year 2015-16 the NHSCR attempted to trace five people for the Police, and a total of 1,375 people for charities (British Red Cross, Missing People and The Salvation Army). Only a very small number of these were found and we do not disclose how many of these resulted in contact being established.

Benefits to Society - Supporting Important Medical Research

Information regarding individuals who are part of a research study may be shared with bona fide researchers following a rigorous application process involving independent assessment of the public benefits, risks and ethics of a given project. Members of approved research studies may be flagged on the NHSCR and the approved researchers can be informed if a member of their study dies or contracts a cancer to allow them to tailor their communication appropriately.

By the end of 2015-16 there were 407 live approved medical research studies involving NHSCR, with seven new studies in the year. The new studies came from the University of Edinburgh (two), University of Aberdeen, Institute of Occupational Medicine (two), Kings College London and University of Oxford

Benefits to Society – Contributing to Essential Statistics Describing Scotland
The NHSCR is the most complete source of information on size of the population between censuses and so is used in NRS population statistics, internal migration statistics and data linkage as well as contributing to Census planning and preparation. Data for the production of statistics is only shared within NRS and remains under the control of the Registrar General.

Consultation on Changes to the LEARS Act
During 2014 and 2015 NRS and Scottish Government carried out a public consultation on proposed changes to the regulations associated with the NHSCR that govern data sharing. The proposal was broadly to complete the postcode field in NHSCR by requesting postcodes from NHS be added to the limited number of postcodes already supplied by local authorities, to extend the power to trace individuals to assist in finding pupils missing in education and to help counter-fraud in the NHS and to significantly increase the number of public bodies that NHSCR data could be shared with for the purposes of extending myaccount, confirming Scottish residence for tax purposes and to extend the data quality service.

We received over 300 responses to the written consultation phase that closed in February 2015. We are currently carefully considering the responses and will respond to Parliament.

Chapter 10 – Scotland's Census 2011

Introduction

The last census in Scotland took place on 27 March 2011. The census has collected information about the population every 10 years since 1801 (except in 1941 when no census was taken due to the Second World War).

Detailed statistics from the census describe the characteristics of an area, such as how many males and females there are, their ages, ethnic group, education level and a broad range of other characteristics. The statistics are used to understand the increasingly diverse nature of Scotland's population by capturing the similarities and differences in the populations' characteristics locally and nationally. This information helps underpin the allocation of billions of pounds of public money each year to provide services like education, transport and health.

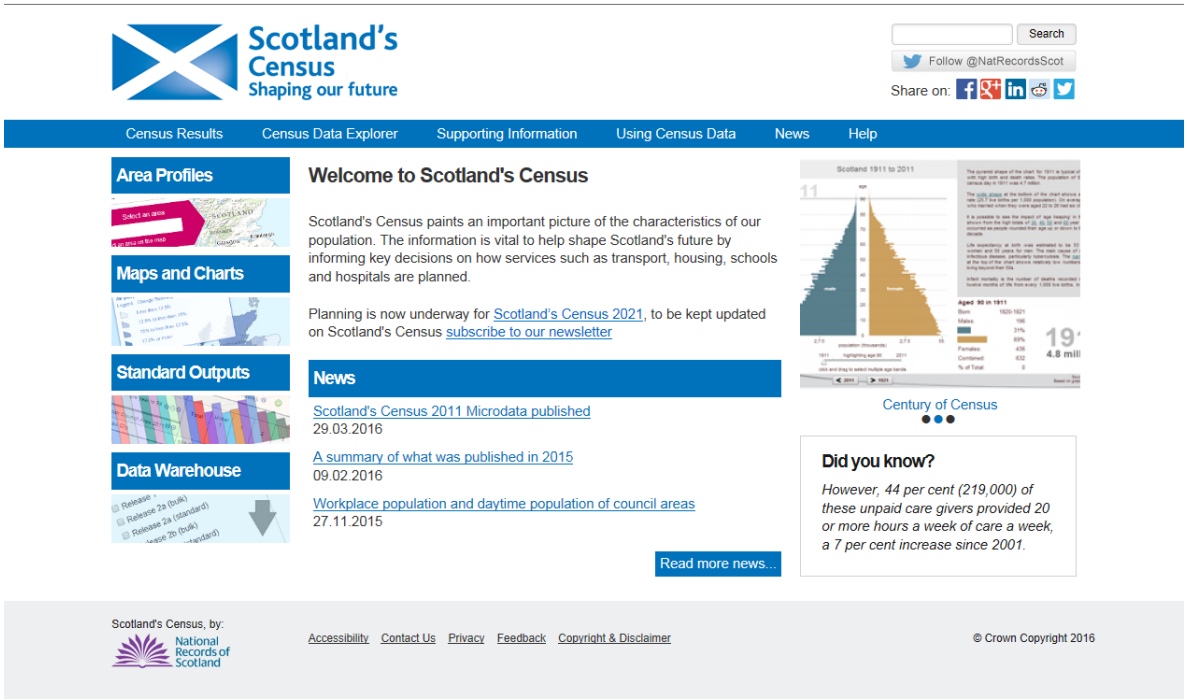
Recent editions of the Registrar General's Annual Review have provided summary information on some of the key findings and results from Scotland's Census 2011. This chapter provides an overview of the range of census outputs and products that have been released by National Records of Scotland (NRS). It also gives some examples of how census data have been used and applied by others.

Scotland's Census website

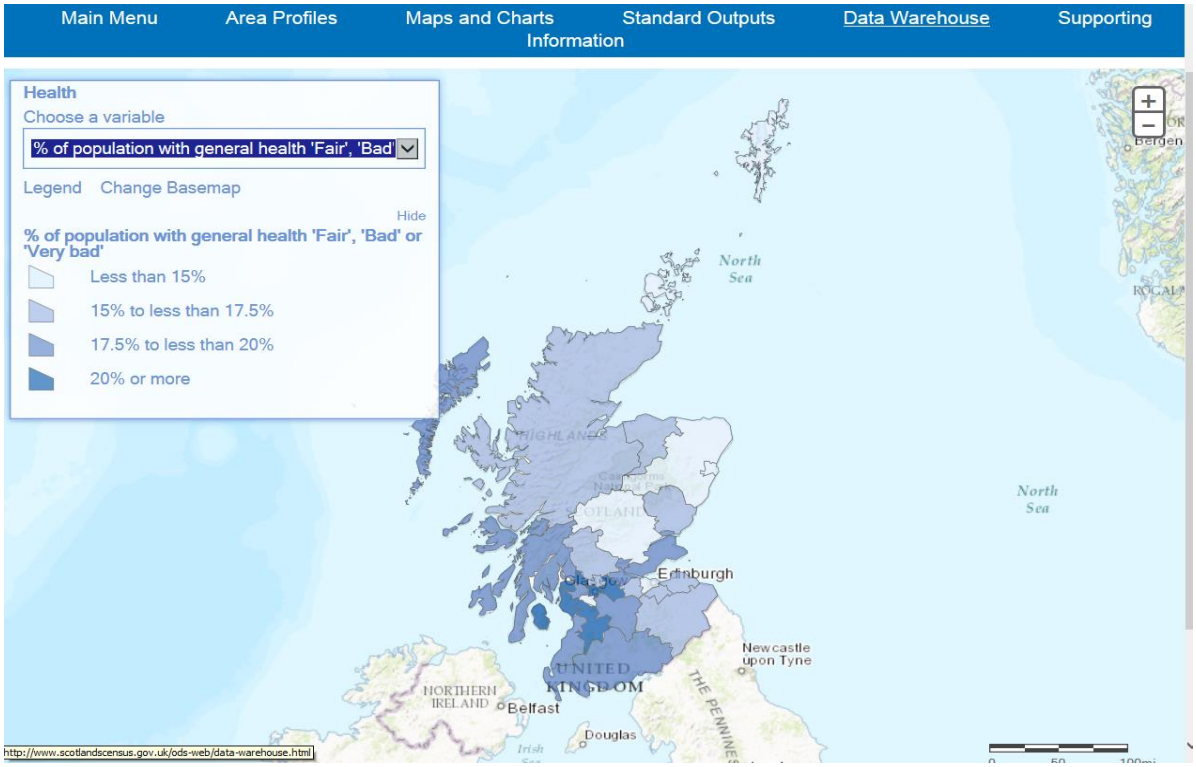
The Scotland's Census website is the main dissemination route for publishing data from Scotland's Census 2011. It provides:

- a core set of around 400 standard census tables delivered via the Census Data Explorer (CDE), available for a range of output geographies, from national down to census output area level;
- summary statistics and a series of statistical bulletins and news releases relating to the standard census tables;
- Area Profiles – key statistics for local areas and for Scottish and UK Parliamentary Constituencies;
- Maps and Charts;
- a facility – the Data Warehouse – for users to bulk download all census tables for the various geographies;
- comprehensive metadata alongside the data;
- analytical reports on a variety of topics based on census data; and
- a wide range of supporting background information.

An example screenshot of Scotland's Census website is shown on the next page.

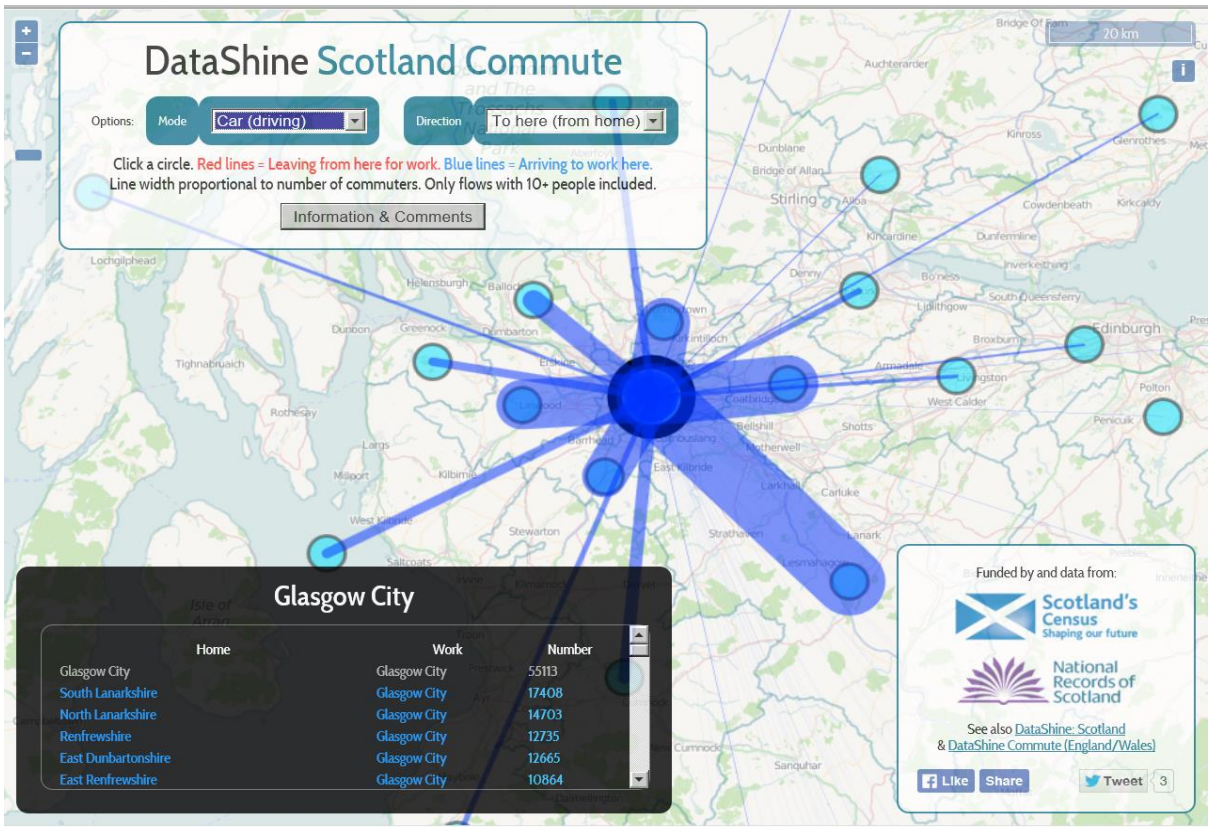


As evidence of the continuing demand for data, the Scotland's Census website gets around 120,000 visits each year. In 2015, users downloaded around 25,000 tables from the Standard Outputs section of the site and around the same number of bulk files from the Data Warehouse. In addition, users accessed data from some of the other sections of the site such as by downloading profiles for a given area or to use one of the many maps and charts that we make available. An example of one of the maps that can be created is shown below.



Tables of data from Scotland's Census 2001 are also available from the CDE, while there are plans to add tables of 1991 Census data later in 2016.

NRS has also secured funding to support the inclusion of Scotland's Census data on 'DataShine', the highly regarded visualisation tool developed by University College London. The Datashine Scotland interactive mapping tool uses the DataShine framework to map a range of census statistics for Scotland. With 'DataShine Scotland Commute' users can also access visuals showing travel-to-work-flows between each council area, split out by direction and mode of transport. Further information can be found on the DataShine Scotland section of the Scotland's Census website.



Microdata

Microdata are small samples of data for whole households and individuals, which include some associated census characteristics but no information that could identify a household or individual. Microdata products enable researchers to look at combinations of characteristics that are not generally available from the standard census tables, and to perform different types of analyses not possible from standard tabulations.

A number of 2011 Census microdata products for Scotland have been released:

Teaching file

The Teaching File contains anonymised records on a limited set of variables for a random sample of one per cent sample of people in the 2011 Census

output database for Scotland. Output categories are generally collapsed to high levels, and no information on a person's place of usual residence is included other than that they live somewhere in Scotland. The Teaching File is available for anyone to download from the Scotland's Census website under the terms of the Open Government License. It is primarily for teaching purposes and is aimed at:

- encouraging wider use of census data;
- assisting with the teaching of statistics and social sciences such as geography in schools and other education establishments; and
- providing an introduction to the kind of information that is available from the census.

Safeguarded file

There are two safeguarded files, each comprising a five per cent sample of individuals:

- a file at Scotland level; and
- a file at a grouped local authority level, which has less detailed variables than the Scotland level file.

The safeguarded files are available via download through the UK Data Service. Researchers wishing to use the UK Data Service need to register and accept terms and conditions before accessing and downloading data.

Secure files

These comprise a 10 per cent sample of individuals and a 10 per cent sample of households. The two samples do not overlap and provide the most detail for the characteristics included. They are available only under Approved Researcher Licence, through a secure setting, with access initially via the Virtual Microdata Laboratory managed by the Office for National Statistics.

Further details on all the microdata products for Scotland are available on the Microdata section of the Scotland's Census website.

NRS continues to investigate alternative means of providing more local access to Scottish users of secure data, including plans to deposit Scottish census microdata in the Edinburgh BioQuarter as part of the Scottish Informatics and Linkage Collaboration.

Origin Destination Statistics

Origin destination statistics are census data which deal with the movement/ flow of people; either as migration (from their address one year prior to the census) or travel to work or study (from their current address to their workplace address or place of study). Much of the origin destination data from the 2011 Census is published at the

UK level, providing flows for usual residents of Scotland, England, Wales and Northern Ireland. More information on the detailed content and access arrangements for UK-wide origin destination statistics can be found on the Origin and destination data section of the Office for National Statistics (ONS) website, with a table finder tool available on the Nomis website to help users search through an index of the tables.

NRS has worked closely with a group of users who had an interest in 'flow data' products to provide bespoke additional products to supplement planned outputs. For example, Transport Scotland has used census data in updating its Transport Model for Scotland.

Alternative populations

While the standard outputs for the 2011 Census generally relate to where people usually live, it is useful for some users to have census statistics in relation to two alternative population bases:

- **Workplace population** (for a given geography, statistics on the people who work there); and
- '**Daytime**' population (for a given geography, statistics on all people who work or study in the area plus all people who are not working or studying but are resident in the area).

For both these population bases, data from the other UK census offices on residents of England, Wales and Northern Ireland who work in Scotland have been combined with data on Scottish residents in the sets of tables on workplace and daytime populations at council area which are available on the Additional and commissioned tables section of the Census Data Explorer.

Further work is planned to produce and disseminate statistics for these alternative population bases at lower levels of geography.

Additional and Commissioned tables

Ad hoc census tables are produced in response to user requests and contain combinations of data that are not available in standard publications. Once created, ad hoc tables are published for all to use in the Additional and commissioned tables section of the Census Data Explorer. A total of 400 additional and commissioned tables were published in the period April 2015 to March 2016, across the whole range of census topics. A breakdown by topic of these tables is given in Table 10.1.

Table 10.1: Additional and commissioned tables by topic, April 2015 to March 2016

Topic	Number of additional and commissioned tables published in 2015-16
Education	8
Health	96
Housing and accommodation	13
Identity	27
Labour market	36
Language	78
Migration	38
Population and households	75
Religion	13
Origin destination (address 1 year ago)	4
Origin destination (travel to work/study)	12
Total	**400**

In addition to published ad hoc tables, information from the census is provided in response to many of the more than 600 requests for information received each year by the NRS statistical request service.

Census Analysis and Reports

NRS has published a number of analytical reports based on data from Scotland's Census 2011, and has also has worked in partnership with analysts in Scottish Government and other users to analyse census data in more detail. Reports have been produced on the following topics:

- Characteristics of 16 to 19 year olds not in employment, education or training;
- Equality characteristics of Scotland's population;
- Gaelic;
- Household composition for population groups in Scotland;
- Inhabited islands;
- Internal migration patterns;
- Migration – characteristics of recent migrant groups;
- Migration – statistical profile of migrants from outside the European Economic Area; and
- People with a learning disability or developmental disorder.

Further details on these analytical reports are available from the Scotland's Census website.

Uses and benefits of Scotland's Census data

In addition to the range of census outputs and analysis generated by NRS, an enormous number of uses have been made of data from Scotland's Census 2011 by a wide spectrum of users. These include:

- **Scottish Government** – in resource allocation and in policy development, for example in relation to ageing and the impact on pensions, migration (both into and out of the country, and internally), economic growth and labour supply.
- **Scotland's local authorities** – Scotland's local authorities are some of the most prolific users of data from the census. Their uses are wide and varied, including for example planning for future provision of new schools, local transport infrastructure, housing and health and social care.
- **Scotland's health boards and health services** – There are a range of uses of Scotland's Census data within health services in Scotland, including updating resource allocation calculations, estimating uptake rates for various forms of treatment and (in combination with other data) the creation of community health profiles as part of health needs assessments. The census is also the only accurate source of information on carers aged under 18 and is important as the main source of information on informal caring.
- **Third Sector** – charities often use census data to help ensure that appropriate support reaches the right people and to highlight inequalities or social problems in particular regions or communities that they feel government needs to address.
- **Media and Parliament** – census data has been used to inform debate in the media and in parliament.
- **Commercial/ private sector** – census data helps to inform decisions about the targeting of millions of pounds worth of investments and helps the shaping of products, services and location of new premises etc.
- **Research** – data from the 2011 Census has been used to update the Scottish Longitudinal Study, which provides an unrivalled source for the examination of how Scotland's population has changed over time.

A fuller description, of the uses and benefits realised from Scotland's Census 2011, together with some further specific examples, is set out in sections 8.72 to 8.138 of Scotland's Census 2011 - General Report.

More information about Scotland's Census 2011

National Records of Scotland will continue to work with stakeholders to promote uses of the census data and ensure the value and benefits of this rich data source are realised.

All of this activity will also feed into our understanding of the needs of our stakeholders enabling us to plan for the future of the census in a way that can best meet those needs. More detailed information, including on developing plans for Scotland's Census 2021, can be found on the Scotland's Census website.

Chapter 11 - Migrants in Scotland's population histories since 1850

Introduction

Professor Michael Anderson
FBA, FRSE
Professor Emeritus of Economic History and Honorary Professorial Fellow, University of Edinburgh.

Professor Michael Anderson was Senior Vice-Principal of the University from 2000 to 2007. He has served as a member of the Economic and Social Research Council, the Council of the British Academy, the Council of the Royal Society of Edinburgh, and the British Library Board, and he chaired the Board of Trustees of the National Library of Scotland for 12 years.

Michael is currently a member of the Office of National Statistics UK Population Theme Advisory Board and the Advisory Board for the ESRC Centre for Population Change, but devotes the majority of his time to finishing a wide-ranging comparative study of the population histories of the different parts and occupational groups of Scotland for the period since c1850, in the context of wider British and European population change, issues he has been working on for more than thirty years. This invited chapter draws on material from this project, exploring some of the key patterns and roles of migration in Scotland's population histories since the middle of the nineteenth century[8].

Footnote

8) The writing of this chapter has been hugely assisted by help from Victoria Avila and Jay Gillam, Assistant Statisticians at National Records of Scotland. In particular, Jay has not only challenged me to produce a much more reader-friendly text, but has also asked many probing questions and supplied a number of corrected and/or updated statistics. Victoria has turned my tables and draft graphs into the carefully crafted, simple and clear Figures that accompany the text. Any remaining errors and lacks of clarity are of course entirely my responsibility, not least because I have not always followed their advice!

Migration trends in recent years

Since the start of the twenty-first century, a mass of detailed information on migration in Scotland has been summarised by National Records of Scotland (and previously General Register Office for Scotland).

In Scotland's Census 2011, just under 600,000 people living in Scotland (11 per cent of the population) reported that they had changed their place of residence in the previous year. Of these, almost half a million had moved within Scotland, and three quarters of those who had moved within Scotland had done so within the same local authority area.

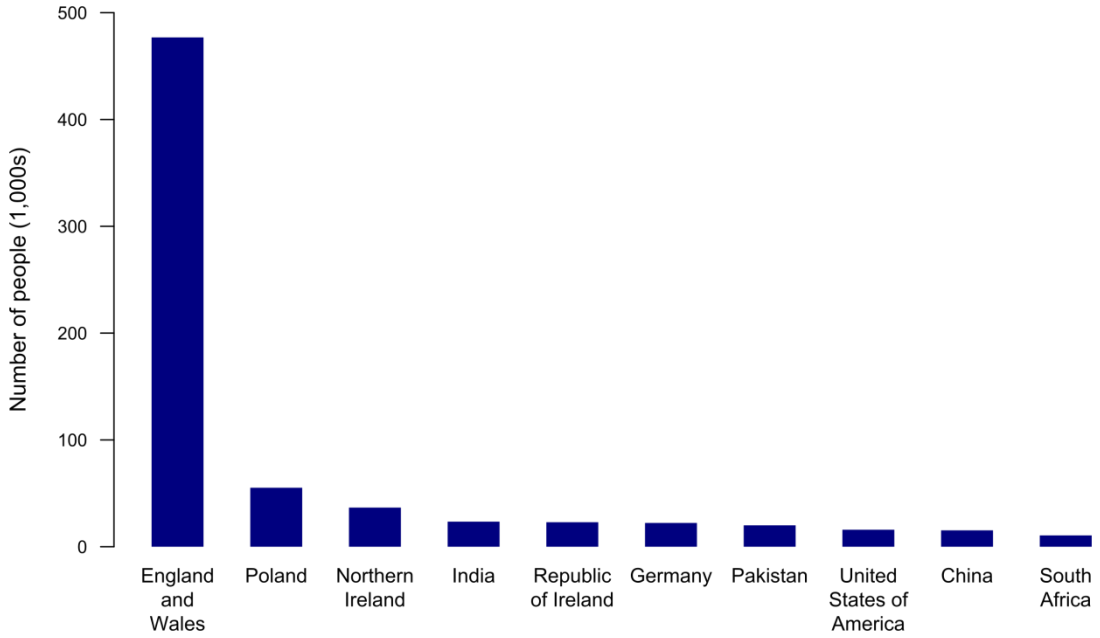
The 2011 Census also revealed that just over 100,000 people had migrated into Scotland in the previous year, three fifths of them from outside the UK and the rest from England, Wales or Northern Ireland.

Census data for other parts of the UK showed that about 43,000 people had moved from Scotland to England, Wales or Northern Ireland over the same period. Censuses make no attempt to record migrants who move outside the UK, but estimates based primarily on the International Passenger Survey suggested that around 16,900 people had emigrated overseas between mid-2010 and mid-2011.

In the year to mid-2011, the net inflow to Scotland from the rest of the UK and overseas was estimated to be the second highest since the general trend of Scottish net migration became positive in mid-2000, at around 30,200 people. The mean estimated net inflow between mid-2010 and the latest mid-2015 estimates was around 19,700 people per year.

According to the 2011 Census, almost exactly one person in six resident in Scotland had not been born here. By far the largest group of immigrants were the nearly 477,000 people born in England and Wales, who made up nine per cent of the total population. Of the rest, about 37,000 had been born in Northern Ireland and 23,000 people had come from the Republic of Ireland. The largest non-UK immigrant group in the population on census day 2011 was the 55,000 people born in Poland, followed by migrants who had come from India, Germany and Pakistan, as shown in Figure 11.1.

Figure 11.1: Top ten countries of birth for persons not born in Scotland, 2011 Census



This Scottish pattern was very different from that shown by the 2011 Census in England and Wales. Over 733,000 Scots-born people were living in England and Wales, but they made up only one per cent of the total population; by contrast, 13 per cent of the population of England and Wales had been born outside of the UK. Nevertheless, including immigrants from the rest of the UK, Scotland had a slightly higher immigrant share in its population than its southern neighbour, a pattern reported at every census since 1851.

Internal migration, reported in both Scotland's Census and the mid-year population estimates, shows a marked variation in propensity to move by age. At Scotland's Census 2011, 33 per cent of 20 to 24 year olds reported that they had moved to a different address in the previous year; 22 per cent of those aged 25 to 34 and 20 per cent of those aged 16 to 19 had also changed address. By contrast, just four per cent of people aged 50 and over had changed their place of residence in the last year.

A similar pattern can be seen for moves into and out of Scotland. In the year to mid-2015 the estimated peak age for movement into Scotland from elsewhere in the UK was 19 and the peak age for leaving was 24; this is clearly a reflection in great part of the movement of undergraduate students. Overseas in- and out-movements peaked at ages 23 and 24. Also reflecting a strong element of student movement, Scotland's Census 2011 showed that the largest share of all movements was to and from Glasgow City, the City of Edinburgh, Aberdeen, Dundee and Stirling. There were also significant outflows from these cities to their residential suburbs.

The previous 160 years: how much has changed?

While all the recently published figures on migration still contain some margin of error, the sources available to National Records of Scotland today are far more comprehensive and reliable than those available for earlier periods. The first Scottish census that provided reasonably reliable information on where people were born and their ages was that of 1851. Civil Registration did not begin in Scotland until 1855, so the first decade for which we can compare population change with natural change, and thus estimate net migration, is 1861-71.

We have little quantitative data on overseas emigration by Scottish natives until 1853, and even then some big groups were not counted[9]. We have to wait until 1895 before figures become available on numbers of returners, thus allowing net overseas emigration rates to be calculated. Precise estimation of migration rates to and from other parts of the UK remains a problem even today. Census tables on movements within Scotland have mostly been limited to county (or, sometimes, city) of birth with no information about when cross-county movement occurred nor of how many moves people had made between the time they were born and any census day.

However, in spite of this, it is possible to chart some of the major movements to and from Scotland over the past 160 years, and to make some reasonably firm statements about who went where, when and at what ages within the country as well as into and out of it.

People living in Scotland have always experienced high levels of mobility. A significant component of this mobility in the past was seasonal or temporary rather than with any intention of a permanent change of home. Notable here were: west coast men and women joining the annual migration around Scotland and down into England of the herring fishing fleet; men from Orkney recruited each year to work on whaling boats and for the Hudson Bay Company; crofters' children moving every summer from the north-west to work on farms in the south and east; crofting families moving with their cattle to live for the summer in shielings on the high pastures; and huge gangs of navvies working on Scotland's new railway lines and labouring at different times on other massive infrastructure projects. Much of this seasonal migration was missed by the censuses which, in the period covered by this chapter (except for the post-war census of 1921), were always held in the early spring.

Sample data on nearly 54,000 people, drawn from the manuscript enumerators' books for the 1851 Census of Scotland, suggest that almost half the 1851 population were living in a parish or town/city in Scotland different from that of their birth. Even allowing for some place identification errors, at least one in ten of those in their first year of life had already moved from their place of birth by the 1851 census day, more than a fifth of children aged five had moved parishes at least once, and more than

Footnote

9) Before 1853, the available sources do not include Scots emigrating from non-Scottish ports, and until 1863 mail packets and smaller ships were excluded, and often only 'steerage' passengers were counted, ignoring both 'cabin' passengers and those who worked their passage as crew members. Emigrants to European ports were not counted until 1890. Visitors and transient migrants were not estimated until 1912. For details see Flinn et al. (1977): 94-6 and Baines (1985): 44-45. More detailed information can be found in Carrier and J R Jeffery (1953).

one in three had done so by their early teens. Nearly two thirds of those aged twenty and over had moved across a parish boundary at one or more points in their lives.

Similar data at parish level are not yet available for later years, but we know, for example, that nearly 24 per cent of Scots-born people living in Great Britain in 1881 (about 865,000) were recorded at the census of that year as having moved at some point from their Scottish county of birth to another county in Scotland; another seven per cent (nearly 254,000) were living somewhere in England and Wales. The percentages were almost exactly the same in 1911, but the numbers had risen to over 1.13 million and nearly 324,000 respectively. Over the next fifty years, the percentage of Scots-born people living in Great Britain who had moved county within Scotland fell slowly to 20.5 per cent in 1961, but the share living in England and Wales grew to over 12 per cent. Over this period, the number of Scots-born people living in England and Wales more than doubled to nearly 654,000. It peaked in 1991 at nearly 767,000, before falling to just over 733,000 by 2011.

The other, and most discussed, major Scottish migrant flow out was emigration not to England and Wales but to other parts of the world. We have no way of knowing at any point in time how many Scots-born people were living in most other countries around the world, (though one estimate for 2007 put the figure at a very precise 467,500[10]). However, we do have some minimal figures[11] of the numbers who embarked on ships taking them to destinations outside Europe between 1853 and 1950 (Carrier and Jeffery 1953). Overall, between 1861 and 1911 a minimum of 1.23 million people who said they were resident in Scotland emigrated in this way, and they were followed by almost 800,000 more by 1930 and, excluding the war years, probably at least another 100,000 by 1950.

The earlier figures need to be treated with some caution, because they do not take account of the many thousands who returned. Indeed, by the 1890s relatively cheap and fast steam shipping allowed some Scottish workers in skilled seasonal trades to go to the United States just for their quiet months in the year, while others went for a few years in a trade depression, returning when business picked up again. No robust estimates for migrant returners are available before 1895, but between then and 1930 the published data suggest that net emigration was about two thirds of the gross figures. In the peacetime years between 1931 and 1950 the net figures are unlikely to have been more than a tenth of the gross because there was net inflow in every year between 1931 and 1938 at least.

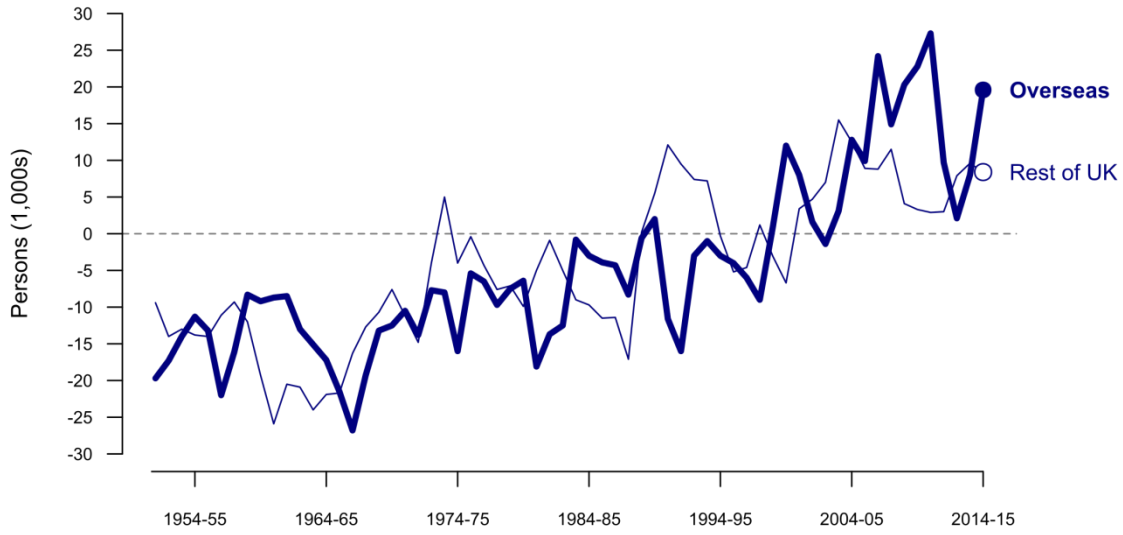
From 1951 onwards the Registrar General for Scotland published estimates of net migration to and from overseas and other parts of the UK. Figure 11.2 shows that both were almost consistently negative until the late 1980s.

Footnotes

10) D Ancien, M Boyle and R Kitchen, The Scottish Diaspora and Diaspora Strategy: Insights and Lessons from Ireland, Table 2, citing a Scottish Government internal working paper by Eirich and McLaren.

11) These do not include all emigrants who embarked on ships to destinations outside Europe, but only those included in the returns to the Board of Trade (refer to Footnote 2).

Figure 11.2: Net rest of UK and overseas migration, 1951 to 2015

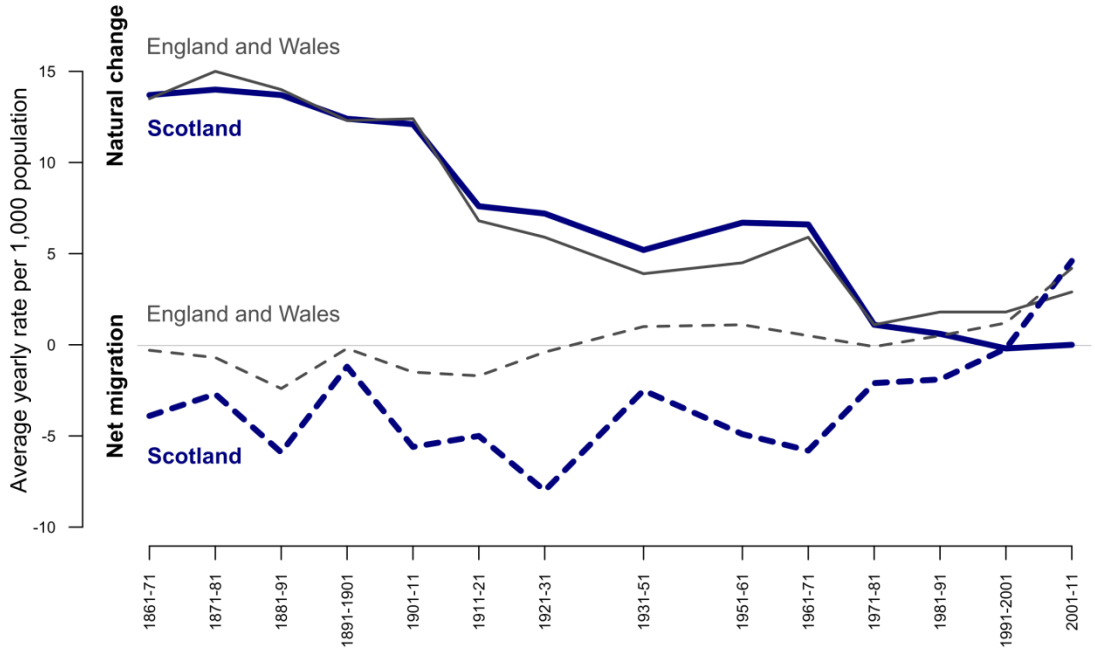


Net movement to the rest of the UK exceeded 20,000 in every year from mid-1961 to mid-1966 and net moves to the rest of the world peaked at around 26,800 in the year to mid-1967. These were years when the UK unemployment rate averaged below two per cent, but when the Scottish rate was typically around double that of the UK as a whole.

Thereafter, with the exception of the year to mid-1990, total Scottish net migration remained negative (though generally at a lower level) until the last years of the century when a sudden and unprecedented change occurred. In the year to mid-1999, about 1,000 more people are estimated to have moved into Scotland from overseas than left for overseas, and for mid-1999 to mid-2000 the estimate was 12,000. Thereafter there has been positive migration between Scotland and overseas in every year except mid-2003 and the average figure for mid-2009 to mid-2011 was around 23,500. From the year to mid-2001, there has also been net in-movement from the rest of the UK. Together with net inflows from the rest of the world, this was the key factor turning Scotland's overall population change to positive in the first decade of the twenty-first century, the first positive growth decade since the 1960s.

Net migration and natural change (the difference between birth and death rates) affect the overall rate of population change. Throughout the period covered by this chapter, net migration has been the key factor differentiating the rate of Scottish population growth from that of England and Wales and, indeed, from most of the rest of north-west Europe. Figure 11.3 shows the relative impact on overall population change of natural change and of net migration. For each decade Scottish experience is contrasted with that of England and Wales. Note that because there was no census in 1941, the rate for 1931-51 is the mean across the two decades.

Figure 11.3: Average yearly rate of natural change and net migration, by decade, Scotland and England and Wales, 1861-2011



Note
Net migration includes movements to and from overseas and the rest of the UK and 'other' changes such as changes in the numbers of prisoners and armed forces and the unattributable components of population change and rounding adjustments when mid-year population estimates are revised following census years. There was no census in 1941, so a mean across the two decades from 1931 to 1951 has been included. Data up to 2001 are from successive volumes of the Annual Abstracts of Statistics, published by the Office for National Statistics (ONS). The components of change for 2001 to 2011 are from the Mid-2002 to Mid-2010 revised population estimate publications produced by National Records of Scotland and the ONS

As a consequence of the similarity in birth and death rates north and south of the border through to the 1970s, natural change was fairly similar in the two parts of Great Britain. However, migration rates were dramatically different. At a decadal level, Scotland did not experience the positive inflows that England and Wales experienced in most of the post-World War Two period until the first decade of the twenty-first century. Indeed in the 1950s and 1960s, when England and Wales was seeing strong immigration, almost six per cent of the population left Scotland per decade.

Even in decades when England and Wales experienced net emigration, Scotland's net emigration rate, controlling for the size of the population, was never less than two and a half times that of England and Wales. In the 1880s and the first decade of the twentieth century, Scottish net migration loss exceeded 5.5 per cent of the population in each decade, and it remained high right up to World War One. By contrast, even in these two decades, the net English/Welsh losses were only the equivalent of 2.4 per cent and 1.5 per cent of the population. Even more remarkably, in the 1920s, when Scottish net emigration averaged 0.8 per cent of the population in every year, England saw modest immigration (though in this decade and even more in the 1930s, Wales had an even higher rate of loss than Scotland).

In the post-Second World War period, the differences continued. In the 1950s and 1960s, a higher birth rate meant that Scottish natural increase was somewhat above

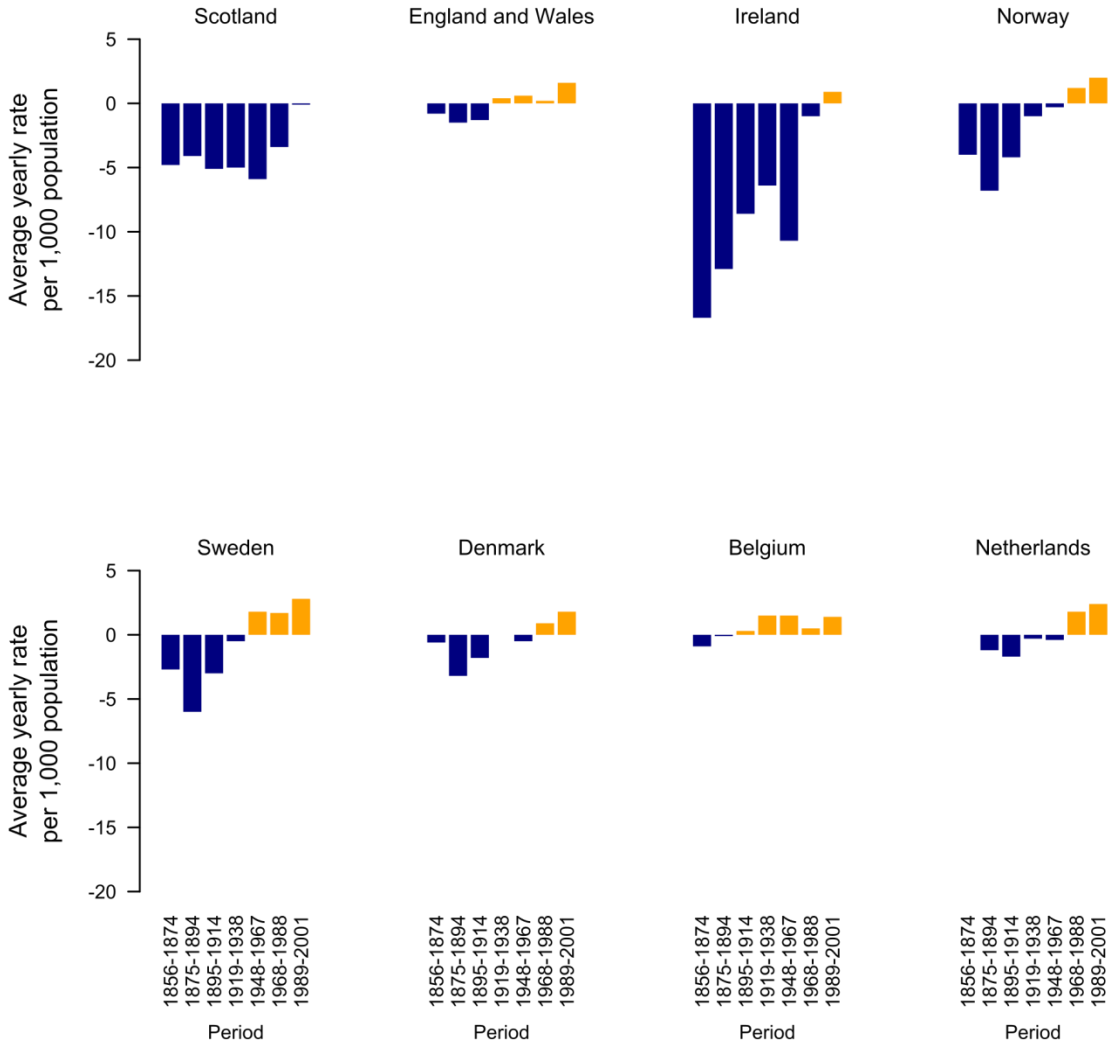
that of England and Wales, but population grew much more slowly than south of the border. This was because, in spite of high levels of emigration of native-born people, England gained population through even higher inward migration, while Scottish net outflow returned to something near the 1920s level. In the 1970s, as the birth rates fell rapidly, the natural change gap narrowed, but Scotland continued to have net outflow above natural increase in most years, so population north of the border decreased. From the mid-1980s, Scottish natural increase fell nearly to zero and eventually became marginally negative, and, although net out-migration also decreased, the population continued to decline. By contrast, south of the border, not only did natural increase remain positive but net immigration rose, giving a further boost to population growth. Only in the first decade of the twenty-first century did net immigration move Scotland back to positive population change.

Scotland's net emigration flows have not just been above those of England and Wales. Taking the whole period from the 1850s to 2001, and excepting only Ireland, they were markedly above those of any other country in north-western Europe for which we have consistent data, as shown in Figure 11.4[12]. Elsewhere in Western Europe, Germany and France did not experience emigration rates anywhere near as high as Scotland's prior to World War Two, and though Italy and Spain had higher overseas outflows in the later nineteenth and early twentieth centuries, they also had much higher rates of return so their net figures never surpassed those of Scotland.

Footnote

12) Note that Norway and Sweden had higher rates of net outflow in the last quarter of the nineteenth century, but lower rates overall.

Figure 11.4: Average yearly net migration rate, Scotland and selected north-west European countries, selected periods from 1856-74 to 1989-2001



Note
Net migration includes 'other' changes in population, for example changes in the numbers of prisoners and armed forces. Data for years up to and including 1993 are selected from F. Rothenbacher's *The European Population 1850-1945* (Palgrave Macmillan, 2002) and F Rothenbacher's *The European Population since 1945* (Palgrave Macmillan, 2005). Post-1993 figures are mid-year estimates produced (UK constituent countries) and compiled (other European countries) by the Office for National Statistics and published in Population Trends.

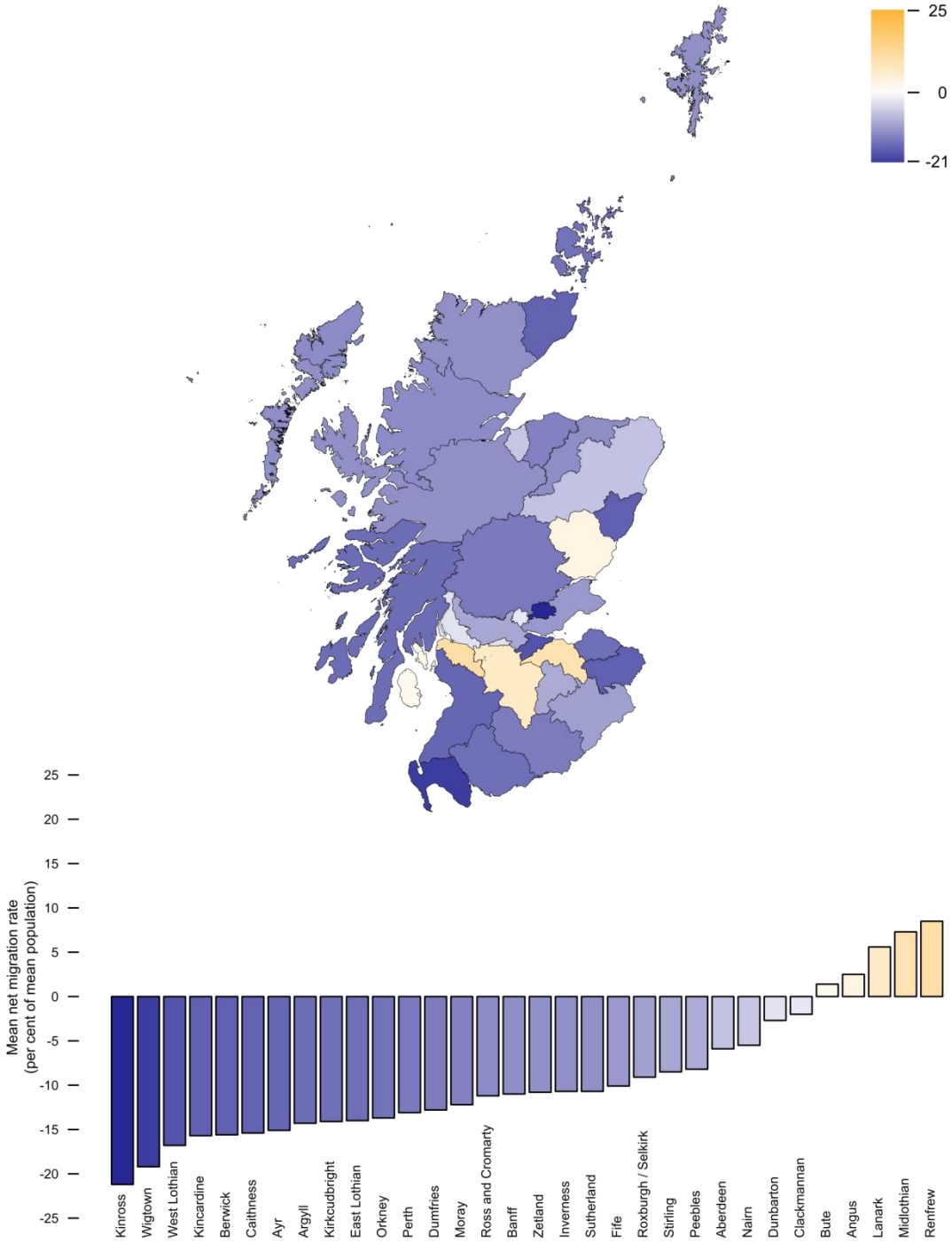
Movements within Scotland

As we saw in an earlier section of this Chapter, Scots did not just emigrate; they were also highly mobile within the country. Successive census reports show that there were significant in- and out-movements between every pair of counties, and also migration both into and out of every parish that has so far been studied. The scale of movements revealed at each census by the census county of birth versus county of residence tables is remarkable. For example, in 1911 there was not a single county anywhere in Scotland that did not have at least one resident born in every other county. Every county except Shetland, Nairn and Orkney had more than 200 people born in Lanarkshire. Nairn, the second smallest county in Scotland, was the only one with less than 200 inhabitants born in Midlothian. At the other extreme, in 1911 in Lanarkshire (which included almost all of Glasgow) there were nearly 22,000 people born in Midlothian (which included Edinburgh), and in Midlothian over 26,000 born in Lanarkshire.

Nevertheless, while every county and probably every settlement had in- and out-flows, these movements were not entirely random. For the decade 1861 to 1871, birth, death and population change figures were published separately for the more than 900 registration districts in Scotland in the 1871 Census. From these data, it can be estimated that over 90 per cent of registration districts in Scotland, containing more than 60 per cent of the population, experienced a net loss of population through out-migration. While these net out-migration parishes were mainly in rural areas, even this early there was also significant net outflow from many urban and industrial parishes, among them nine with populations of more than 20,000, the largest of which was Paisley.

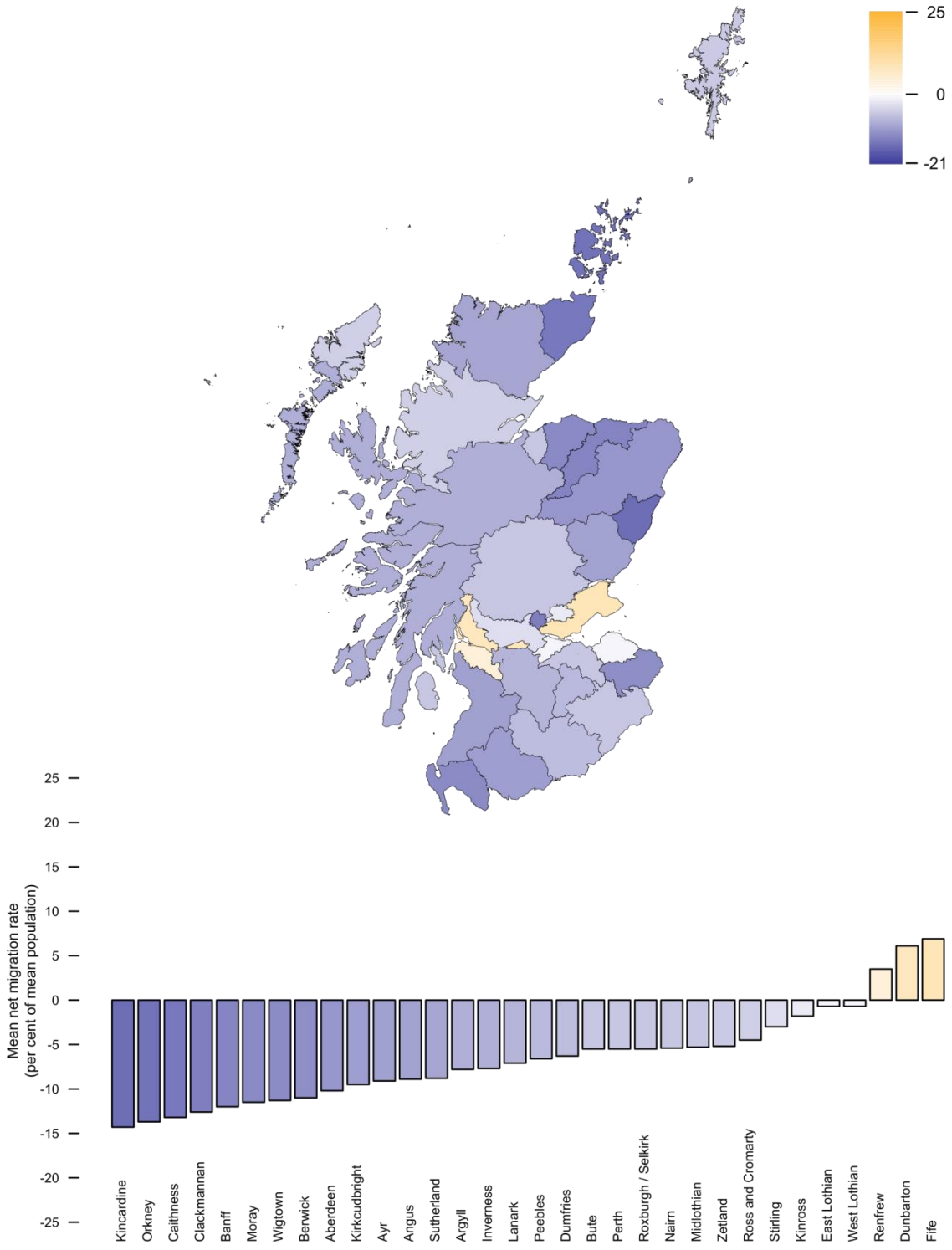
At higher levels of geography, analysis of net decadal migration by county is possible from 1861 to 1971. After this, because of local government reorganisation and the change of registration geography from the 33 county councils to 12 regions, county of birth data was no longer included in the censuses. Figures 11.5, 11.6 and 11.7 show average net migration by county, as a percentage of (average) population, for the periods 1861 to 1871, 1901 to 1911 and 1961 to 1971.

Figure 11.5: Average net migration by county, per cent of average population, 1861 to 1871



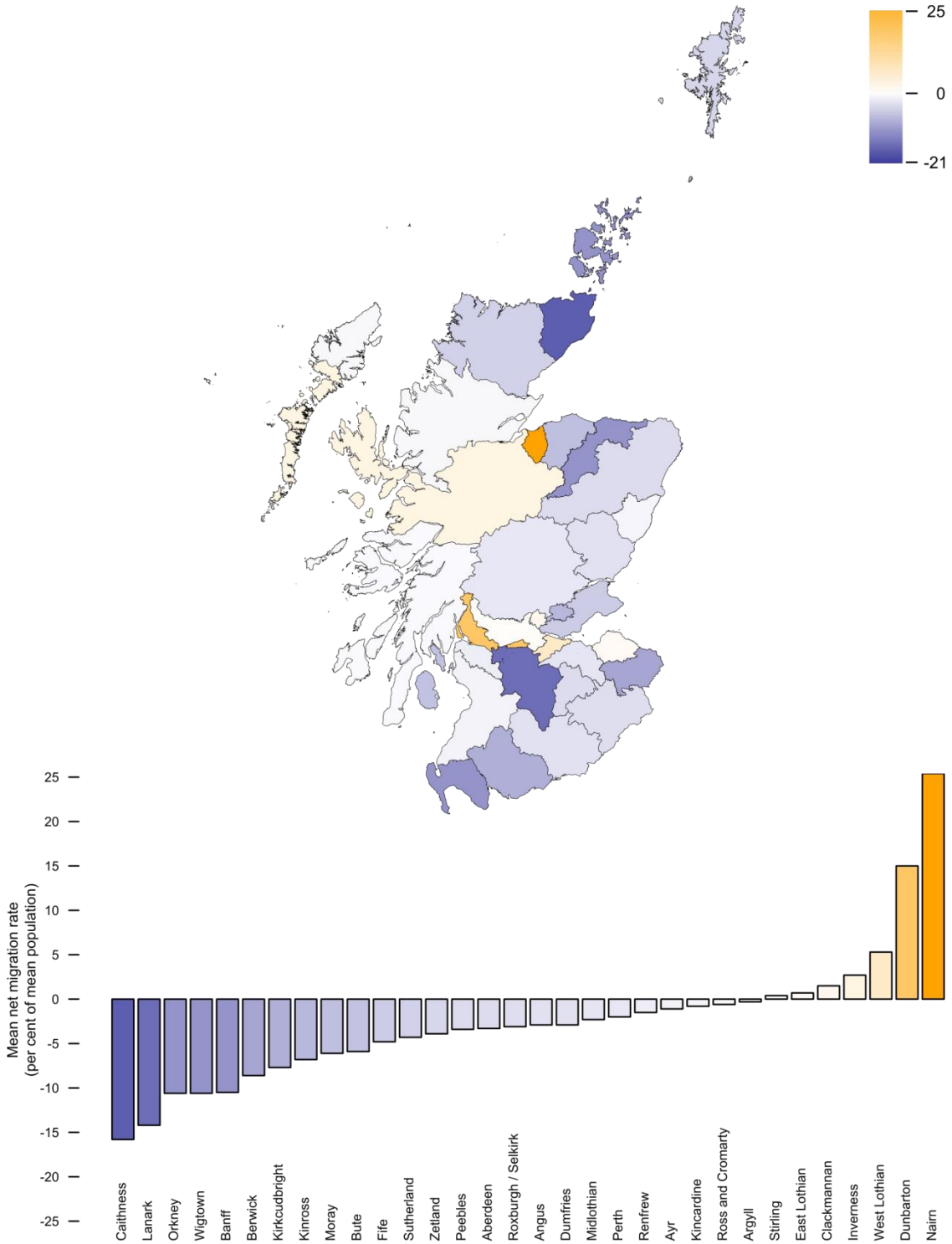
Note
Net migration includes 'other' changes in population, for example the number of armed forces and prisoners, and is calculated from estimated population change and natural change. The four cities are included in their pre-1930 counties and, because of major boundary uncertainties and change over time, Selkirk and Roxburgh are combined. Data are plotted in Civil Counties. The figures for 1861 to 71 are calculated for Registration Counties; however, the differences are not large enough to cause any major distortions.

Figure 11.6: Average net migration by county, per cent of average population, 1901 to 1911



Note
Net migration includes 'other' changes in population, for example the number of armed forces and prisoners, and is calculated from estimated population change and natural change. The four cities are included in their pre-1930 counties and, because of major boundary uncertainties and change over time, Selkirk and Roxburgh are combined. Data are plotted in Civil Counties.

Figure 11.7: Average net migration by county, per cent of average population, 1961 to 1971



Note
Net migration includes 'other' changes in population, for example the number of armed forces and prisoners, and is calculated from estimated population change and natural change. The four cities are included in their pre-1930 counties and, because of major boundary uncertainties and change over time, Selkirk and Roxburgh are combined. Data are plotted in Civil Counties.

Several points emerge from these maps and from a more general survey of changes over this period:

- As Figure 11.5 shows, only five counties experienced net in-migration between 1861 and 1871. Thereafter, analysis of successive censuses shows that there were net inflows into five counties between 1871 and 1881, just two between 1881 and 1891, seven between 1891 and 1901 and, as Figure 11.6 shows, three between 1901 and 1911. The data for the 1920s are complicated by the timing of the 1921 census in a peak holiday period, but in that decade there was probably net in-migration into only one county (Roxburgh, by a tiny amount). In the 1950s there were just two counties with net inflows and still only seven in the 1960s (Figure 11.7). These almost entirely (as with Nairn or East Lothian) reflected suburban development around Inverness and Edinburgh, or moves, largely from Glasgow, to New Towns like Livingston in West Lothian and Cumbernauld in Dunbarton.

- In the 1860s, as Figure 11.5 shows, while all the more rural counties experienced high levels of outflow, the very highest rates were not from the Northern Isles and the crofting counties of the north-west as might perhaps be expected but from counties like Kinross, Wigtown, West Lothian, Kincardine, Berwick and Ayr. The main areas with significant inflow in this period were still the heartlands of the first phase of Scottish industrialisation: Lanark and Renfrew (with movement both into Glasgow and into some of the surrounding mining and heavy industry parishes). There were also inflows into Midlothian (where there was strong net migration into Edinburgh but even larger movement into some of the mining communities outside the city). There was also a small inflow into Angus, almost entirely focused on Dundee.

- Over the next four decades there were significant changes in both the intensity and patterns of in-and out-migration. In the 1870s, modest inflow continued into Dundee, Aberdeen and Edinburgh, but even this early there was net outflow from Glasgow equivalent to almost nine percent of its mean population. However, Lanarkshire as a whole and also Renfrewshire continued to attract modest net in-migration, as shipbuilding, mining and heavy metal manufacturing continued to grow at the expense of textiles. By far the biggest gainer by migration in this decade was Dunbarton, where net inflow, driven by the expansion of shipbuilding and Glasgow suburbanisation, reached 11 per cent of the mean population per decade, followed by seven per cent in the next ten years. Modest inflow continued in Dunbarton in the 1890s, and then accelerated in the first decade of the twentieth century. Figure 11.6 shows Dunbarton as one of the two largest inflow counties, along with Fife, where much of the inflow was stimulated by rapid development of new coalfields (note also, comparing Figures 11.5 and 11.6, the marked declines in the rates of net outflow from other newly developing mining counties and notably East and West Lothian and in Kinross).

- More generally, however, comparison of Figure 11.5 and Figure 11.6 shows a widespread trend for net rates of outflow to be lower between 1901 and 1911 compared with the 1860s. The 1901 to 1911 net outflows were smaller in 22 of the 33 counties including almost all rural areas of the country. In spite of

this, the national rate of net out-migration was markedly higher in the first decade of the twentieth century than in most earlier decades. This was entirely because net migration had turned negative in Lanarkshire and Midlothian, which made up almost exactly two fifths of the total Scottish population in both 1901 and 1911 (it had been 30 per cent in 1861). It is clear, therefore that events that affected migration in these two counties were having a disproportionate impact on net migration rates for Scotland as a whole.

- This became even clearer in the 1920s. Rates of net outflow from the key heavy industry and mining areas in the decade 1921-31 were extremely high: Lanarkshire had net outflow which removed the equivalent of seven per cent of the mean population over the decade, Dunbarton 11 per cent (but some of this was due to the holiday-timing of the 1921 census), Renfrewshire 12 per cent, Fife 14 per cent and West Lothian 16 per cent. Given that these five counties contained more than 55 per cent of the national population in 1921, the very heavy rates of net national emigration shown in Figure 11.3 were almost inevitable.

Local government reorganisation and the introduction of new registration geographies in 1975 and again in 1996 make it difficult to present net migration flows by counties after 1971. However, the impact in the 1970s of oil development on migration to the Aberdeen area and to the Highlands and the northern and western isles is very clear. So too is the subsequent out-movement from Shetland, in particular as the main construction phase came to an end (net out-migration from Shetland for mid-1981 to mid-1986 was the equivalent of 33 per 1,000 population per year). The most marked contrast compared with earlier decades comes from the shift of most of rural, central and eastern Scotland into positive migration starting in the 1970s and persisting through to the 1990s. This was nevertheless accompanied by continued national net outflows, almost entirely due to the continuing outflow from the west Central Belt areas. Rates for today's post-1996 single tier local authorities from mid-1991 to mid-2002 show net outflow for all the council areas in and surrounding the City of Glasgow, excepting only East Renfrewshire. Glasgow City and Inverclyde on average lost the equivalent of more than five per cent of their population through out-migration in these years.

Who moved, when and why?

Prior to 2001 little data is available on the age profiles of migrants between Scotland and the rest of the UK and Scotland and overseas. For movements to and from the rest of the world, limited use was made in some years after 1912 of information from the Board of Trade returns and, after 1967, from the International Passenger Survey[13].

It is, however, possible to make approximate estimates of the age pattern of total net migration to and from Scotland by using a technique known as 'age-cohort depletion'. This involves comparing the number of people stated to be in each age group at each census with the number who stated their ages as ten years older in the subsequent census, and then making allowance for the numbers in each age group who are likely to have died between any pair of census dates[14].

The results of this method are subject to a margin of error, but the scale of the differentials that are shown clearly suggest real contrasts in patterns of net migration. Figure 11.8 shows examples of estimates of net migration by age group and sex, for those aged from 5 to 9 to 30 to 34 at the first of each pair of censuses, and compares Scotland with England and Wales[15].

Until 1921 to 1931, for males, the highest rates of Scottish emigration in almost all decades occurred among those who were aged between 15 and 24 at the start of the decade. For females, the highest loss rates were nearly always among those a few years older, those aged between 20 and 29, but the numbers leaving were always lower than for men[16].

Footnotes

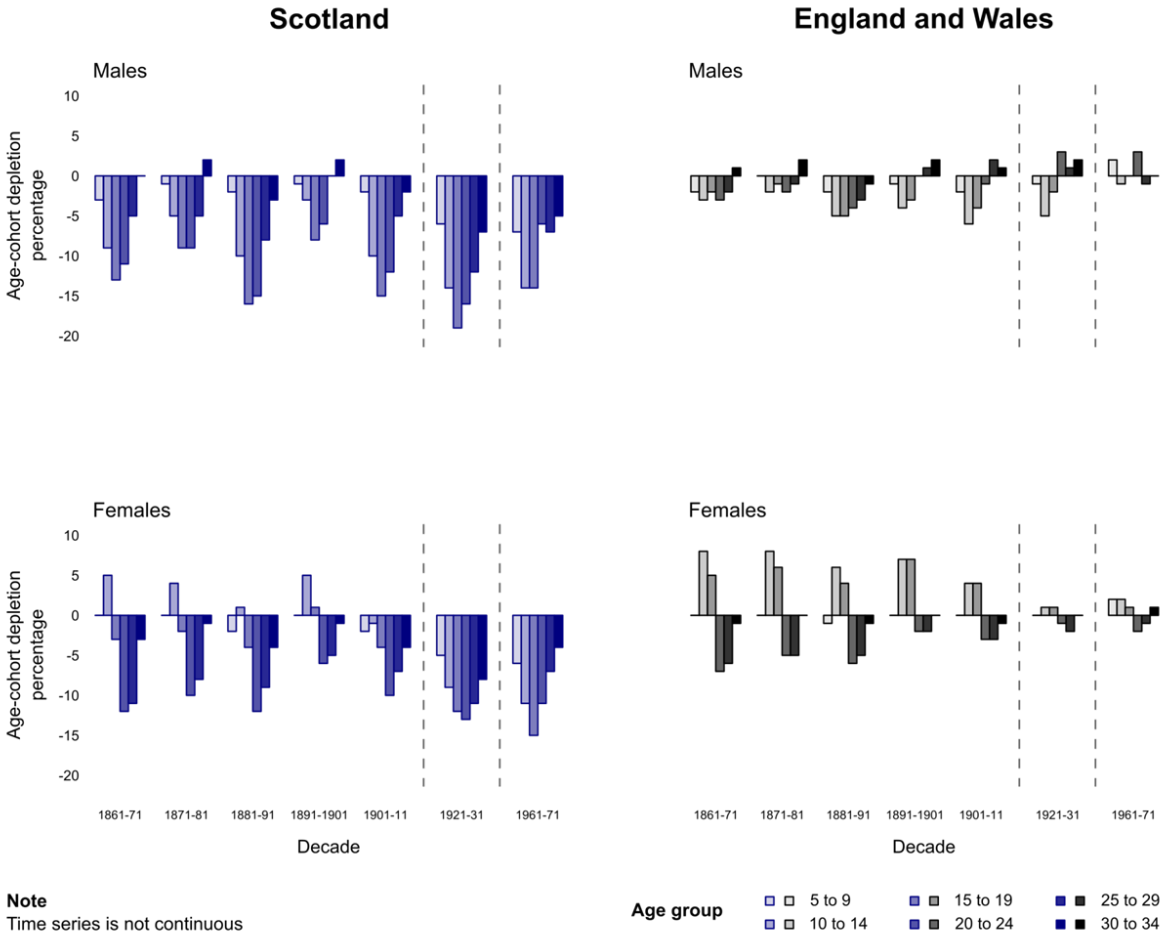
13) Summaries of the Board of Trade data up to 1950 are in Carrier and Jeffery (1953). Thereafter, a limited amount of information was included in some but not all of the Registrar General's Annual Reports from 1967 to 1978.

14) This method relies on ages being recorded with a reasonable degree of consistency between censuses, which was not entirely the case especially in the nineteenth century when significant numbers of people rounded their ages to the nearest ten years, but did so more commonly at some ages than others. The assumptions that must be made to estimate numbers likely to have died also introduce an element of uncertainty, because we do not know exactly when within any decade people left or moved to Scotland, nor the degree to which prospective emigrants and arriving immigrants had different mortality chances compared with non-mobile Scots.

15) No data are shown for those who were aged 0 to 4 or 35 and over at the first of any pair of censuses, because of the uncertain impact of mortality on these results; for most of the period at least, death rates at ages between 5 and 44 were sufficiently low that the results can be considered with reasonable confidence.

16) It is worth noting that Scotland was used to massive excess losses of young men relative to young women, and highly skewed sex ratios as a result, even before the high death rates of World War One. For example, the sex ratio in 1921 for ages 20 to 34 was 866 males per thousand females, but this had been pulled down not only by war deaths but also by the very large emigration of young men in the years 1910 to 1913; the number of men per thousand women in these age groups had been 913 in 1911, 899 in 1891 and 807 in 1861.

Figure 11.8: Age cohort depletion between census populations, percentage by age group and sex, Scotland and England and Wales 1861-71 to 1961-71



In contrast, from the 1920s until the 1960s (and this continued through to the 1980s) significant numbers of young people who were under the age of nine and women in their later twenties and thirties at the start of each decade, are also revealed as emigrating. This reflects a marked increase in family emigration in these years. Except in the interwar period and to a lesser extent in the 1950s and 1960s, net emigration fell markedly after the age of about 30 and was very low or even negative by the time people reached their forties; although some of this may reflect increasing numbers of return migrants. From the 1980s, however, both age groups began to have low levels of net in-migration, a point that will be returned to below.

Figure 11.8 also allows us to compare the Scottish age-cohort depletion with England and Wales. The contrasts are extremely marked. For males, English net outflow was much lower at all ages and, indeed, there was actual net inflow in the 1890s, the 1900s and the 1920s among men of 30 and over. The rising numbers of Scots-born people living south of the border makes it clear that many of these immigrants came from Scotland.

The figures for women show net inflow among teenagers to an even greater extent than in Scotland; some of this probably reflects young women moving from Ireland into service and other jobs of this kind[17].

The most remarkable contrast, however, is in the 1900s, 1920s and the 1960s (and indeed also for later decades) when, as was suggested above, the age-profile of migrants provides a strong indication of significant net family emigration from Scotland, but almost none from England and Wales. By the 1960s England and Wales was already experiencing very significant immigration from the new Commonwealth, a migration flow which, as we shall observe below, was almost unknown in Scotland at that time.

Some local examples of patterns and impact of migration: rural counties

The availability from 1851 onwards of age by sex data at county level (and, between 1861 and 1911, also at parish level) shows how different rural areas were affected by out-migration over time. It also shows how industrial expansion and contraction affected in- and out-movements of people of different ages (discussed in the next section). No attempt has been made here to adjust for mortality because the most important net flows are very large relative to the population and the effect of age-specific death rates, and the pattern of movement over any decade is unknown and no age-specific mortality data are available below county level.

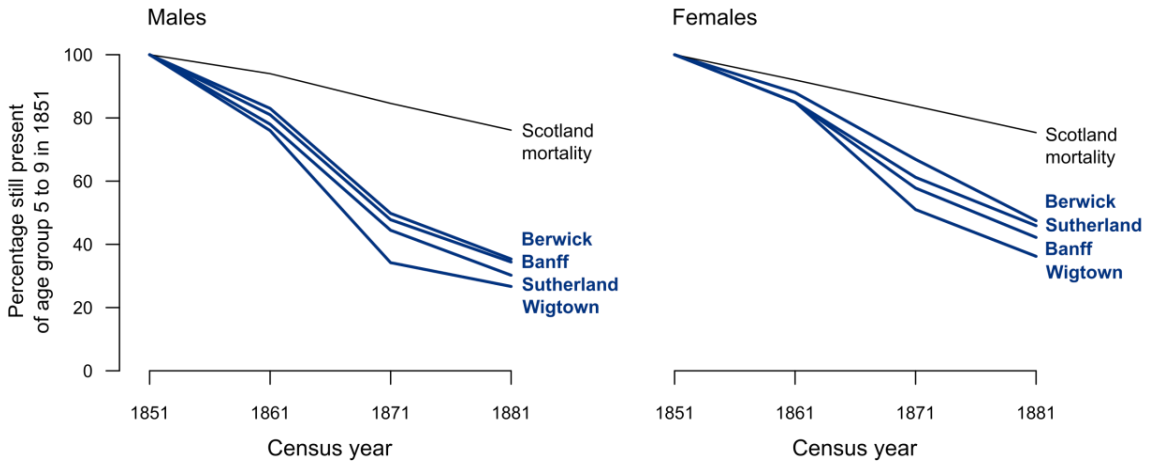
It is well-known that the crofting counties saw very significant population decline through out-migration in the decades after the failure of the potato crop in the late 1840s. What is less well-known, however, is that population losses on at least the same scale occurred widely across almost all parts of rural Scotland in these years.

Figure 11.9 examines, for four predominantly rural counties in different parts of the country, the decline of the cohort who were aged five to nine at the 1851 Census of Scotland. Figure 11.9 also shows a rough estimate of the losses that would have been attributable to mortality if these counties had shared the Scottish national age-specific death rates in these years; in practice, their mortality was somewhat lower, and many of those who died would in fact have done so after their out-migration, so the mortality figures plotted are an extremely conservative upper bound.

Footnote

17) A smaller part of this apparent net immigration seems likely to have resulted from some young women who were aged eight or nine at the first census of a decade returning themselves as 20 or 21 ten years later.

Figure 11.9: Decline of the population cohort aged 5 to 9 in the 1851 Census of Scotland, percentage still present, 1851 to 1881



The graphs show that by 1861 the equivalent of around 19 per cent of boys who had been aged five to nine in 1851 had disappeared from the core crofting county of Sutherland, but it also shows that 24 per cent, 17 per cent and 22 per cent were already missing from Wigtown, Berwick and Banff respectively. These are net flows, and the actual numbers leaving would have been somewhat higher. By the time they were aged 35 to 39, just over a third of the 1851 cohort were still living in Sutherland, Berwick or Banff and just below a third remained in Wigtown. The proportions remaining for women of the same age cohort were a little higher than for men.

A fuller account for other age cohorts, for a larger number of rural counties, and for most decades from 1851 through to the 1960s can be found in the forthcoming book, but the overall picture is very similar: almost all rural counties and not just the crofting areas of north-west Scotland and the islands experienced massive population outflows of young men and women for most of the century after 1851 and beyond.

Some local examples of patterns and impact of migration: manufacturing and mining areas

A second example looks at how, in a period of rapid population and employment growth, different kinds of core industries produced very contrasting patterns of net migration flows by gender by age.

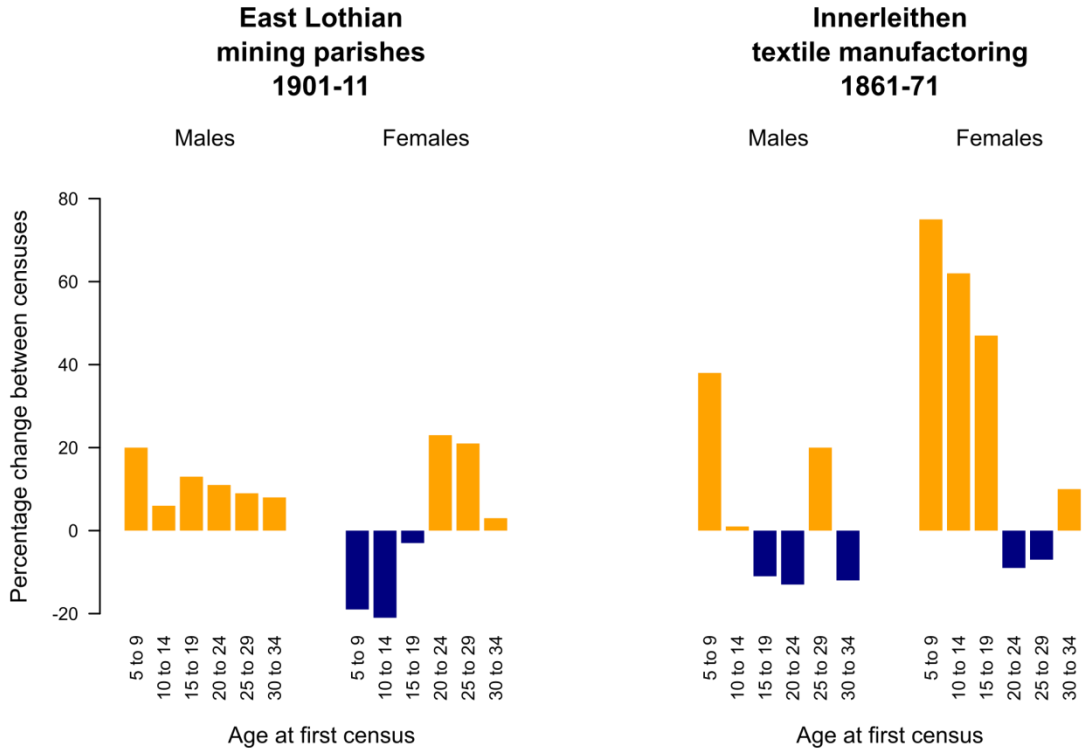
In the first decade of the twentieth century, there was a rapid expansion of coal mining in a number of parishes in western East Lothian. Between 1901 and 1911 the combined population of Ormiston, Pencaitland and Prestonpans grew by nearly 34 per cent. Most of the new jobs were for fit young men; there was very little employment for women in these communities. Most of the women who were there were married.

The result of these very different employment demands for men and women was, as would be expected, a markedly skewed sex ratio at young adult age groups (in 1911,

there were 137 men per 100 women aged 15 to 19 and 136 men per 100 women aged 20 to 24, for example).

However, the age cohort depletions plotted in Figure 11.10 reveal that these sex ratios were not just the result of a pattern of inflow dominated by young men. Young women (aged under 20) growing up in the community could see no prospects in staying and left. However, as they got older, the men wanted to marry and it is presumably this that encouraged significant numbers of women in their twenties to move in. Patterns of movement very similar to this can be found in many other heavy industry areas in this period, notably, for example, in the shale oil communities in West Lothian.

Figure 11.10: Age cohort depletion in East Lothian, 1901 to 1911 and in Innerleithen between 1861 and 1871, percentage change



What happened in Innerleithen in the 1860s was in many ways the reverse. This was a period of major expansion in woollen textile manufacturing in the parish, and the largest share of jobs in this industry was for young women, though there were also some jobs for teenage boys. The population of the parish rose by 52 per cent between 1861 and 1871, the number of women aged 15 to 19 increased from 92 to 193, but the number of men in this age group only rose from 89 to 107. As Figure 11.10 shows this involved a 75 per cent net increase in the number of women aged 15 to 19 in 1871 compared with the number of girls aged 5 to 9 ten years earlier and a 62 per cent increase for women who by 1871 were aged 20 to 24 (note that this is a net figure and it also does not take account of mortality, so the actual numbers moving in would have been markedly higher). By contrast, even allowing for mortality, it seems that there was a small outflow of men in their teens and early

twenties (though an inflow of men in their late twenties, possibly skilled workmen recruited to maintain the growing amount of steam engines and mill machinery).

The final example examines what happened in the Burgh of Clydebank in the 1920s, when it was dramatically hit by the collapse in demand for some of its principal products, and notably ships and marine engineering. The age cohort depletions over this period are shown in Table 11.1.

Table 11.1: Age cohort depletion and population change, by age group, Clydebank 1921-1931

	Per cent depletion by age cohort, 1921-1931							
Age group 1921	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44
Age group 1931	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54
Male	-8	-12	-21	-24	-21	-19	-17	-14
Female	-12	-18	-15	-16	-17	-15	-14	-19

	Per cent population change by age group, 1921-1931							
Age group	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54
Male	-4	-2	-2	-4	-7	-6	-7	16
Female	2	4	-1	1	5	3	4	21

Note
Age cohort depletion is estimated as the difference between the number of persons in each age group in the first census population and those aged 10 years older in the next census population. No attempt has been made here to adjust for mortality because the most important net flows are very large relative to the population and the effect of age-specific death rates, the pattern of movement over any decade is unknown and no age-specific mortality data are available below county level.

The top half of Table 11.1 shows substantial net out-migration by males and females at all the age groups up to those who had been 40 to 44 in 1921. The number of young people involved and the inclusion of large numbers of women as well as men strongly suggest major family out-migration. What is of particular interest here is that in spite of this heavy out-migration, the lower half of Table 11.1 shows that numbers present in each age group hardly changed at all between 1921 and 1931. Indeed, the total population of the burgh as reported in the censuses actually rose from 46,506 to 46,952 over the decade, though some people will almost certainly have been away on holiday in 1921.

Nevertheless, the clear conclusion is that in Clydebank the previous rapid expansion of the town, plus the very high fertility of many of those employed in its principal industries, had given its population an in-built propensity for rapid population growth which could only have been absorbed by continuing major expansion of employment opportunities. In the absence of such expansion, many young men and women would have had to leave to look for employment elsewhere. In fact, what happened in Clydebank and in many other parts of industrialised Scotland in the 1920s was that employment collapsed, thus producing a double pressure for massive out-migration.

From which social groups did the most emigrants come?

It is clear from the discussion so far that Scots over the whole of our period have been a very migratory people and that Scottish emigration has had a very different history over the past 160 years from that of England, or, indeed, any other country in Europe. We have also seen that migrants were at most periods concentrated particularly among young adults of both sexes (though family emigration increased over time), and that they moved in large numbers from all parts of the country, including the cities and the most industrialised areas.

As far as international emigration was concerned, in the decades leading up to World War One, men and women born in Lanarkshire and Renfrewshire, the heartlands of the first Scottish industrial revolution, had among the highest emigration rates in Scotland outside the Borders and the Northern Isles (Brock 1999). In an area where a large part of the labour force was engaged in heavy industries, and where marital fertility rates were well above the Scottish average, the high rate of emigration appears to be a direct consequence of the inability of the manufacturing areas of the West of Scotland to provide employment for all their potentially available locally born skilled labour force. This is also reflected in the quite high rates of migration from these areas recorded in the 1911 census for England. People born in the seven most industrialised counties in Scotland made up 44 per cent of all Scots living in England and Wales (though this was less than their 56 per cent of the population of Scotland at this date).

Moreover, and in contrast to the situation for English (and especially Irish) migrants, around half of all Scottish emigrants to the United States in most years between 1875 and 1913 were classified by the US authorities as 'skilled', and more than 40 per cent in most of the 1920s - and we know that very many of these came from the West Central Belt[18]. Skilled workers from these areas were especially over-represented in the high emigration years (almost 63 per cent in 1906-07 and 56 per cent in 1910-11) (Thomas 1973)[19]. In the severe depression and high emigration years of 1921-24, 74 per cent of Scottish male emigrants to the United States who gave an occupation to the UK authorities were classified as skilled (49 per cent had previously been employed in skilled mining, quarrying, metals and engineering jobs), and skilled workers continued to make up more than half of all emigrants to the USA in the years 1925-30 (when 38 per cent of those going to Canada and 49 per cent going to Australasia also declared that they had been in skilled jobs) (Carrier and Jeffery 1953: 116-20).

Similarly, in the post-1950 period, when data from passenger surveys are intermittently cited in the Annual Reports of the Registrar General for Scotland, the principal occupational groups of all emigrants nearly always included men engaged in engineering, professional and managerial, clerical, and building and carpentry employments. In the years 1967-1971, when much less detailed occupational groupings are provided in the Annual Reports, around a fifth of all male net emigration was from professional and managerial employments alone, and these high levels of skilled and professional emigration continued into the 1980s (Lindsay 1992).

Footnotes

18) Thomas (1973), Table 83. Note also important discussion of these issues in Evans (2006).

19) In addition, between 1904 and 1913 an average of six per cent were classified as 'professional;' and this rose to nine per cent for 1919 to 1930.

Conclusion: how might we explain Scotland's high rates of out-migration and emigration?

It is within this context that we need to consider the 'explanations' offered in the past for the high levels of Scottish emigration. Most of these are ultimately based on simple push-pull models, for example: comparing Scottish wage rates with North American; pointing to particular periods of deeper depression in Scotland than in England (for example in 1907-08 or the early 1920s); noting the appalling state of, and shortages in, Scottish urban housing (though there was also much appalling housing in many English mining and industrial areas and certainly much in many continental cities).

No doubt each of these factors had a role to play in encouraging some people to emigrate from Scotland, but, crucially, none of these arguments answer the question as to why Scotland's emigration should be so much higher than England's. Certainly, in some periods and some jobs, Scottish wages were lower than English, but this was by no means universal. Certainly, unemployment in recession years in Scotland was almost always rather worse than in England and Wales, but the actual rates of contraction in jobs in the staple industries in the 1900s and 1920s were not markedly greater. Moreover, in every decade except the 1920s, there was significant net migration of English-born people of working age into Scotland. In 1911 a quarter of men employed in mining, metal manufacturing and engineering in Scotland had been born in England or Wales. So had more than 2,700 men in professional and related activities, over 4,200 men in the commercial sector, more than 1,100 women school teachers and 574 men employed in printing and lithography. This pattern of skilled and professional migration into as well as out of Scotland has continued to the present day. The 1991 Census of Scottish recorded over 22,000 English born 'corporate managers and administrators', over 9,600 science and engineering professionals, 11,780 teaching professionals, over 14,900 clerical workers and around 10,000 men employed in iron and steel, electrics and electronics and other engineering employment (Watson 2002: 38-39). If life was that much worse north of the border, why did they come?

What is undoubtedly true is that Scotland, right through to the 1970s at least, had a more recession-prone occupational structure. At all periods from the 1850s to the 1950s, compared with the picture for Great Britain as a whole, a markedly higher percentage (typically about ten percentage points more) of Scottish men were employed in the most recession-prone industries of mining, metal manufacturing, shipbuilding and textiles (Lee 1979; Kendrick *et al.* 1985). There were, of course, also some areas of England and Wales which had high proportions of their local populations in these industries, but there is one particularly notable feature of Scotland: the geographic spread of these industries across an almost continuous band through the whole of the Central Belt from Dundee in the east to Ayrshire in the west. The counties most involved comprised a huge share of the total population of Scotland (for example 72 per cent in 1921). Within this area only a few places and relatively few occupations were not directly or indirectly affected in some way.

At its most extreme, the impact in the inter-war years on the minds of those most affected right across this vast almost uniformly depressed environment has been summed up by Devine as a 'national malaise', 'collapse of confidence' and a descent

into 'pessimistic introspection' at all levels of society[20]. Its widespread effect on 'the attitude of the people' was commented on by a senior official in 1921. In 1923, the Secretary for Scotland noted a 'spirit of hopelessness and sullen discontent' across Glasgow and the Clyde in 1923, and in 1928 the Report of the Cabinet Unemployment Policy Committee on Industrial Transformation, referring to the large numbers 'permanently surplus to the requirements of their industry', commented that 'There is no ground for hoping that if these people remain where they are they will ever again obtain employment'[21].

However, the problems did not just relate to crisis years. More generally, young adults in Scotland for most of our period faced a real shortage of opportunities to establish themselves at home. This is a well-known and continuing problem in the north-west of the country, made worse in the nineteenth century by landlords seeking to downsize their local populations, and old people clinging onto crofts. But there were wider problems also. Throughout our period, because of its more open education system, Scotland markedly over-produced professionals and those with the skills required to enter employment where good levels of literacy and numeracy were needed, such as clerks, bankers, teachers and other professionals. To take just one example, Walker's work reveals that 37 per cent of Scottish chartered accountants qualifying between 1904 and 1914 went overseas, most because there were no jobs for them at home (Walker 1988: 44).

There was also an underlying demographic component to this surplus. Basically, because of Scotland's poor record in developing new industries from the later nineteenth century onwards, and the failure to continue to expand its older ones, the number of young adults of any skill level looking for work grew much faster than job opportunities. One extreme example of this, as was illustrated by the Clydebank example cited above, was that the rapid expansion of heavy manufacturing/mining areas, with their very high birth rates, produced major excesses of young adults in the next generation in these areas. This, however, was a national not just a local problem.

Simple modeling suggests that, had there been no emigration, in 1891 there would have been around 190,000 more males aged 20 to 29 looking for employment in Scotland than the number of vacancies created by both the number of deaths over the decade of men aged 20 to 54 in 1881 and the total or partial withdrawal from the labour force of men aged 55 to 64 in 1881. This 190,000 means that the number of jobs available to this age group would have needed to expand by 22 per cent compared with the number available in 1881; this is a far larger figure than the Scottish economy could possibly have supplied at this time. A similar calculation for 1921 to 1931 suggests there would have been an excess of around 200,000 (17 per cent) men in this age group looking for jobs in 1931, at a time when the number of available jobs had fallen over the previous decade by at least 250,000. Of course, England and Wales also faced a similar problem, but similar modeling of the percentage excess comes out lower in most decades while employment growth was faster[22].

Footnotes

20) Cited in Devine (2000) 318-20.

21) Cited in Levitt (1992) 146-9, 150, 164.

22) There is an excellent discussion of this issue for England in Lawton (1968): 16.

The key next question is: what were these surplus young adults to do? Over the second half of the nineteenth century, trade union and other bodies developed a range of support mechanisms which provided at least some minimal short-term support for an increasing range of unemployed skilled workers in recession-prone industries, and the very skilled were often supported by employers afraid that their skills would be lost if they moved away. From 1905, the beginnings of state-provided unemployment insurance became available for some workers to supplement this system, though it only extended to a fuller range of the labour force after World War One, and even then only provided full rate support for 13 weeks. Behind all these systems in England lay the Poor Law, which increasingly provided out-relief payments to industrial and other workers during periods of mass unemployment.

These systems were, however, of limited use to the excess labour force of young adults in Scotland. If they were not already well established in employment, they would not have been eligible for most of the trade union relief funds, nor would they have been able to build up much in the way of insurance records. Also crucially, until 1921 the Scottish Poor Law did not normally allow the payment of relief to any able-bodied person, or to their families, except sometimes on a transitional short-term basis. Even through to the 1930s, many parishes were reluctant to do more than an absolute minimum in the way of support for such people. Under these circumstances, many of the unemployed had no alternative but to try to move elsewhere. In addition, in rural areas most houses for agricultural workers went with the job or the tenancy to a plot of land; if one had no job or no tenancy (and numbers of both declined steadily over time), one had to move on.

A key reason for Scotland's large surplus of young adults was the poor development of new industries. From the late nineteenth century through to the 1950s, the share of Scotland's industrial employment which was in the expanding areas of chemicals, vehicles and electrical engineering was at best about half the English level[23]. In parallel with this Scotland never developed the large clusters of new consumer goods industries which underpinned so much of the twentieth century population growth of the English south midlands and the south-east. It was to these areas and industries that many of the surplus young adults south of the border moved especially in the inter-war and post-war periods.

Some Scots did the same, but, faced with poor opportunities at home, far more of them than of the English went overseas. There is at present too little research to be absolutely certain why this might be, but some insight can possibly be gained from work done in the 1930s and the 1950s into the reluctance of English and Welsh men to move from high unemployment regions to the expanding areas of the south. One factor that becomes very clear in this literature is the disincentive of long spatial distance, but moves into what was in many ways also a rather different community environment and culture were also cited as important. If this was the case for unemployed men from the England and Wales, it seems likely to have applied even more to Scots, for whom the

Footnotes

23) In 1931 less than nine per cent of industrial employment in Scotland was in newer manufacturing areas such as chemicals, vehicles and electrical engineering, compared with 16.7 per cent in Britain as a whole. In 1951 the situation was even worse: 13.6 per cent and 28.1 per cent. (Kendrick et al. (1985): 70 and 79).

spatial and cultural difference would arguably have been even larger (Makower *et al.* 1939; Levitt 1992: 29, 162).

It has been suggested (Devine 1992) that there is an interesting paradox in the history of Scottish emigration: why, unlike most of the predominantly rural major outflow countries of Europe, did Scotland, one of the most industrialised, have such high rates of net loss. This analysis rather suggests that the high emigration rates were in fact a direct result of Scotland being a highly industrialised country, but one where opportunities for early marriage in one generation produced, in the next generation, a surplus of young adults that its economy was unable to absorb. It is only within this wider set of demographic, employment, and welfare contexts that I believe that the English-Scots differences in diaspora are crucial. Culturally, Scots certainly had long traditions of mass international emigration – and also of movement to England. Indeed, emigration had become part of Scottish culture in a way that was much less true south of the border. This also meant that Scots had much better contacts abroad, indeed, arguably better in most cases than they mostly had in the south midlands or most of the home counties of England. As a result, by the 1880s emigration was both culturally and practically easier, should circumstances at home force people to look elsewhere – and crucially at certain periods this became the case, even more so in the post-Second World War years, as many Scottish industries went into terminal decline. Culture and diaspora are certainly important, but provide only part of the explanation for Scotland's high emigration rates.

Immigration into Scotland, in contrast to England and Wales

There is one final question that requires more attention than it has so far received in either academic or the popular writing on Scottish migration. The key reason why England had net immigration flows from the 1950s onwards was not that its natives did not emigrate in large numbers: they did, though not on as large a scale as from Scotland. England also attracted growing numbers of immigrants from outside the UK; by contrast, until well into the twenty-first century, disproportionately far fewer of these migrants came to Scotland.

Writing in the early 1990s, Coleman and Salt identified three significant streams of immigrants into Britain over the previous forty years. Of their first group, asylum seekers, very few were settled in Scotland in this period. Coleman and Salt's second strand were workers, above all from Europe and the USA, who brought a wide variety of skills which were in demand in the UK economy. At UK level, these people were actually part of an almost balanced two-way flow of skilled migrants in and out of the country, and as a result their share of the UK population changed relatively little over these decades. However, people born in Europe and the USA always made up a smaller proportion of the population of Scotland than of England and Wales, above all because of their heavy concentration in Greater London (where, for example, they comprised 3.0 per cent of the population in 1971; the figures for England and Wales, Scotland, and Edinburgh were 1.4 per cent, 0.8 per cent and 0.9 per cent respectively).

The big difference between Scottish and English/Welsh immigration flows in the second half of the twentieth century lay within Coleman and Salt's third category: immigrants from what came to be called the New Commonwealth, and especially from India, Pakistan and Bangladesh, the West Indies, and parts of East Africa. In the immediate

aftermath of World War Two, and excepting a significant number of people, many of them white, who had been born in India under the Raj, the numbers living in any part of the UK who had been born in any of these countries were very small. Thereafter, however, parts of England experienced significant inflows from all these areas but only relatively small numbers from any of them came to any part of Scotland. Even by 1981 the percentage of the Scottish population reported in the census of that year as born in Jamaica, Pakistan and India, for example, had only reached 0.01 per cent, 0.14 per cent and 0.18 per cent respectively, up from 0.01, 0.02 and 0.16 per cent twenty years earlier. Over the same twenty years, however, the England and Wales figures for those born in Jamaica increased from 0.22 per cent to 0.34 per cent, Pakistan and Bangladesh from 0.02 to 0.47 per cent and India from 0.34 to 0.79 per cent.

Migrants from different parts of the New Commonwealth showed a marked tendency to focus initially on different and highly specific labour markets, to which they were often attracted by targeted recruitment campaigns in their country of origin or by high demand for low paid semi-skilled labour. These labour markets were almost entirely in a relatively small number of major metropolitan areas of England. None were in Scotland - and interestingly there were also some English regional centres like Tyneside and Merseyside which also offered few jobs to immigrants from these countries in these years. So, for example, in 1971, 55 per cent of all the West Indies-born migrants in Britain were living in Greater London, and another 33 per cent in Birmingham - but just 0.1 per cent in the Central Clydeside Conurbation (and 0.5 per cent in the whole of Scotland). Of migrants born in Pakistan living in Britain in the same year, 22 per cent were in London, 16 per cent in Birmingham, 16 per cent in the West Riding of Yorkshire, but less than 2 per cent in the Clydeside Combination (and less than 3 per cent in Scotland). A similar pattern continued into the 1970s, with major flows of East Africans highly focused on Leicester and Peterborough in England, and south Asians into the Lancashire textile areas.

The low levels of New Commonwealth immigration into Scotland in the last half of the twentieth century can therefore largely be explained by the fact that, in an economy with higher unemployment and collapsing textile industries, employers did not wish or need to target new sources of immigrant labour. This in turn was one key reason why Scotland continued to see net out-migration in these decades, while migration south of the border was persistently positive or at least roughly in balance.

References

Baines, D (1985) Migration in a Mature Economy: emigration and internal migration in England and Wales 1861-1900 Cambridge, Cambridge University Press.

Brock, J M (1999) The Mobile Scot; emigration and migration, 1861-1911 Edinburgh, John Donald.

Carrier, N H and Jeffery, J R (1953) External Migration: a study of the available statistics, 1815-1950 General Register Office Studies on Medical and Population Subjects No. 6 London, HMSO.

Devine, T M (1992) The Paradox of Scottish emigration, in T M Devine (ed.) (1992).

Devine, T M (1992) (ed.) Scottish Emigration and Scottish Society Edinburgh, John Donald.

Devine, T M (2000) The Scottish Nation, 1700-2000 London, Penguin.

Evans, N J (2006) The emigration of skilled male workers from Clydeside during the interwar period, International Journal of Maritime History, 18: 255-80.

Flinn M W et al. (1977) Scottish Population History from the 17th Century to the 1930s Cambridge, Cambridge University Press.

Kendrick, S, Bechhofer F and McCrone D (1985) Is Scotland different? Industrial and occupational change in Scotland and Britain, in Newby, H et al (eds), Restructuring Capital: recession and reorganisation in industrial society London, Macmillan: 63-102.

Lawton, R (1968) Population change in England and Wales in the later nineteenth century, Transactions of the Institute of British Geographers, 44: 55-74.

Lee, C H (1979) British Regional Employment Statistics, 1841-1971 Cambridge, Cambridge University Press.

Levitt, I (1992) The Scottish Office: Depression and Recovery 1919-1959 Edinburgh, Scottish History Society.

Lindsay I (1992) Migration and motivation in T M Devine (ed.) (1992), pp. 154-74.

Makower, H et al. (1939) Studies in mobility of labour: analysis for Great Britain, Part 1, Oxford Economic Papers 2: 70-97.

Rothenbacher, F (2002) The European Population 1850-1945 Basingstoke, Palgrave Macmillan.

Rothenbacher, F (2007) The European Population since 1945 Basingstoke, Palgrave Macmillan.

Thomas, B (1973) Migration and Economic Growth Cambridge, Cambridge University Press.

Walker, S (1988) The Society of Accountants in Edinburgh 1854-1914 New York and London, Garland.

Watson, M (2002) The English diaspora: discovering Scotland's invisible migrants - 1945 to 2000, Scottish Economic and Social History 22: 23-49.

Appendix 1 – Summary tables

Table 1: Population and vital events, Scotland, 1855 to 2015

Year	Estimated population ('000s)	Live births[1]		Stillbirths[1,2]		Infant deaths		Deaths		Marriages[3]	Civil Partnerships[4]	
		Number	Rate[5]	Number	Rate[6]	Number	Rate[7]	Number	Rate[5]		Male	Female
1855-60	3018.4	102,462	34.1	-	-	12,250	119.6	62,644	20.8	20,645	-	-
1861-65	3127.1	109,764	35.1	-	-	13,166	119.9	69,265	22.1	22,013	-	-
1866-70	3275.6	114,394	34.9	-	-	13,971	122.1	71,974	22.0	22,832	-	-
1871-75	3441.4	120,376	35.0	-	-	15,314	127.2	77,988	22.7	25,754	-	-
1876-80	3628.7	126,086	34.8	-	-	14,921	118.3	74,801	20.6	24,956	-	-
1881-85	3799.2	126,409	33.3	-	-	14,864	117.6	74,396	19.6	26,176	-	-
1886-90	3943.9	123,977	31.4	-	-	14,943	120.5	74,320	18.8	25,702	-	-
1891-95	4122.5	125,800	30.5	-	-	15,895	126.4	78,350	19.0	27,962	-	-
1896-1900	4345.1	130,209	30.0	-	-	16,857	129.5	78,021	17.9	31,771	-	-
1901-05	4535.7	132,399	29.2	-	-	15,881	119.9	77,313	17.1	31,838	-	-
1906-10	4679.9	128,987	27.6	-	-	14,501	112.4	75,534	16.1	31,811	-	-
1911-15	4748.3	120,654	25.4	-	-	13,604	112.8	74,466	15.7	33,857	-	-
1916-20	4823.8	109,750	22.8	-	-	10,869	99.0	72,365	15.0	37,437	-	-
1921-25	4879.6	112,245	23.0	-	-	10,299	91.8	67,652	13.9	34,720	-	-
1926-30	4845.1	96,674	20.0	-	-	8,260	85.4	66,017	13.6	32,605	-	-
1931-35	4905.1	89,306	18.2	-	-	7,212	80.8	64,839	13.2	34,986	-	-
1936-40	4956.8	87,734	17.6	-	-	6,650	75.8	67,166	13.5	42,941	-	-
1941-45	4711.9	91,593	19.4	3,393	35.7	6,202	67.7	66,302	13.8	43,772	-	-
1946-50	5054.3	101,222	20.0	3,047	29.2	4,789	47.3	63,854	12.6	43,206	-	-
1951-55	5103.6	91,366	17.9	2,390	25.5	3,009	32.9	61,838	12.1	41,718	-	-
1956-60	5145.2	98,663	19.2	2,307	22.9	2,755	27.9	61,965	12.0	41,671	-	-
1961-65	5201.0	102,642	19.7	2,000	19.1	2,568	25.0	63,309	12.2	40,235	-	-
1966-70	5204.3	93,033	17.9	1,415	15.0	1,970	21.2	62,797	12.1	42,832	-	-
1971-75	5234.7	75,541	14.4	939	12.3	1,421	18.8	63,808	12.2	41,404	-	-
1976-80	5213.9	65,758	12.6	529	8.0	900	13.7	64,343	12.3	37,801	-	-
1981-85	5151.9	66,422	12.9	389	5.8	695	10.5	63,723	12.4	35,756	-	-
1986-90	5089.5	65,544	12.9	350	5.3	550	8.4	62,796	12.3	35,440	-	-
1991-95	5093.5	63,571	12.5	382	6.0	418	6.6	61,171	12.0	32,866	-	-
1996-2000	5077.5	56,856	11.2	327	5.7	316	5.6	59,478	11.7	29,965	-	-
2001-2005	5078.6	52,914	10.4	297	5.6	275	5.2	57,178	11.3	30,648	-	-
2006-2010	5200.0	58,270	11.2	311	5.3	245	4.2	54,920	10.6	28,934	316	329
2011-2015	5332.4	56,891	10.7	249	4.4	205	3.6	55,023	10.3	29,195	186	246
1991	5083.3	67,024	13.1	369	5.5	473	7.1	61,041	12.0	33,762	-	-
1992	5085.6	65,789	12.9	356	5.4	449	6.8	60,937	11.9	35,057	-	-
1993	5092.5	63,337	12.4	409	6.4	412	6.5	64,049	12.5	33,366	-	-
1994	5102.2	61,656	12.0	381	6.1	382	6.2	59,328	11.6	31,480	-	-
1995	5103.7	60,051	11.7	397	6.6	375	6.2	60,500	11.8	30,663	-	-
1996	5092.2	59,296	11.6	381	6.4	365	6.2	60,654	11.8	30,242	-	-
1997	5083.3	59,440	11.6	319	5.3	316	5.3	59,494	11.6	29,611	-	-
1998	5077.1	57,319	11.2	351	6.1	320	5.6	59,164	11.6	29,668	-	-
1999	5072.0	55,147	10.8	286	5.2	276	5.0	60,281	11.8	29,940	-	-
2000	5062.9	53,076	10.4	298	5.6	305	5.7	57,799	11.3	30,367	-	-
2001	5064.2	52,527	10.4	301	5.7	290	5.5	57,382	11.3	29,621	-	-
2002	5066.0	51,270	10.1	278	5.4	270	5.3	58,103	11.5	29,826	-	-
2003	5068.5	52,432	10.3	296	5.6	265	5.1	58,472	11.5	30,757	-	-
2004	5084.3	53,957	10.6	317	5.8	266	4.9	56,187	11.1	32,154	-	-
2005	5110.2	54,386	10.6	292	5.3	284	5.2	55,747	10.9	30,881	53	31
2006	5133.1	55,690	10.8	296	5.3	248	4.5	55,093	10.7	29,898	578	469
2007	5170.0	57,781	11.2	327	5.6	272	4.7	55,986	10.8	29,866	340	348
2008	5202.9	60,041	11.5	325	5.4	253	4.2	55,700	10.7	28,903	245	280
2009	5231.9	59,046	11.3	317	5.3	235	4.0	53,856	10.3	27,524	219	279
2010	5262.2	58,791	11.2	291	4.9	218	3.7	53,967	10.3	28,480	197	268
2011	5299.9	58,590	11.1	299	5.1	238	4.1	53,661	10.1	29,135	229	325
2012	5313.6	58,027	10.9	274	4.7	217	3.7	54,937	10.3	30,534	257	317
2013	5327.7	56,014	10.5	234	4.2	186	3.3	54,700	10.3	27,547	217	313
2014	5347.6	56,725	10.6	228	4.0	207	3.6	54,239	10.1	29,069	193	243
2015	5373.0	55,098	10.3	211	3.8	175	3.2	57,579	10.7	29,691	33	31

Footnotes

1) Live births only, prior to 1939.
2) Refer to Notes, definitions and quality of statistics.
3) Figures for 2014 onwards include opposite-sex and same-sex marriages.
4) The Civil Partnership Act 2004 came into effect in December 2005.
5) Rate per 1,000 population.
6) Rate per 1,000 live and still births.
7) Rate per 1,000 live births.

Table 2: Estimated population, births, stillbirths, deaths, marriages and civil partnerships, numbers and rates, by council area, Scotland, 2015

Area	Estimated population at 30 Jun	Live births			Stillbirths		Infant deaths		Deaths			Marriages[4]	Civil Partner-ships
		Number	Rate[1]	Standard-ised Rate	Number	Rate[2]	Number	Rate[3]	Number	Rate[1]	Standard-ised Rate		
SCOTLAND	**5,373,000**	**55,098**	**10.3**	**10.3**	**211**	**3.8**	**175**	**3.2**	**57,579**	**10.7**	**10.7**	**29,691**	**64**
Council areas													
Aberdeen City	230,350	2,609	11.3	8.7	11	4.2	7	2.7	2,187	9.5	10.9	819	1
Aberdeenshire	261,960	2,891	11.0	12.4	8	2.8	6	2.1	2,458	9.4	9.7	1,324	1
Angus	116,900	1,065	9.1	11.1	2	1.9	3	2.8	1,347	11.5	9.6	506	-
Argyll & Bute	86,890	688	7.9	11.4	2	2.9	-	-	1,173	13.5	10.6	1076	-
Clackmannanshire	51,360	553	10.8	12.4	1	1.8	3	5.4	546	10.6	11.1	157	1
Dumfries & Galloway	149,670	1,256	8.4	10.9	6	4.8	6	4.8	1,912	12.8	10.0	4395	8
Dundee City	148,210	1,555	10.5	8.9	6	3.8	11	7.1	1,761	11.9	11.9	525	-
East Ayrshire	122,060	1,327	10.9	12.1	8	6.0	5	3.8	1,406	11.5	11.4	500	-
East Dunbartonshire	106,960	971	9.1	12.0	5	5.1	-	-	1068	10.0	8.4	232	-
East Lothian	103,050	1,061	10.3	11.7	3	2.8	4	3.8	1,073	10.4	9.8	611	1
East Renfrewshire	92,940	871	9.4	11.8	3	3.4	2	2.3	890	9.6	8.6	331	1
Edinburgh, City of	498,810	5,274	10.6	7.8	32	6.0	20	3.8	4,326	8.7	9.8	3156	15
Eilean Siar	27,070	222	8.2	11.1	2	8.9	2	9.0	350	12.9	9.8	123	-
Falkirk	158,460	1,594	10.1	10.7	6	3.8	4	2.5	1,622	10.2	10.6	744	-
Fife	368,080	3,755	10.2	11.1	11	2.9	16	4.3	4,027	10.9	10.4	1667	3
Glasgow City	606,340	7,086	11.7	8.9	25	3.5	29	4.1	6,515	10.7	13.4	2673	13
Highland	234,110	2,220	9.5	11.3	8	3.6	11	5.0	2,565	11.0	9.8	1,496	4
Inverclyde	79,500	711	8.9	10.2	3	4.2	2	2.8	1,031	13.0	11.8	210	-
Midlothian	87,390	1082	12.4	13.2	2	1.8	3	2.8	896	10.3	10.7	392	-
Moray	95,510	905	9.5	11.0	5	5.5	2	2.2	1054	11.0	10.1	412	2
North Ayrshire	136,130	1,255	9.2	10.8	3	2.4	1	0.8	1,740	12.8	11.7	671	1
North Lanarkshire	338,260	3,716	11.0	11.2	16	4.3	16	4.3	3,624	10.7	12.4	860	1
Orkney Islands	21,670	191	8.8	10.9	-	-	1	5.2	222	10.2	8.7	114	1
Perth & Kinross	149,930	1,357	9.1	10.9	6	4.4	3	2.2	1,652	11.0	9.0	1111	3
Renfrewshire	174,560	1,712	9.8	10.5	3	1.7	1	0.6	1,995	11.4	11.4	761	1
Scottish Borders	114,030	1,037	9.1	12.3	7	6.7	2	1.9	1,389	12.2	9.9	670	1
Shetland Islands	23,200	234	10.1	11.6	-	-	-	-	256	11.0	11.0	86	-
South Ayrshire	112,400	1,030	9.2	11.4	5	4.8	3	2.9	1,498	13.3	10.5	858	2
South Lanarkshire	316,230	3,185	10.1	11.0	10	3.1	7	2.2	3,497	11.1	11.1	1168	1
Stirling	92,830	792	8.5	8.8	3	3.8	-	-	925	10.0	10.0	746	1
West Dunbartonshire	89,590	924	10.3	10.6	3	3.2	1	1.1	1,095	12.2	12.7	353	-
West Lothian	178,550	1,969	11.0	11.4	6	3.0	4	2.0	1,479	8.3	10.2	944	2

Footnotes
1) Rate per 1,000 population.
2) Rate per 1,000 live and still births.
3) Rate per 1,000 live births.
4) Includes opposite-sex and same-sex marriages.

Table 3: International populations and vital statistics rates, selected countries, latest, available figures

Country	Estimated population 2015 ('000s)	Live births		Stillbirths[1]		Infant deaths		Deaths		Marriages	
		Year	Rate[2]	Year	Rate[3]	Year	Rate[4]	Year	Rate[2]	Year	Rate[2]
Scotland	**5,373**	2015	**10.3**	2015	**3.8**	2015	**3.2**	2015	**10.7**	2015	**5.5**
European Union											
Austria	8,576	2015	9.8	2013	3.4	2014	3.0	2015	9.6	2013	4.3
Belgium	11,258	2015	10.9	2010	4.9	2014	3.4	2015	9.8	2012	3.8
Bulgaria	7,202	2015	9.2	2014	7.3	2014	7.6	2015	15.3	2014	3.4
Croatia	4,225	2015	8.9	2014	3.8	2014	5.0	2015	12.9	2014	4.6
Cyprus	847	2015	10.8	2007	3.1	2014	1.4	2015	6.9	2013	6.4
Czech Republic	10,538	2015	10.5	2014	2.7	2014	2.4	2015	10.5	2014	4.3
Denmark	5,660	2015	10.2	2014	4.1	2014	4.0	2015	9.2	2014	5.0
Estonia	1,313	2015	10.6	2013	2.2	2014	2.7	2015	11.6	2014	4.7
Finland	5,472	2015	10.1	2014	3.8	2014	2.2	2015	9.6	2014	4.5
France	66,415	2015	12.0	2010	10.4	2014	3.5	2015	9.0	2012	3.7
Germany	81,198	2015	9.0	2014	3.6	2014	3.2	2015	11.3	2014	4.8
Greece	10,858	2015	8.5	2014	3.8	2014	3.8	2015	11.2	2014	4.9
Hungary	9,856	2015	9.4	2014	4.5	2014	4.5	2015	13.4	2014	3.9
Irish Republic	4,629	2015	14.2	2011	2.8	2014	3.3	2015	6.4	2012	4.5
Italy	60,796	2015	8.0	2012	2.7	2014	2.8	2015	10.7	2014	3.1
Latvia	1,986	2015	11.1	2014	3.8	2014	3.8	2015	14.4	2014	6.3
Lithuania	2,921	2015	10.8	2014	4.6	2014	3.9	2015	14.4	2014	7.6
Luxembourg	563	2015	10.7	2014	4.9	2014	2.8	2015	7.0	2014	3.0
Malta	429	2015	10.0	2011	4.3	2014	5.0	2015	8.0	2014	6.7
Netherlands	16,901	2015	10.0	2014	2.8	2014	3.6	2015	8.7	2014	3.9
Poland	38,006	2015	9.7	2014	2.5	2014	4.2	2015	10.4	2014	5.0
Portugal	10,375	2015	8.3	2014	2.3	2014	2.9	2015	10.5	2014	3.0
Romania	19,871	2015	9.3	2014	4.0	2014	8.4	2015	13.2	2014	5.9
Slovakia	5,421	2015	10.3	2014	3.0	2014	5.8	2015	9.9	2014	4.9
Slovenia	2,063	2015	10.0	2012	2.3	2014	1.8	2015	9.6	2014	3.2
Spain	46,450	2015	9.0	2014	3.1	2014	2.8	2015	9.0	2014	3.4
Sweden	9,747	2015	11.7	2014	4.0	2014	2.2	2015	9.3	2014	5.5
United Kingdom	64,875	2015	11.9	2014	4.6	2014	3.9	2015	9.3	2013	4.3
Other Europe											
Macedonia	2,069	2015	11.1	2014	7.2	2014	9.9	2015	9.9	2014	6.7
Norway	5,166	2015	11.4	2014	3.7	2014	2.4	2015	7.8	2014	4.6
Switzerland	8,238	2015	10.2	2014	4.3	2014	3.9	2015	8.1	2014	5.1
Turkey	77,696	2015	16.9	2010	8.8	2014	11.1	2015	5.2	2014	7.8

Footnotes

1) The definition of a stillbirth varies from country to country and over time. The position in the UK is described in Appendix 2 - Notes, definitions and
2) Rate per 1,000 population.
3) Rate per 1,000 live and still births.
4) Rate per 1,000 live births.

Sources: Eurostat, Office for National Statistics, Northern Ireland Statistics and Research Agency.

Appendix 2 – Notes, definitions and quality of statistics

This appendix gives general notes on some of the information and conventions used in this report, and defines some of the terms.

General

Rounding

Figures are calculated using non-rounded data

Conventions for tables

Where a range of years is listed in a table (for example, '1980-82'), the information we have given will be an average for that length of time or in the case of non-census migration it will refer to migration between 1 July (1980) to 30 June (1982).

In all tables 'year' means 'calendar year' unless we tell you otherwise. Many of the ranges of years start in a census year (for example, 1991).

The date events happen and the date of registration

The statistics about births and deaths in the Population chapter are for mid-year periods (from 1 July of one year to 30 June of the next) and relate to the date the event happened and not to the date the event was registered. For example, a birth on 30 June 2015 which was registered on 4 July 2015 would be included in the mid-2015 figures, which relate to the period from 1 July 2014 to 30 June 2015.

All the other statistics about births and deaths, as well as the statistics about stillbirths, marriages and civil partnerships, are for calendar years and relate to the date the event was registered, not the date the event actually happened. For example, a birth on 31 December 2014 which was registered on 4 January 2015 would be included in the 2015 figures. By law, births and stillbirths should be registered within 21 days, marriages and civil partnerships should be registered within three days, and deaths should be registered within eight days. Almost all births, stillbirths, marriages, civil partnerships and deaths are registered on time.

The place the relevant person usually lives and the place the event happens

Births, stillbirths, and deaths are generally allocated to the area in Scotland where the relevant person (the mother for births and stillbirths, and the person who has died for deaths) usually lives. If the relevant person does not usually live in Scotland, the event is allocated to the area in which it happened. However, a death may be allocated to the area where the person used to live if the area is in Scotland and the person had lived away from that area for less than 12 months.

Marriage and civil partnership figures relate to the area where the event took place.

Age

Ages relate to the person's age on their last birthday.

When working out average ages (such as the average age at death and the average age of mothers at childbirth) we have added half a year to people's age at their last

birthday. For example, to work out the overall average age at death, we have assumed that the average age of 77-year-olds who died was 77 years and 6 months.

Age standardisation

A straight comparison of rates between areas may give a misleading picture because of differences in sex and age between the different populations. For example, it would be unreasonable to expect a high birth rate in an area with a high proportion of elderly people. Because of this, we have standardised information in certain tables and charts. Standardisation allows areas with different age and sex structures to be easily compared, comparing the actual number of events that happen in an area with the total number of events that would be expected if the area had the rates of the standard population. In this report, the standard population refers to the overall Scottish population for the year or years in question.

Lists of groups of countries

EU-2 refers to the countries that became member states of the European Union on 1 January 2007, which were Bulgaria and Romania.

EU-8 refers to the countries that became member states of the European Union on 1 May 2004, which were Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

EU-15 refers to the countries that were member states of the European Union before 1 May 2004, which were Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

EU-25 refers to the EU-15, plus the countries that became member states of the European Union between 1 May 2004 and 31 December 2006, which were Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia.

EU-28 refers to the EU-25, plus the countries that became member states of the European Union on 1 January 2007 (Bulgaria and Romania) and on 1 July 2013 (Croatia).

Urban and rural classifications

'Large urban areas' are settlements of over 125,000 people.

'Other urban areas' are settlements of 10,000 to 124,999 people.

'Accessible small towns' are settlements of 3,000 to 9,999 people that are within a 30-minute drive of a settlement of 10,000 people or more.

'Remote small towns' are settlements of 3,000 to 9,999 people that are not within a 30-minute drive of a settlement of 10,000 people or more.

'Accessible rural' settlements are areas of fewer than 3,000 people that are within a 30-minute drive of a settlement of 10,000 people or more.

'Remote rural' settlements are areas of fewer than 3,000 people that are not within a 30-minute drive of a settlement of 10,000 people or more.

You can get more information about the Scottish Government Urban Rural Classification in the Methodology section of the Scottish Government (SG) website.

Deprivation

The Scottish Government produces the Scottish Index of Multiple Deprivation to define small-area concentrations of deprivation across all of Scotland. The index is based on 38 indicators in seven fields – income, employment, health, education, skills and training, housing, geographic access and crime.

You can get more information about the Scottish Index of Multiple Deprivation on the SG website.

Chapter 1 - Population

All population figures refer to estimates at 30 June of the relevant year.

Population covered

The estimated population of an area includes all those who usually live there, whatever their nationality. Students are treated as living at their term-time address. Members of UK and non-UK armed forces stationed in Scotland are included, but UK forces stationed outside Scotland are not. Short-term international migrants (people who move to Scotland for less than 12 months) are also not included.

Population projections

Population projections are estimates for future years largely based on past trends. The Registrar General asks the Office for National Statistics (ONS) to prepare population projections with input from his own experts. The latest national projections were published in November 2015, and were based on 2014 population estimates.

Sources and quality of statistics – population

Population estimates are based on the 2011 Census and are updated each year by adding one year to the age of everyone in the population and including information on births, deaths and migration (people moving to or away from an area). Births and deaths are estimated using information from the civil registration system, which is virtually complete. Migration is more difficult to estimate because there is no complete migration registration system in the UK.

There is more information about the quality of population statistics in the Mid-Year Population Estimates for Scotland: Methodology Guide and the About this Publication paper for the Mid-Year Population Estimates for Scotland. Both Adobe Acrobat Portable Document Format (PDF) documents are available on the National Records of Scotland (NRS) website.

Sources and quality of statistics – population projections

More information about the quality of population projections can be found in the Quality and Methodology Information section on the Office for National Statistics website.

Chapter 2 - Births

Cohort

A cohort is a well-defined group of people who have had a common experience and are observed through time. For example, 'the birth cohort of 1976' refers to the people born in that year.

General fertility rate (GFR)

The number of births per 1,000 women of childbearing age (15 to 44).

Total fertility rate (TFR)

The average number of children who would be born, per woman, to a cohort of women who experienced, throughout their childbearing years, the fertility rates for the calendar year in question.

Age specific fertility rate (ASFR)

The number of births per woman for a specific age during a set time.

Marital status of parents

'Married parents' means parents who are married to each other. 'Unmarried parents' refers to parents who are not married, or who are married but not to each other.

Sources and quality of statistics – births

Statistics about births in Scotland are produced from information collected when the births are registered. The information should be very accurate as it is almost always provided by one or both of the baby's parents, and the parent (or parents) and the registrar should check the details that will appear on the child's birth certificate before the certificate is produced. Also, each record of a birth is checked by one of our district examiners.

The statistics will cover almost 100 per cent of all births in Scotland − because of the importance of a person's birth certificate, there will be very few births that are not registered, and they are likely to be the result of extremely unusual circumstances (for example, if a pregnancy was hidden, the baby killed and the body disposed of).

You can get more information about statistics on births from the Vital Events Births – Background section on the National Records of Scotland (NRS) website.

For general information on all vital events statistics please go to the Vital Events - General Background Information section of the NRS website.

Chapter 3 - Deaths

Cause-of-death coding

Since 1 January 2000, deaths in Scotland have been coded in line with the International Statistical Classification of Diseases and Related Health Problems (Tenth Revision), also known as ICD10. We put the underlying causes of death into classes based on information collected from the medical certificate of cause of death, together with any extra information the certifying doctor provides later. We also take account of changes that procurators fiscal tell us about.

You can get more detailed information about death certificates and coding the causes of death, and how we produce statistics of deaths from certain causes from the Vital Events Deaths - Background Information section of the NRS website.

Stillbirth

Section 56(1) of the Registration of Births, Deaths and Marriages (Scotland) Act 1965 (as amended by the Still-Birth (Definition) Act 1992) defines a stillbirth as a child born after the 24th week of pregnancy which does not breathe or show any other sign of life.

Perinatal deaths

This refers to stillbirths and deaths in the first week of life.

Infant deaths

This refers to all deaths in the first year of life.

Sources and quality of statistics – deaths

Statistics about deaths in Scotland are produced from information which is collected when the deaths are registered. Details of the causes of death come from the Medical Certificate of the Cause of Death (MCCD), and so represent the results of a doctor's clinical judgment, which may not be correct (and, sometimes, an investigator may feel that the doctor did not fill in the MCCD properly - for example, perhaps the doctor mentioned on the MCCD a medical condition that was not related in any way to the death). In some cases, the doctor, a procurator fiscal or a pathologist provides extra information about the cause of death later, for example following further investigations.

Other information about the person who has died will be provided by the person who registers the death (who is usually a son or daughter, sometimes a husband, wife or partner, another relative or a friend, or occasionally, someone like a police officer or a care-home manager) or the registrar can get the information from existing registration records (if the person who has died was born or married in Scotland). In a small percentage of cases, some of the information about the person who has died may not be complete or accurate (for example, if the person registering the death did not know the person very well, and the registrar could not get details from previous registration records). The person registering the death and the registrar should check the details before the certificate is produced. Also, each record of a death is checked by one of our district examiners.

The statistics will cover almost 100 per cent of all deaths in Scotland, as a cemetery or a crematorium will not accept a body unless the death has been registered. However, occasionally a death may not be recorded (for example, because the authorities do not know that someone who is missing has died).

You can get more information about statistics on deaths from the Vital Events Deaths – Background Information section of the NRS website.

You can also get some general information on all vital events statistics from the Vital Events – General Background Information section of the NRS website.

Chapter 4 - Life expectancy

The average number of extra years a person can expect to live if current trends regarding the number of deaths (mortality trends) continue for the rest of that person's life. Life expectancy is most commonly referred to in relation to life expectancy at birth.

Sources and quality of statistics – life expectancy

The life expectancy estimates are based on the likely trends in the number of deaths indicated by the death records for the three years before the year the records are published. For example, the estimates based on the figures for 2012-2014 for administrative areas were published in October 2015.

You can get more information about the quality of statistics on life expectancy in the Life Expectancy for Scotland: Methodology Guide (PDF document) and on the Life Expectancy at Scotland Level Methodology page both available on the NRS website.

Chapter 5 - Migration

Net migration figures (the number of people moving to Scotland minus the number of people moving out of Scotland) do not include people joining and leaving the Armed Forces or other changes, such as changes in the numbers of Armed Forces stationed in Scotland.

Sources and quality of statistics – migration

Estimates of internal migration (that is, people moving between Scotland and the rest of the UK) are based on General Practitioners (GP) registrations and are considered reasonably accurate for most groups. They may be less accurate for young men, as they tend not to register with a GP immediately after moving.

The National Health Service Central Register (NHSCR) system records the movements of patients between NHS Board areas in the UK. Anonymised extracts from the National Health Service Central Register (NHSCR), linked with Community Health Index (CHI) postcodes that are shared by NHS National Services Scotland with NRS NHSCR are used to calculate moves between NHS Board areas within the UK.

The CHI holds records of people registered with an NHS doctor in Scotland. Unlike the NHSCR, these records contain the postcode of the patient's address. Migration

at council area level and below is estimated using anonymised data from the CHI supplied with the permission of the Scottish Directors of Public Health.

International migration estimates (that is, people moving between Scotland and countries outside the UK) are based largely on the International Passenger Survey (IPS). However, these estimates may not be very accurate due to the size of the survey in Scotland (around 220 contacts between mid-2014 and mid-2015).

You can get more information about the quality of statistics on migration from the Migration - Methodology page and Migration Statistics – About this Publication (PDF document) on the NRS website.

Chapter 6 - Marriages and civil partnerships

Civil marriages were introduced by the Marriage (Scotland) Act 1939, which came into force on 1 July 1940.

The Civil Partnership Act 2004, which applies throughout the UK, came into force on 5 December 2005. The act allows same-sex couples aged 16 and over to get legal recognition of their relationship. In Scotland, the first civil partnership was registered on 20 December 2005.

The Marriage and Civil Partnership (Scotland) Act 2014 came into force on 16 December 2014, allowing same-sex couples to marry.

Sources and quality of statistics – marriages and civil partnerships

Statistics about marriages and civil partnerships in Scotland are produced from information which is collected when the marriages and civil partnerships are registered. The information should be very accurate as it will be provided by both parties to the marriage or civil partnership, and the couple and the registrar will check the details that will appear on the certificate before the certificate is produced. Also, each record of a marriage or a civil partnership is checked by one of our district examiners.

The statistics cover 100 per cent of all marriages and civil partnerships in Scotland as a marriage or civil partnership is not legally formed unless a district registrar has carried out all the legal requirements.

You can get more information about statistics on marriages and civil partnerships from the Vital Events Marriage and Civil Partnerships – Background Information section of the NRS website.

You can also get some general information on all vital events statistics from the Vital Events – General Background Information section of the NRS website.

Chapter 7 - Adoptions

The Registrar General for Scotland registers adoptions under the Adoption of Children (Scotland) Act 1930.

Sources and quality of statistics – adoptions

You can get some more information about these statistics from the Vital Events Adoptions – Background Information section on the NRS website.

Chapter 8 - Households and housing

Household projections

We produce household projections (estimates for future years largely based on past trends) every two years. These are mainly used for informing decisions about future housing need and providing services. The latest household projections, covering the length of time from 2012 to 2037, take account of the results of the population projections. They use information from the last three censuses, along with recent survey data, to help project trends in how households are structured by type of household and by the age of the head of household. The head of household is defined in the census as the first person on the census form who is aged 16 or over and usually lives at the address in question. The projections give an indication of what would happen if past trends continue. They do not take account of policy initiatives, or other factors that may affect future populations. Projections for small groups are likely to be less reliable than those for larger groups.

Household estimates

Household estimates are produced every year from information on occupied and empty homes taken from council tax billing systems. An occupied home is roughly equivalent to a household. The estimates are used for a range of purposes including informing local authority decisions about housing need and providing services (including housing, planning waste collection and community care). Information on types of housing is taken from the Scottish Assessors' Portal. The latest household estimates are for 2015.

Sources and quality of statistics – households and housing

Information on occupied and empty homes and on housing type comes from council tax billing systems and from the Scottish Assessors' Association, and then goes through a thorough process of quality assurance. It is possible that not all of the information held on the billing systems is up to date. There can also be small differences in the definitions used for various categories in the billing systems. The details can change over time as a result of reviews of council tax discounts and exemptions and year-on-year differences in the way second homes and empty homes are classed by some local authorities. This can have a small effect on the percentages of homes which are classed as empty or second homes.

You can get more information from 'Background Information' (section 5) of the Estimates of Households and Dwellings in Scotland, 2015 publication which is available on the of the NRS website.

Chapter 10 – Scotland’s Census 2011

We have checked the quality of all census estimates by comparing them with other national and local sources of information. The estimates have also been reviewed by a series of quality-assurance panels, and we are confident that the 2011 Census provides a high-quality statistical estimate of Scotland’s population and its characteristics.

A range of quality-assurance, evaluation and methodology reports, including quality-assurance packs on the census population and household estimates for each council area in Scotland, is available on the Quality Assurance section of the Scotland's Census website.

Notes on statistical publications

National Statistics

The UK Statistics Authority has designated these statistics as National Statistics, in line with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics (available on the UK Statistics Authority website).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is National Records of Scotland's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Information on background and source data

Further details on data source(s), timeframe of data and timeliness, continuity of data, accuracy, etc can be found in the About this Publication document that is published alongside this publication on the NRS website.

National Records of Scotland

We, the National Records of Scotland, are a non-ministerial department of the devolved Scottish Administration. Our purpose is to collect, preserve and produce information about Scotland's people and history and make it available to inform current and future generations. We do this as follows:

- Preserving the past – We look after Scotland's national archives so that they are available for current and future generations, and we make available important information for family history.
- Recording the present – At our network of local offices, we register births, marriages, civil partnerships, deaths, divorces and adoptions in Scotland.
- Informing the future – We are responsible for the Census of Population in Scotland which we use, with other sources of information, to produce statistics on the population and households.

You can get other detailed statistics that we have produced from the Statistics section of our website. Scottish Census statistics are available on the Scotland's Census website.

We also provide information about future publications on our website. If you would like us to tell you about future statistical publications, you can register your interest on the Scottish Government ScotStat website.

You can also follow us on twitter @NatRecordsScot

Revisions and Corrections

We, the National Records of Scotland, label any revisions and corrections that we have applied to any of our statistics. These revisions and corrections are clearly marked on the webpage of the publication as well on our revisions and corrections page available on the NRS website.

Where applicable, revisions will also be carried out in accordance with the revisions policy for population, migration and life events statistics available on the ONS website.

Enquiries and suggestions

Please contact our Statistics Customer Services if you need any further information.
Email: statisticscustomerservices@nrscotland.gov.uk

If you have comments or suggestions that would help us improve our standards of service, please contact:

Kirsty MacLachlan
Senior Statistician
National Records of Scotland
Room 1/2/3
Ladywell House
Ladywell Road
Edinburgh
EH12 7TF

Phone: 0131 314 4242
Email: kirsty.maclachlan@nrscotland.gov.uk

Related organisations

Organisation	Contact
The Scottish Government (SG) forms the bulk of the devolved Scottish Administration. The aim of the statistical service in the SG is to provide relevant and reliable statistical information, analysis and advice that meets the needs of government, business and the people of Scotland.	Office of the Chief Statistician and Strategic Analysis Scottish Government 2W, St Andrews House Edinburgh EH1 3DG Phone: 0131 244 0442 Email: statistics.enquiries@gov.scot Website: http://www.gov.scot/Topics/Statistics
The Office for National Statistics (ONS) is responsible for producing a wide range of economic and social statistics. It also carries out the Census of Population for England and Wales	Customer Contact Centre Office for National Statistics Room 1.101 Government Buildings Cardiff Road Newport NP10 8XG Phone: 0845 601 3034 Minicom: 01633 815044 Email: info@statistics.gsi.gov.uk Website: www.ons.gov.uk/
The Northern Ireland Statistics and Research Agency (NISRA) is Northern Ireland's official statistics organisation. The agency is also responsible for registering births, marriages, adoptions and deaths in Northern Ireland, and the Census of Population.	Northern Ireland Statistics and Research Agency McAuley House 2-14 Castle Street Belfast BT1 1SA Phone: 028 9034 8100 Email: info.nisra@dfpni.gov.uk Website: www.nisra.gov.uk