



Australian Government
Australian Government Actuary

Australian Priority Investment Approach to Welfare

30 June 2019 Valuation Report



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Executive summary

Background and overview

This report presents the 30 June 2019 actuarial valuation of the Australian income support and social security (welfare) system. The actuarial valuation is part of the Australian Priority Investment Approach to Welfare (PIA), implemented by the Department of Social Services (DSS), and supports a better understanding of the welfare system, both at the population level and for population subgroups of interest.

The valuation is based on the concept of a Lifetime Cost, which is the expected net present value of all future in-scope payments made in respect of the model population over their lifetime. The model population includes both the entire resident Australian population, and all overseas recipients of income support and social security payments, as at 30 June 2019.

Modelling approach

For those in the model population, the PIA model projects future possible interactions with the welfare system. Detailed data is required in order for this to be modelled. This data is provided by DSS in the form of a longitudinal dataset covering welfare use in Australia. Together with a range of other supplementary data sets, it enables projections of future transitions into and out of the welfare population, transfers within the welfare system, and the type and amount of welfare payments made.

This year, the following enhancements have been made to the modelling approach:

- A key element of the modelling process is identifying appropriate weightings for characteristics that drive future welfare entry, exit, and payment size, given that future welfare use varies significantly across different individual circumstances. This year we updated the modelling process to a more automated process, allowing greater accuracy and efficiency. The modelling process now uses Neural Networks, a machine learning algorithm originally inspired by biological brains, which can automatically identify patterns in data and then make predictions based on those patterns.
- The demographic and population modules used within the model have been modified, updating some elements of the simulation process that account for movements between different welfare types, adjusting the use of various data sources.
- We have aligned some economic forecasts with those used by the Treasury.

Rebasing the 30 June 2018 valuation on the updated modelling process resulted in a minor increase (0.7%) to the previously estimated 30 June 2018 Lifetime Cost.

Population level results

The total Lifetime Cost for the model population as at 30 June 2019 is estimated to be \$5,506 billion. This represents a decrease of \$195 billion (3.4%) from the rebased 30 June 2018 valuation of \$5,701 billion.

The major contributor to the Lifetime Cost is the Age Pension (\$3,202 billion, or 58%). The Disability Support Pension (\$635 billion, or 12%) and non-income support families payments (\$557 billion, or 10%) are other significant contributors to the total Lifetime Cost. The significant influence of the Age Pension is due to [1] the large number of people currently receiving the Age Pension; [2] the large number of people that will receive the Age Pension in the future; [3] the relatively high annual payments being received; and [4] the long duration for which payments are received (19 years, on average). Those not currently in the welfare system contribute 62% of the Age Pension Lifetime Cost, reflecting the expectation that many Australians who are currently not relying on welfare will do so at some point in the future.

Various individual characteristics are correlated with higher welfare utilisation and/or payments in the future. Females are generally expected to have a higher Lifetime Cost for families and parenting payments, and for the Age Pension. Age is influential across most categories of welfare, in particular for Disability benefits where, for example, the age of onset of disability has a bearing on the future duration of support.

The duration of support directly influences the Lifetime Cost. For example, those currently on income support are expected to spend a greater proportion of their future lifetime receiving income support, than those not currently on income support. This is particularly the case for recipients of Carer payments and the Disability Support Pension.

Changes in the valuation will occur over time, for a number of reasons. Of the total decrease of \$195 billion from 30 June 2018 to 30 June 2019, \$184 billion was due to changes in the experience of welfare utilisation and payments in 2018-19, as well as policy changes made up to 30 September 2019. In general, slightly lower utilisation of welfare combined with relative stability in average payment size has given rise to the overall decrease attributed here.

Changes in experience and assumptions relating to the economic factors of unemployment, wage growth and inflation, led to a decrease of \$84 billion.

As a result of an increase in the model population, the Lifetime Cost increased by \$73 billion. This was due to a growth of 1.8% in the overall population, which more than offset a decrease of 0.9% in the proportion of the population on welfare, which fell from 31.8% as at 30 June 2018 to 30.9% as at 30 June 2019.

The Age Pension is the payment category with the largest decrease in Lifetime Cost, contributing \$75 billion (38%) to the total decrease. This is driven by increases in the

Age Pension eligibility age, delays in entry in line with a maturing superannuation system, a longer forecasted timeframe for AWE to reach its long term rate of 4% per annum, and the flow-on effects of reduced pre-retirement welfare dependence. Offsetting these factors are recent policy changes relating to changes to the Work Bonus and deeming rates. The Lifetime Costs of most of the pre-retirement income support categories have also decreased, with continued falls in entry rates for these classes being the primary driver.

The estimate of the Lifetime Cost is subject to uncertainty. How changes in mortality emerge over time can have a significant impact on future welfare utilisation, notably the Age Pension. The greater the future improvement in mortality, then the higher the future life expectancy, and longer the duration of payments that results. A 10% movement in future mortality improvements has an impact of approximately 1% on the Lifetime Cost.

Changes in indexation rates can also have a large impact on the Lifetime Cost. AWE assumptions directly impact the size of payments made, with a 1% increase to the base assumption significantly increasing income support payments over time. Variation in CPI assumptions have a significant effect on non-income support payment categories.

Changes in the unemployment rate affects the number of people both entering and exiting welfare. JobSeeker is one of main payment categories that is directly impacted, but a range of impacts are also evident across the spectrum of payment categories.

The behaviour and response of current and future welfare recipients may also change over time in response to policy, and/or economic changes. An interesting observation is that the Lifetime Cost is more sensitive to changes in entry rates from non-welfare into welfare, than exit rates from welfare to non-welfare. This reflects the fact that someone who exits from welfare is more likely to re-enter welfare than someone who has never previously been in welfare.

The COVID-19 pandemic further highlights the uncertainties associated with the experience of the welfare system. COVID-19 will clearly have a widespread and significant impact on a range of welfare policies, payments and services. This will be reflected in the results of subsequent valuations. The 2020/21 data will be extremely informative in this regard, and will highlight the direct costs of short term welfare support, the impact on unemployment, the time taken for employment to recover, and longer term implications of impaired retirement savings.



Guy Thorburn FIAA
Australian Government Actuary
11 December 2020

1 Background and overview

1.1 The Priority Investment Approach to Welfare

- 1.1.1 The Department of Social Services (DSS) implemented the Priority Investment Approach to Welfare (PIA) to support its objective of improving the wellbeing of individuals and families in Australian communities. As part of the implementation of PIA, this report documents and presents the 30 June 2019 actuarial valuation of the Australian income support and social security (welfare) system.
- 1.1.2 The actuarial valuation allows us to better understand the welfare system both at the population level and for population subgroups of interest. By projecting the expected welfare experience of different subgroups of the population, the valuation model provides insights into the potential future outcomes for each subgroup. These projections aggregate into a single valuation measure of the Lifetime Costs of future welfare use for the entire population, which provides a measure of the welfare system as a whole.
- 1.1.3 The valuation model provides a tool for exploring the dynamics of the welfare system and changes to the system, via the impact on Lifetime Cost. The Lifetime Cost is defined as the expected net present value of all future in-scope payments made in respect of the model population over the remainder of their lifetimes. This report estimates the Lifetime Cost as at 30 June 2019.
- 1.1.4 This is the fifth such annual valuation and provides an updated assessment of the Lifetime Cost for the Australian population, together with information on the changes to the system since the 30 June 2018 valuation.

1.2 Model population

- 1.2.1 The model forecasts the welfare experience of the entire resident Australian population, as well as any overseas recipients of income support and social security payments, as at 30 June 2019. Future migrants and future births are not directly included in the model population, but will influence valuations in the future, when they enter the Australian population. At that time, they will contribute to an increase in the total Lifetime Cost. Future births indirectly influence the valuation result by adding to the number of children that a currently modelled individual has, thus impacting their future propensity to utilise welfare.
- 1.2.2 The model population is built up from information and assumptions relating to each individual. The information and assumptions pertain to their demographic characteristics, life situation and welfare history. This allows us to simulate individual trajectories throughout their lifetime and their associated interactions with the welfare system, for each future year.

1.3 Assumptions and policy impacts

- 1.3.1 Detailed assumptions are made in order to reflect how different drivers of experience interact with each other and over time, in respect of welfare use. It is assumed that relevant social security policy settings will persist in perpetuity.
- 1.3.2 Where material changes have been made to relevant policies over the previous year, updated assumptions and/or adjustments are made within the modelling process. This ensures that the projection allows for estimates of the direct impact of any such changes.
- 1.3.3 However, subsequent secondary impacts and/or behavioural changes in response to such policy changes are not modelled directly. Their impact will emerge over time in the data. As such, secondary impacts will be captured within the analysis of experience for future valuations and will impact future valuation results as they arise.

1.4 Uses of the PIA model

- 1.4.1 Results at the whole population level inform not only the overall projected cost of future welfare utilisation, but can also give insights regarding:
 - How welfare utilisation changes in response to movements in the population size and demographic profile. This is of particular relevance in the context of an ageing population and changing family circumstances;
 - The key factors that drive the overall Lifetime Cost and annual expenditures;
 - How the cost is changing over time, which provides information on the financial sustainability of the system; and
 - The impact of changes, both to the welfare system and to external drivers (for example, economic conditions) of experience within the system.
- 1.4.2 The PIA model also provides insights into the future welfare utilisation for a range of population subgroups, including their expected future pathways through the welfare system. This allows analysis into the experience of population subgroups, as well as how that experience will change over time. Population subgroups can include groupings by age, gender, current payment category or class, geographic location, refugee status, and a range of other characteristics.
- 1.4.3 Exploring the sensitivity of the results to changes in assumptions can provide additional insights. This includes assessing the impact of different economic scenarios, changes in fertility rates, changes in payment design (payment eligibility, amounts or indexation), or changes in other policy parameters. The model is best suited to assessing the impact of such changes over the long term.

1.5 Model limitations

- 1.5.1 Whilst the lifetime trajectory of each individual is simulated in the model, this is based on the risk characteristics that apply at an aggregate level for groups and populations of people. It is not intended nor suitable to produce, nor infer, conclusive insights about future welfare use based on unique individual characteristics. Rather, it is intended to produce meaningful results for a group of similar individuals – either in total or on average for that group.
- 1.5.2 As with the modelling of any program with long-term financial implications, there is inherent uncertainty of any estimation of such long-term costs. Issues of uncertainty are discussed later in this report, and give rise to the need for the provided sensitivity analyses around the reported results.

1.6 Professional standards underlying this report

- 1.6.1 The advice in this report is intended to satisfy the Code of Professional Conduct issued by the Actuaries Institute. No other Australian Professional Standards are relevant to this work.
- 1.6.2 The International Actuarial Association's International Standard of Actuarial Practice 2 (ISAP 2) provides (non-binding) guidance to actuaries performing financial analyses of Social Security Programs (SSPs), or for reviewing, advising on, or opining on such analyses. Whilst ISAP 2 is not directly applicable to this valuation, our approach is aligned with the suggested practices that are relevant to this report.

1.7 Reliances

- 1.7.1 The report relies on the completeness and accuracy of information compiled and provided by DSS. Although the modelling process requires and prompts checks for internal consistency and for consistency with other information, ultimate assurance of the fidelity and accuracy of the data resides with DSS.
- 1.7.2 This report has been prepared by the Australian Government Actuary at the request of DSS. It is not intended, or necessarily suitable, for any other purpose other than that described in this report.

2 Modelling approach

2.1 Overview

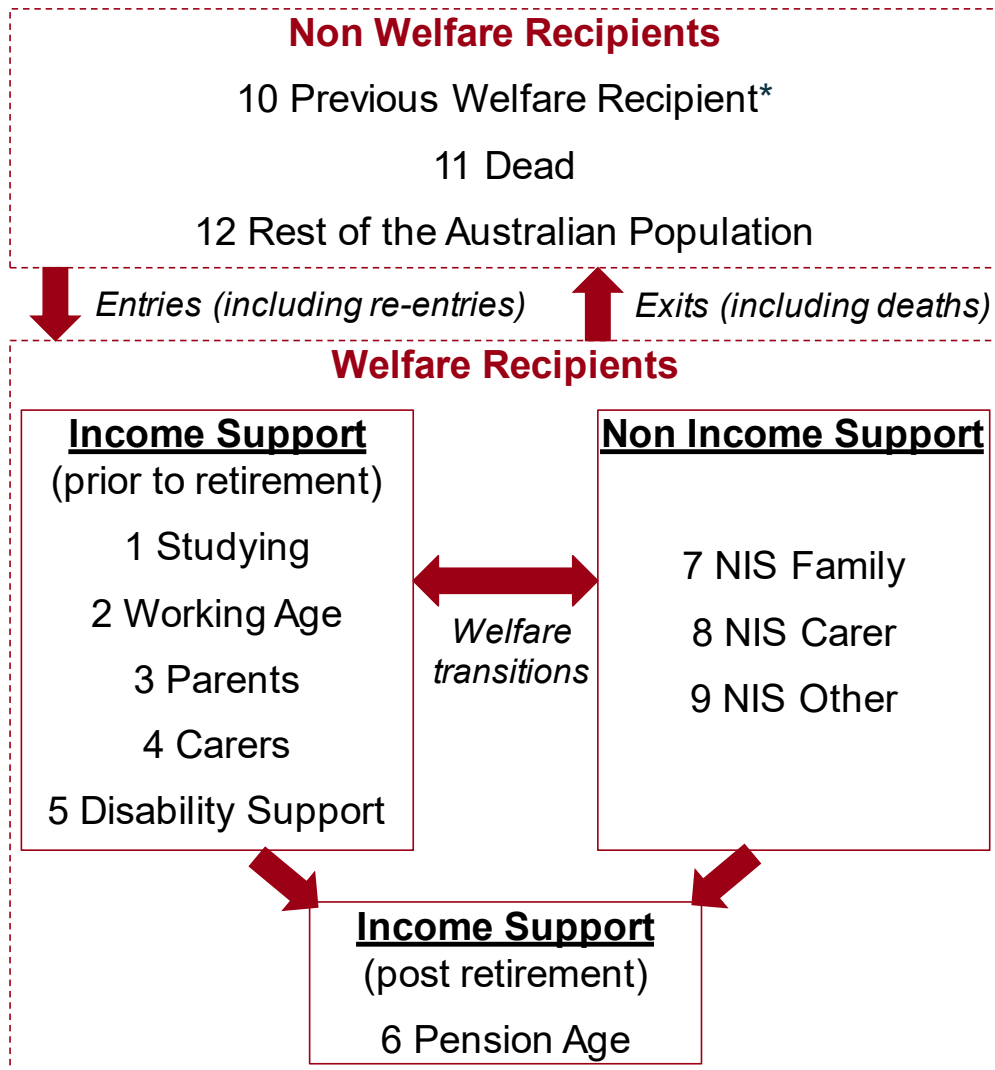
- 2.1.1 In order to establish an expected value of the financial cost of the welfare system, two key parameters need to be estimated. First, the number of people expected to receive each of the different welfare payment types at a point in time, and secondly, the expected size of each payment made. The product of those two parameters, summed up across a given population, gives rise to the total expected financial cost of the welfare system at that point in time.
- 2.1.2 Projecting the financial cost for every future year forward of the valuation date of 30 June 2019, and summing these year-on-year estimated costs, then gives rise to an expected overall future cost of the welfare system.
- 2.1.3 To account for the time value of money, an appropriate interest rate is applied to discount the financial costs estimated in each future year, to give an expected cost in today's dollars. This present value of the expected overall future cost of the welfare system is what this report refers to as the Lifetime Cost.
- 2.1.4 The interest rate used to discount the financial costs of each future year, to the current valuation date of 30 June 2019, is equal to 5%. This value aligns with that used by the Australian Government Actuary in assessing other long-term Commonwealth Government liabilities, in particular Commonwealth superannuation liabilities. The choice of interest rate does not impact the projected cashflows in each future year, but does impact the present value of the Lifetime Cost as at the valuation date in each future year.
- 2.1.5 This valuation applies the above approach to the entire Australian (welfare and non-welfare) population as at 30 June 2019, to give rise to the Lifetime Cost as at that date.
- 2.1.6 The valuation modelling process requires, as a minimum:
- appropriate details of the model population as at 30 June 2019;
 - data relating to past experiences of those both inside and outside the welfare system;
 - analysis of past experience relating to rates of entry, exit, and transfers within the welfare system;
 - analysis of past experience relating to entitlements and payments within each welfare program (or class);
 - adjustments to the above experience, to account for both trends over time, and to account for various changes to the welfare system that have been

legislated, but whose impacts are not yet fully evident in the data to date;
and

- a framework to examine, and appropriately model, the many varied and inter-dependent categories of welfare assistance within the Australian system.

2.1.7 With respect to the latter point, the following diagram provides an overview of the broad dynamics of the welfare system. This indicates the high-level movements of entries to and exits from the welfare system, and transfers between the broad welfare categories of Age Pension, other income support, and non-income support.

Figure 1: Overview of the Dynamics of the Welfare System



*Received welfare within the previous 18 years

2.1.8 The model projects individuals' trajectories through life and their interactions with the welfare system. The average Lifetime Cost for people in each class is driven by the probability of an individual in that starting population entering, remaining in or leaving the system in each future year; combined with the type and amount of payments they are likely to receive while they are active in the system.

2.2 Data

2.2.1 Detailed data for each person in the model population is required in order to project an individual's trajectory through life, in terms of their interaction with the

welfare system. DSS produces and maintains a longitudinal dataset covering welfare use in Australia. This dataset provides the major source of relevant information relating to the welfare population, transitions into and out of the welfare population over time, and payments made.

- 2.2.2 Other supplementary data also supports the modelling process. This includes past Census data, the Australian Life Tables, data from the Australian Bureau of Statistics (ABS), and the Household, Income and Labour Dynamics in Australia (HILDA) Survey.
- 2.2.3 At this valuation, we have used a data extraction (census) date for DSS data of 30 September rather than 30 June. This follows the approach used in the 2018 valuation.
- 2.2.4 A date later than the valuation date of 30 June 2019 is used because some entrants into, and exits from, the welfare system may not have that movement recorded as it occurs. Rather, it is collated after the event due to delays in processing applications and reporting. If an extraction date of 30 June was used instead, then information recorded after this date relating to historical entitlements would not be part of the collected data. This data maturity issue would particularly impact the experience recorded for the most recent year.
- 2.2.5 Hence, adopting a date of data extraction as at 30 September 2019, in respect of the model population as at 30 June 2019, provides more certainty for early projection years in particular.

2.3 Modelling process

- 2.3.1 An individual's contribution to the Lifetime Cost will vary significantly for different people, based on their particular circumstances or characteristics. The extent to which these characteristics are shown to be important differentiators of welfare utilisation or payment size, is therefore a key element of the modelling process.
- 2.3.2 The modelling process identifies appropriate weightings to be given to each characteristic that drives welfare entry, exit, and payment size. Importantly, this identification and allocation of weighting occurs within a class structure, with different welfare classes defined based on the types of payments received over the last year. These classes are defined in Table 1.

Table 1: Welfare Classes

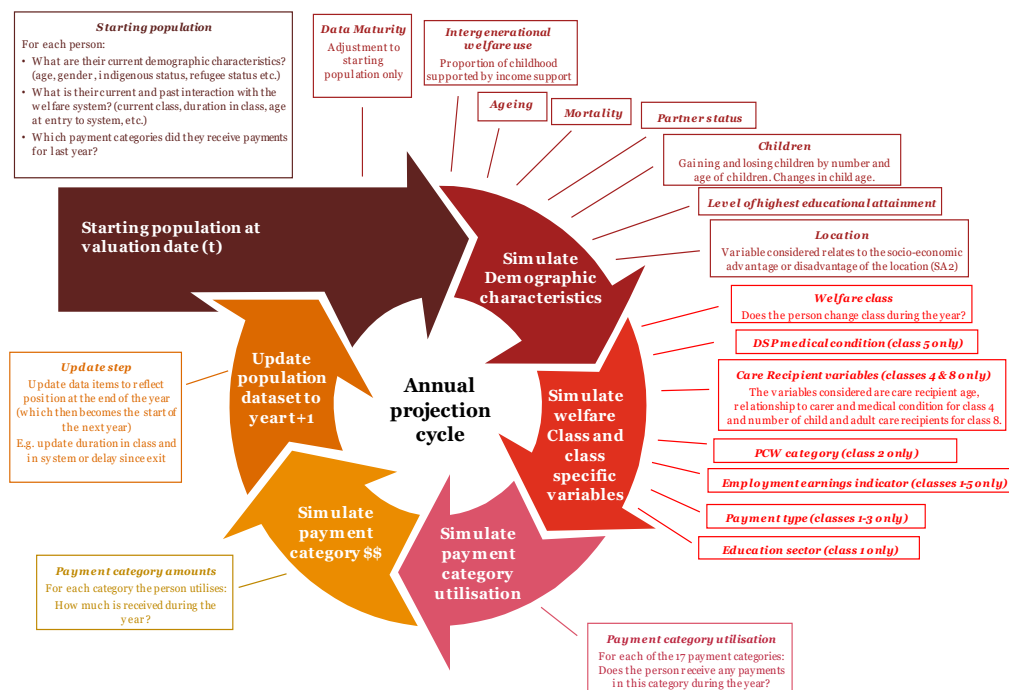
Class Category	Class Number	Description
Active – income support (IS)	1 Studying	People receiving Austudy, ABSTUDY or Youth Allowance (Student) as their most recent income support payment.
	2 Working Age	People receiving Newstart Allowance or Youth Allowance (Other) as their most recent income support payment (plus a small number of other recipients). Note – we will use the updated term of JobSeeker Payment rather than Newstart Allowance throughout the document.
	3 Parenting	People receiving Parenting Payment (Partnered or Single) as their most recent income support payment.
	4 Carers	People receiving Carer Payment as their most recent income support payment.
	5 Disability support	People receiving Disability Support Pension as their most recent income support payment.
	6 Pension Age	People receiving any Age Pension as their most recent income support payment (also includes a small number of Widow B Pension and Wife Pension recipients).
Active – non-income support (Non IS)	7 Non IS Family	People not receiving any carer payments but receiving one or more family supplement payments (such as a Family Tax Benefit or Child Care Subsidy – see categories H, I and J in Appendix C for a full list) in the previous year.
	8 Non IS Carer	People receiving Carer Allowance.
	9 Non IS Other	People receiving payments but not in any other welfare recipient class (such as those receiving Assistance for Isolated Children or Crisis Payment).
Inactive classes	10 Previous welfare recipient	People who have been in one of classes 1 to 9 within the previous 18 years*, but are not in one of these classes for the latest year. <i>* 18 years is selected here as the modelling dataset to 30 June 2019 has a maximum of 18 years welfare history. That is, the current data cannot indicate if someone's last welfare interaction was more than 18 years ago.</i>
	11 Dead	People who have died during the previous year or in prior years.
	12 Rest of Aust. population	Rest of modelled population.

2.3.3 The experience of an individual within each welfare class is influenced by various factors. Significant influences include:

- the particular structure of a welfare class. This includes the eligibility criteria and parameters regarding the length of time for which benefits can be received (for example, age or age of youngest child);
- an individual's characteristics, which inform the expected persistency of receiving a payment (for example, age when first entering welfare system or duration on income support); and
- an individual's characteristics, which inform the level of payment received (for example, gender or partnering status).

2.3.4 The annual simulation of welfare use in each future year is illustrated in Figure 2. This also shows the order in which each variable is simulated.

Figure 2: Illustration of the Simulation Model Structure



2.3.5 Underneath the welfare class structure is another modelling structure based on approximately 85 individual payment types, which are themselves grouped into seventeen payment categories. Seven of these payment categories relate to income support payments, and ten relate to non-income support payments.

2.3.6 Although each person is allocated to a single unique class in a year, the model simulates the possibility of payment utilisation for each possible payment category. As such, the model allows for individuals to receive payments from multiple categories (and classes) in the same year.

2.3.7 The welfare classes are treated in a hierarchical order. For example, if someone receives multiple payments during a given year, being in an income support

class (classes 1 to 6) will take precedence over being in a non-income support class (classes 7 to 9).

2.4 Model updates

2.4.1 A number of updates to the modelling approach have been conducted for the purposes of the 2019 valuation. These are described in the following paragraphs.

2.4.2 Changes have been made to the modelling algorithms. Previous valuations (as described in those respective reports) were based on a relatively manual process of fitting Generalised Linear Models (GLMs) to underlying data, in a staged approach, overlaid with a range of adjustment factors where needed. The updated approach utilises a more automated process (machine learning) to fit Neural Networks, and to consolidate selections of models to give greater simulation efficiency.

2.4.3 Neural Networks have replaced GLMs as they require less manual fitting and are more able to identify complex patterns in the data such as interactions between predictors. This means that for the PIA modelling, they are generally both more efficient and more accurate than the GLMs.

2.4.4 The demographic module has been updated. Changes made include:

- further utilising HILDA data analysis to inform trends in non-welfare classes;
- updating the data window used, to make more use of more recent (2015-18) demographic data for relevant experience analyses;
- updating the process for model fitting at older ages;
- modifying the previous application of mortality data. This includes using a longer term mortality improvement factor and aligning aggregate mortality across the whole population (indigenous and non-indigenous) with the Australian Life Tables;
- creating a new dataset to represent the number of children within the non-welfare population. Previously, data regarding children from the welfare population was modified to serve as an approximation for the non-welfare population; and
- accommodating transfers to Class 12 within the demographic model.

2.4.5 The population module has been updated, in order to:

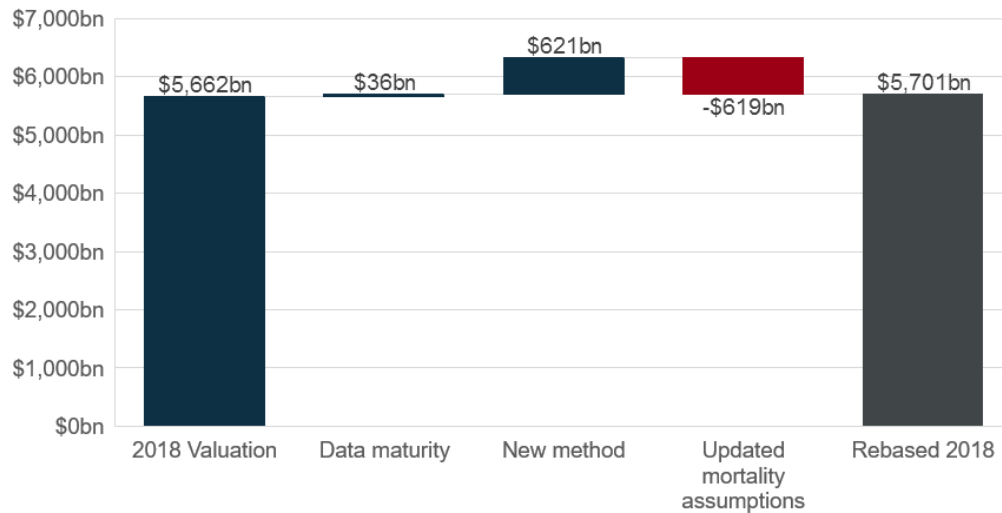
- impute missing values in the starting population; and
- generate a more representative age distribution of the Indigenous population.

- 2.4.6 The data extraction and simulation processes have been updated. This includes modifying the transition rules from Class 10 to Class 12. For data to 30 June 2019, it is not possible to infer information about historical welfare use for individuals prior to 2001-02. Therefore, to ensure consistency between Class 10 and Class 12, individuals projected to have no welfare history in the 18 years immediately prior to a given year, will transition to Class 12 rather than remain in Class 10. This means that Class 10 is defined as those with no welfare use in the previous 18 years, across the entire projection.
- 2.4.7 Indexation forecasts have been updated. AWE and CPI will continue to be linked to Budget forecasts. However, the Pensioner and Beneficiary Living Cost Index (PBLCI) will now use the Treasury Department Forecast (instead of a rolling average forecast), and the national minimum wage (NMW) will be directly linked to AWE.
- 2.4.8 There is now alignment of the census date for policy changes, with that of the starting population. The population data is 'as at' 30 June 2019, but 'as known at' 30 September 2019 to allow for any maturity corrections / updates to the data. As such, policy changes up to 30 September 2019 (rather than 30 June 2019) are now also considered as part of any model update.

2.5 Rebase of 2018 results

- 2.5.1 In light of the model changes discussed above, and to enable a meaningful analysis of change between the 2018 valuation result and the 2019 valuation result, we have re-run the updated modelling process on the 2018 population. This gives us a valuation as at 30 June 2018 of \$5,701 billion, which is 0.7% higher than the previously modelled 30 June 2018 result of \$5,662 billion.
- 2.5.2 This rebasing of the 2018 valuation result is important, because it supports comparability of the 2018 and 2019 results. In particular, it ensures that changes between those valuations can be attributed to relevant changes over the 2018-19 period. For example, changes in the underlying population, legislative changes, and changes in experience.
- 2.5.3 If the 2018 result was not rebased, then changes between the 2018 and 2019 valuations would be attributed to features that have no relevance to the actual experience of the welfare system *per se* – such as updates to the modelling process, use of certain data, and other aspects of the modelling discussed above.
- 2.5.4 An analysis of the rebased 2018 result, compared to the previous 2018 result, follows.

Figure 3: Rebase of the 2018 Valuation



The updated modelling approach produced a slightly higher valuation result as at the valuation date of 30 June 2018. This slight change arose from three main sources:

- Data maturity, with more now known about the model population as at 30 June 2018, compared to when the valuation was conducted 12 months previously.
- Increases in projected average payments for both 'Income Support – Aged' and 'Income Support – Disability'. These changed due to differences in underlying demographic projections (including partnership rates and social economic status); projections in the distribution of people across the disability medical group; and projected Age Pension usage based on past data.
- Updated assumptions regarding long-term mortality, which now allows for lower levels of future improvement than was previously the case. Payments relating to 'Income Support – Aged' are the most sensitive to changes in mortality assumptions, hence these future payments constituted the major portion of the resulting decrease in value.

2.6 Policy updates for 2019

- 2.6.1 The actuarial valuation reflects relevant policy as legislated at the valuation date, and assumes that these policy settings will persist in perpetuity. This means future changes in payment design or eligibility have been allowed for in the valuation, if the related legislation is in place for those changes to occur in the future.
- 2.6.2 A number of changes can be made in any given year to the policies underpinning the welfare system. This 30 June 2019 valuation incorporates changes made

since 1 July 2018, as these may impact the types of payments available, the eligibility criteria, and entitlement amounts. These in turn will impact the projected trajectories and payments in the model.

- 2.6.3 Explicit allowances are made as part of the modelling process for material changes to policy. These allowances reflect the estimated direct impact of the changes. No second order or indirect allowance has been made for any flow-on impacts, or behavioural responses, to the changes. Rather, these will be reflected in the emerging experience as they take effect.
- 2.6.4 The table below outlines the material policy changes that have been advised by DSS since the 30 June 2018 valuation. The influence of these changes has been accounted for with adjustments to the modelling process for the current valuation.

Table 2: Summary of Main Material Policy Changes (legislated 1 Jul 2018 to 30 Sep 2019*)

Policy Change	Description of Policy Change
FTBA HIFA increase	The Higher Income Free Area (HIFA) for FTBA has increased from \$94,316 to \$98,988. In addition, changes to the FTBA Method 1 income test taper rate now reduce the rate of FTB Part A by 30 cents for each dollar of income over \$98,988 (up from 20 cents previously).
Work Bonus	The Work Bonus increased from \$250 to \$300 per fortnight for People on Carer's Payment, DSP or Age Pension who are 66 years or older.
Social Security Deeming Rates	Social security income test deeming rates reduced from 1.75% to 1.00% for those earning below the threshold (\$51,800 for singles). Above the threshold, the deeming rate reduced from 3.25% to 3.00% ¹ .

* 30 September 2019 is referenced here, rather than the valuation date of 30 June 2019, as 30 September 2019 is the census date adopted to enable utilisation of more mature population and policy information than would be the case of a census date of 30 June 2019.

2.7 Model population

- 2.7.1 An external driver of the valuation result relates to movement in the underlying population base that is either currently receiving welfare assistance, or is not currently receiving welfare assistance but could receive this in the future. As

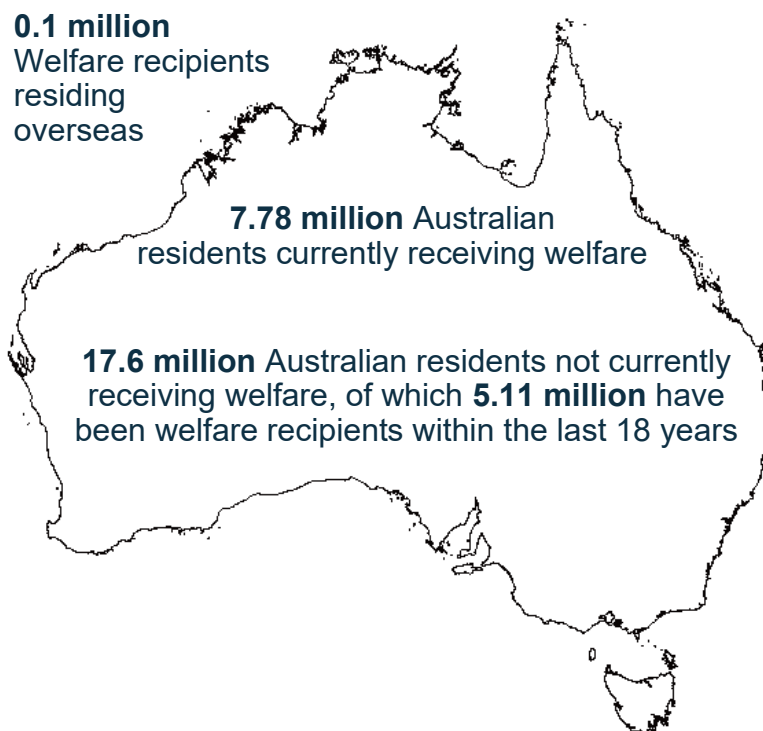
1 It was announced in March 2020 that deeming rates will decrease further, and significantly, on 1 May 2020. For those earning below the threshold (\$51,800 for singles), the deeming rate will reduce from 1.00% to 0.25%, and for those above the threshold, the deeming rate will reduce from 3.00% to 2.25%. These changes will be reflected in the 2020 valuation.

such, the current size and profile of the in-scope (model) population is of interest, as is the movement in this population since 30 June 2018.

Current Model Population

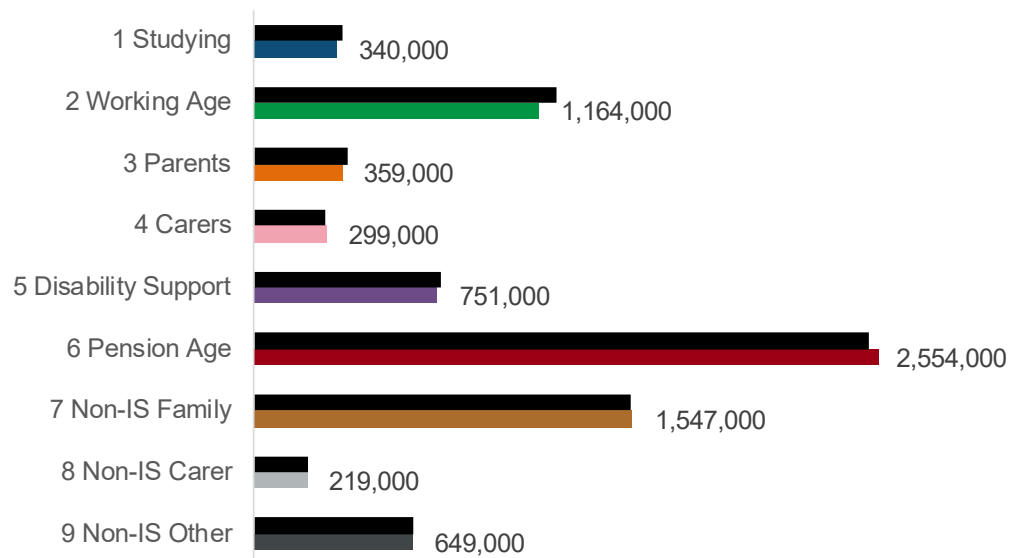
- 2.7.2 The total model population as at 30 June 2019 is equal to 25.48 million people. This consists of the Australian estimated resident population of 25.38 million, and approximately 0.1 million who are current welfare recipients residing overseas (primarily age pensioners).
- 2.7.3 The overall change in population from 30 June 2018 to 30 June 2019 is 1.8%, an increase of 449,000 people.
- 2.7.4 A more detailed breakdown of the composition of the model population as at 30 June 2019 is shown in Figure 4.

Figure 4: Total Model Population 25.48 million at 30 June 2019



- 2.7.5 An additional breakdown of the current welfare population, distributed across the different welfare classes, is also provided in Figure 5.

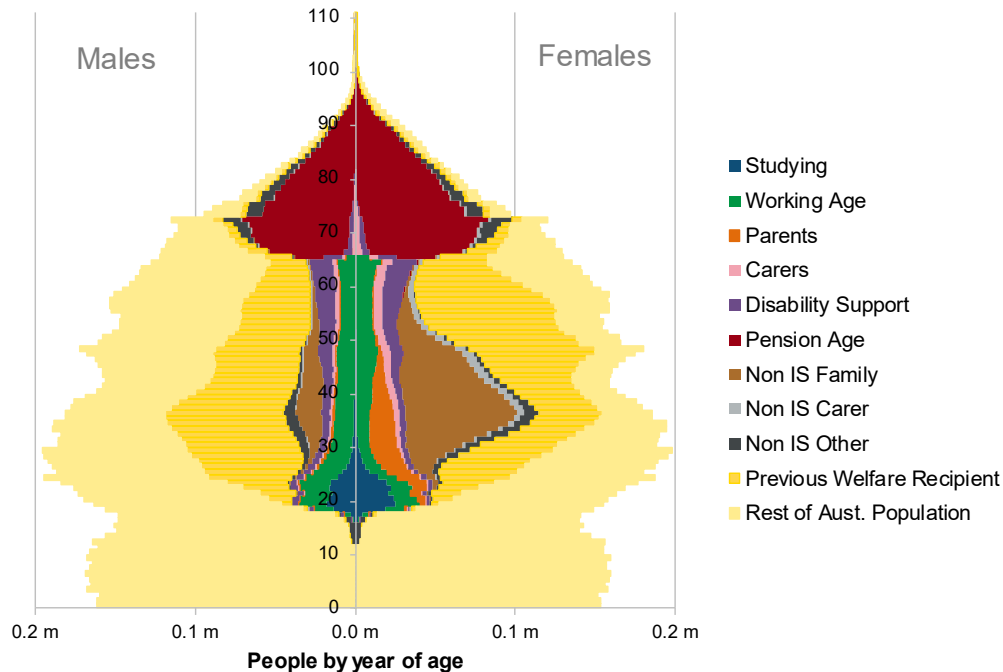
Figure 5: Current Welfare Recipient Population by Welfare Class



Black bars show previous year's population (numbers can be found in Table 3)

2.7.6 It is also of interest to consider how current welfare recipients relate to the whole population. The following population pyramid shows the composition of the model population by age and gender, to illustrate the demographic profile within each welfare class. It also demonstrates the proportions of different combinations of age and gender for current welfare recipients.

Figure 6: Model Population with Class Utilisation



Features of Current Population

- 2.7.7 The age of first direct access to the welfare system is typically from the late teens and will occur via classes 1 or 2.
- 2.7.8 As expected with a government-provided Age Pension, a large proportion of those aged 65 and over are in receipt of welfare payments. In addition, this proportion increases with age. In the years leading up to eligibility for the Age Pension, there is a slight increase in welfare utilisation, mainly in respect of working age, carer and disability support (that is, classes 2, 4 and 5 respectively).
- 2.7.9 There are significant differences in the patterns and type of welfare utilisation between females and males. Females are more likely to receive families payments, as well as larger Age Pension payments over time due to longer life expectancy.

Changes to model population

- 2.7.10 A summary of changes between the model populations as at 30 June 2018 and 30 June 2019 is shown in Table 3. Due to more mature data used in section 2.8.1, the population numbers may not match with the 30 June 2018 reported population numbers.

Table 3: Summary of Changes in Model Population

Class	June 2018 Population		June 2019 Population		Movement from 2018 to 2019	
	Number (000s)	% of total	Number (000s)	% of total	Number ('000s)	% change in numbers
1 Studying	359	1.4%	340	1.3%	-19	-5.3%
2 Working Age	1,237	4.9%	1,164	4.6%	-73	-5.9%
3 Parents	381	1.5%	359	1.4%	-22	-5.7%
4 Carers	294	1.2%	299	1.2%	5	1.8%
5 Disability Support	762	3.0%	751	2.9%	-11	-1.4%
6 Pension Age	2,508	10.0%	2,554	10.0%	46	1.9%
Income support recipient subtotal	5,541	22.1%	5,469	21.5%	-72	-1.3%
7 Non-IS Family	1,540	6.2%	1,547	6.1%	7	0.4%
8 Non-IS Carer	218	0.9%	219	0.9%	1	0.5%
9 Non-IS Other	652	2.6%	649	2.5%	-3	-0.4%
Non-income support recipient subtotal	2,410	9.6%	2,415	9.5%	5	0.2%
Total welfare recipient population	7,951	31.8%	7,884	30.9%	-67	-0.8%
10 exited 1-3 years*	1,597	6.4%	1,574	6.2%	-23	-1.5%
10 exited 4-18 years*	3,219	12.9%	3,533	13.9%	314	9.8%
Total previous client population	4,816	19.2%	5,107	20.0%	291	6.0%
12 Rest of Aust. population	12,266	49.0%	12,491	49.0%	225	1.8%
Total Australian model population	25,033	100%	25,482	100%	449	1.8%

* In order to highlight the impact of more recent welfare transitions, previous welfare recipients are grouped into those that exited in the last three years, and those that exited four or more years ago. Those that exited over 18 years ago are moved into Class 12.

- 2.7.11 Despite the overall population increase of 1.8% (0.449 million), the number of current welfare recipients has decreased from 7.95 million to 7.88 million. Current welfare recipients now make up 30.9% of the population, down from 31.8% at June 2018. Income support recipients now make up 21.5% of the population, down from 22.1% at June 2018. This fall in the population of current welfare recipients reflects the changes in legislation, population size and demographics, and overall welfare system utilisation, as discussed throughout the class-specific summaries provided earlier.
- 2.7.12 The number of Australians not currently receiving welfare has increased by 516,000 and now make up 69.1% of the population (compared to 68.2% at June 2018). Note that this group still contributes to future welfare cost, as many of these people will move into welfare classes in the future. This is especially so in the case of the Age Pension.

2.8 Experience updates for 2019

- 2.8.1 Over time, changes occur in how the population accesses and utilises the welfare system. Where there are material changes in the numbers (or rates, when numbers are expressed as a proportion of the applicable underlying population) who enter into, exit from, or transfer between classes within the welfare system, this is called a change in experience. An additional element of experience is the size of payments received, and how these also change over time.
- 2.8.2 Such changes may arise from behavioural responses to changes in policy settings, changes in mortality, or more general changes in societal trends over time.
- 2.8.3 For each welfare class, we firstly consider trends in entry rates, exit rates, and rates of transfer between welfare classes. We also provide a commentary of each apparent trend over time, for each class. We then consider changes over time in payments received, also within each class.

Entry and exit rates per class

- 2.8.4 Entries and exits describe the movement into and out of modelled welfare classes, during the year. Rates of entry and exit are expressed as a proportion of each modelled class's population at the start of the year. Entry rates can exceed 100%, in the situation where the number of entrants into a class exceeds the starting population.
- 2.8.5 For all presentations of exit rates per class in the following analysis, exit by reason of death is excluded. If it were included, it would dominate the exit numbers and rates at older ages.

Overall Welfare Class Experience

2.8.6 The following analysis summarises trends in key experience parameters, across all welfare classes as a whole.

Figure 7: Trends in Entry and Exit Rates for Welfare

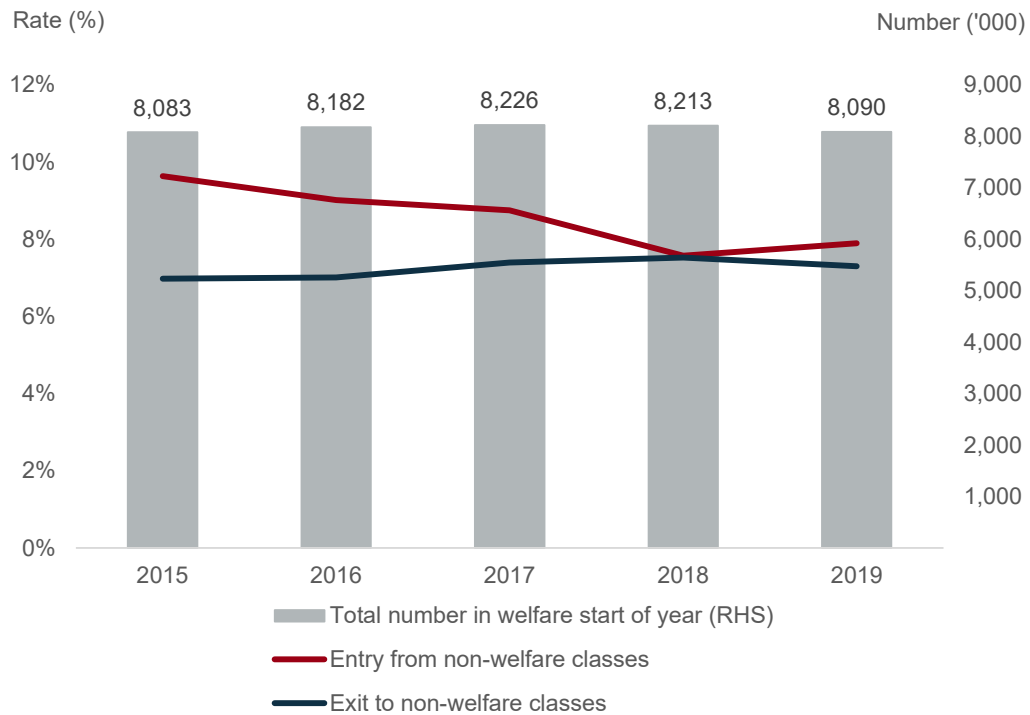
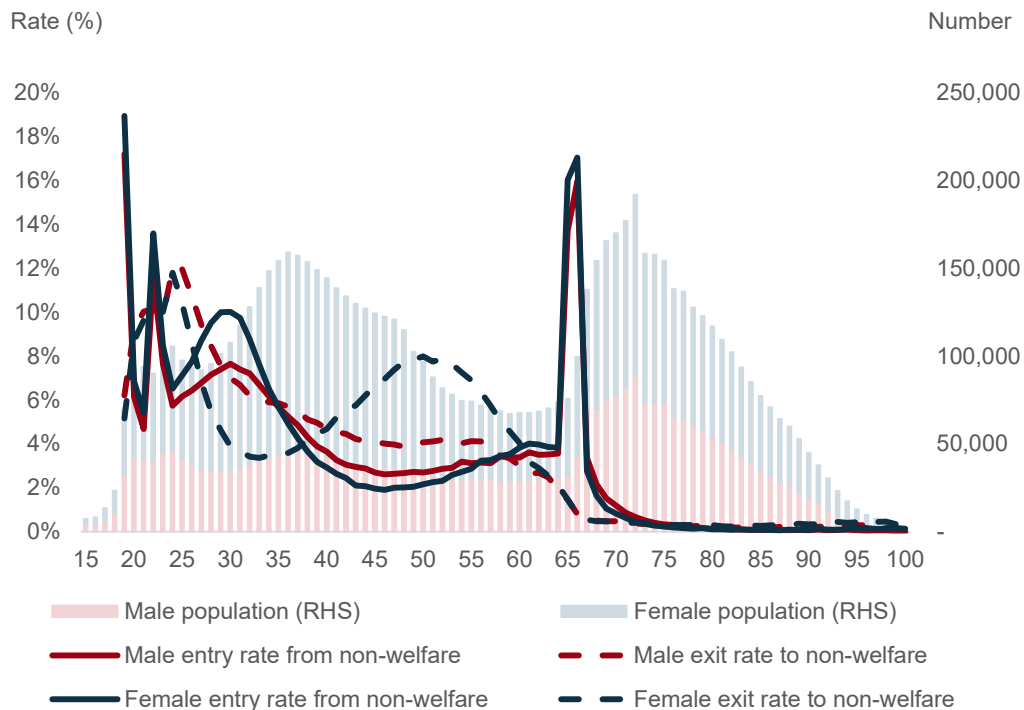


Figure 8: 2018/19 Entry and Exit Experience by Gender and Age



2.8.7 The number of people receiving welfare has been in decline over the last three years, with both a decreasing rate of entry to welfare, and an increasing rate of exit from welfare. Note that the entry rate is still above the exit rate in Figure 7, due to the exclusion of exits due to death.

2.8.8 The population receiving welfare can be broadly categorised into four age ranges.

- 18 – 30s: This group is dominated by student and job seeker payments, as people study or look for work. There are two age spikes for welfare entry. These align with eligibility changes for Youth Allowance at age 18 (from which point full-time students can access Youth Allowance while living at home), and age 22 (from which point young people are considered independent, and parental income tests no longer apply).
- 30s – 50s: Family payments dominate this age range, primarily due to people receiving FTB and child care payments. Because of the broader eligibility of these payments, this age range is one of the peak welfare usage periods.
- 50s – Retirement age: The number of people in welfare by age is lowest in this range. The group is a mix of people still receiving families payments, and those receiving job seeker, disability or carer payments. The latter group will mostly transition to the Age Pension.

- Retirement age onwards: Age Pension payments are received by a large proportion of the Australian population, which makes this age range a peak period of welfare usage.

2.8.9 Male and female entry and exit rates differ due to higher entry, and subsequent exit, rates for females into families payments. Females also have a slightly higher entry rate onto the Age Pension around retirement age.

Class 1 (Studying) Experience

2.8.10 The following analysis summarises trends in key experience parameters for Class 1.

Figure 9: Trends in Entry and Exit Rates for Class 1

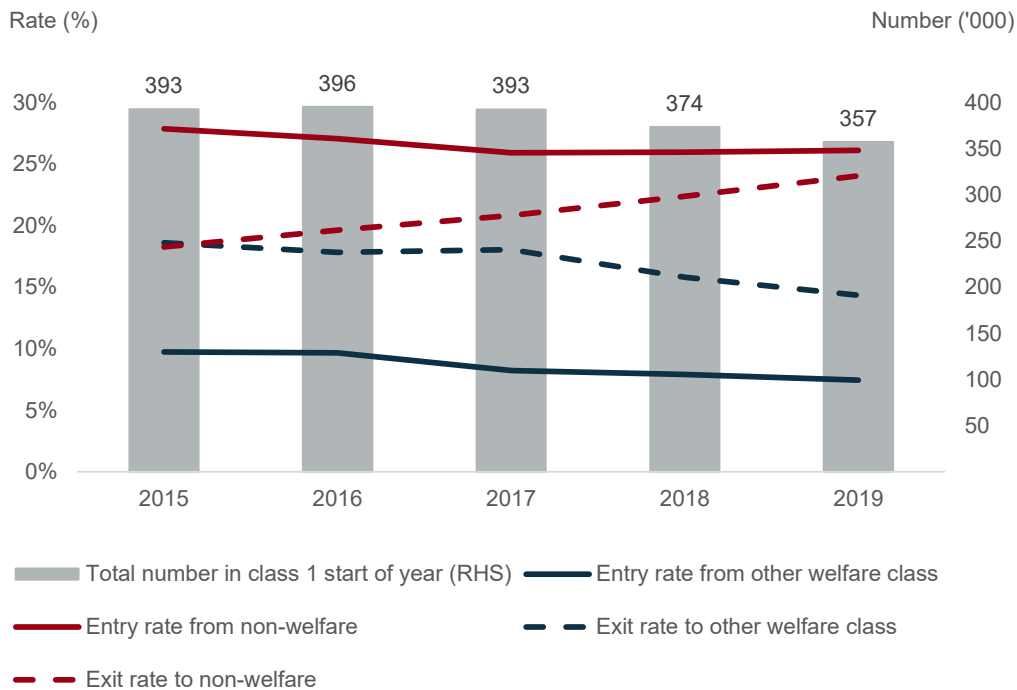
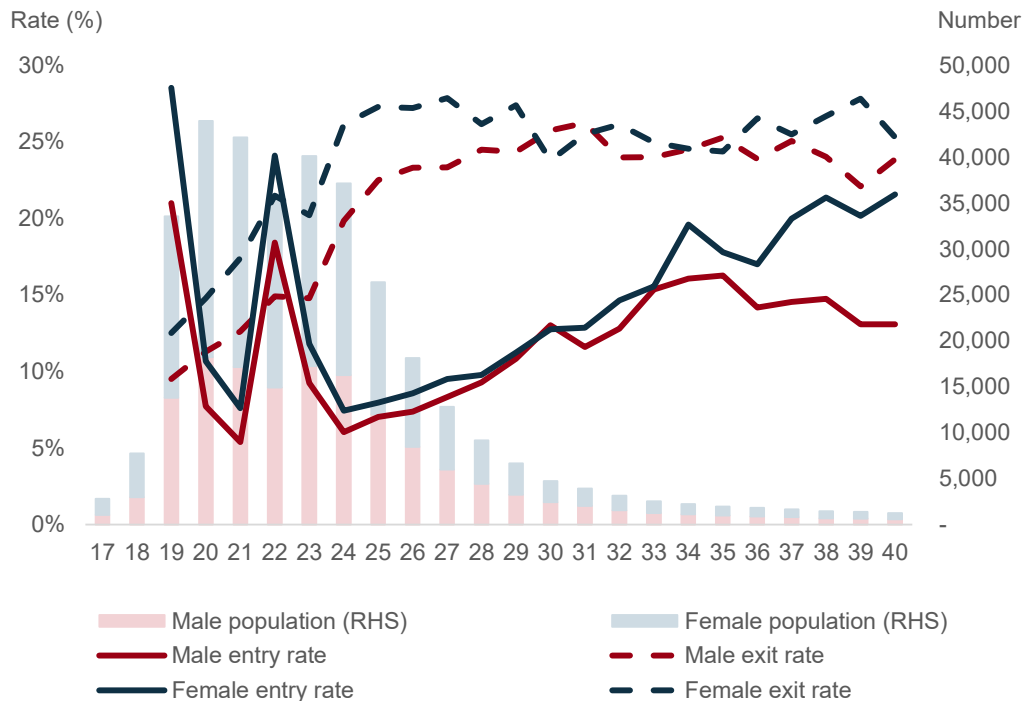


Figure 10: 2018/19 Entry and Exit Experience by Gender and Age for Class 1



- 2.8.11 Class 1 is highly transient, with the highest entry and exit rates of the income support classes. Most entries into Class 1 are from the non-welfare population, as younger aged students first engage with the welfare system.
- 2.8.12 The recent experience has shown an overall trend of decline of the Class 1 population resulting from a net rate of exit. This was attributed to a declining rate of entry into Class 1, while the overall exit rate remained steady.
- 2.8.13 The majority of the population receiving Class 1 payments are young. A high rate of entry for ages 19 and younger corresponds with the age eligibility threshold for student payments; and a high rate of entry at age 22 corresponds with the independence age threshold, at which point the parental income test no longer applies. Over the age of 22, exit rates are higher than entry rates as people finish studying and exit the class.
- 2.8.14 Male and female entry and exit rates broadly follow the same age pattern, with slightly more females than males in the class. Females do exhibit increasingly higher entry rates for ages over 30, likely returning to study to reskill after child-rearing.

Class 2 (Working age) Experience

2.8.15 The following analysis summarises trends in key experience parameters for Class 2.

Figure 11: Trends in Entry and Exit Rates for Class 2

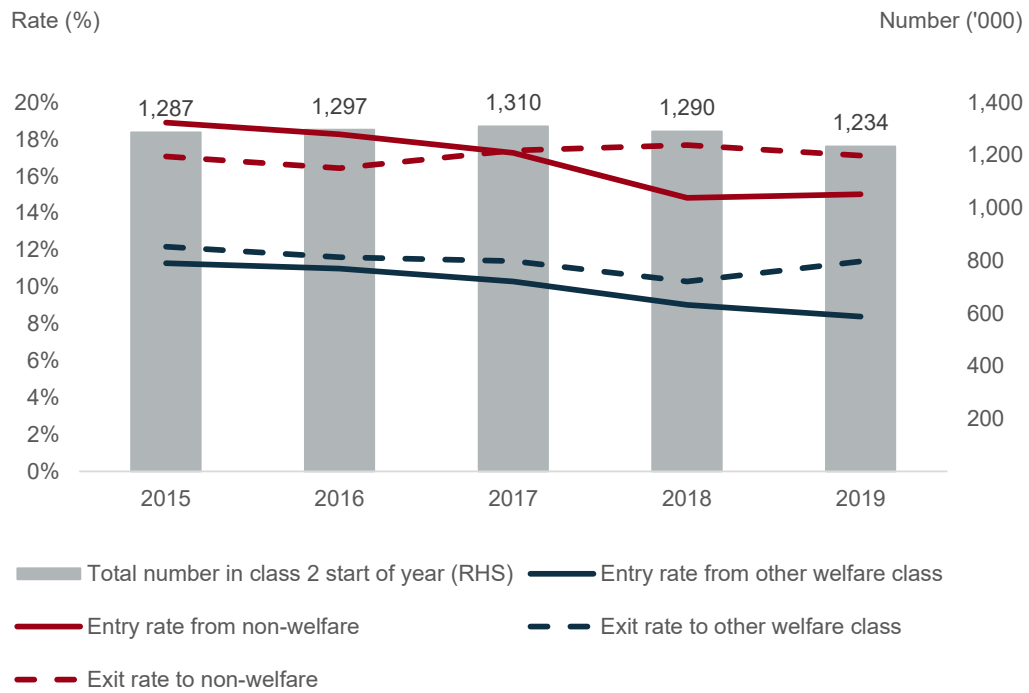
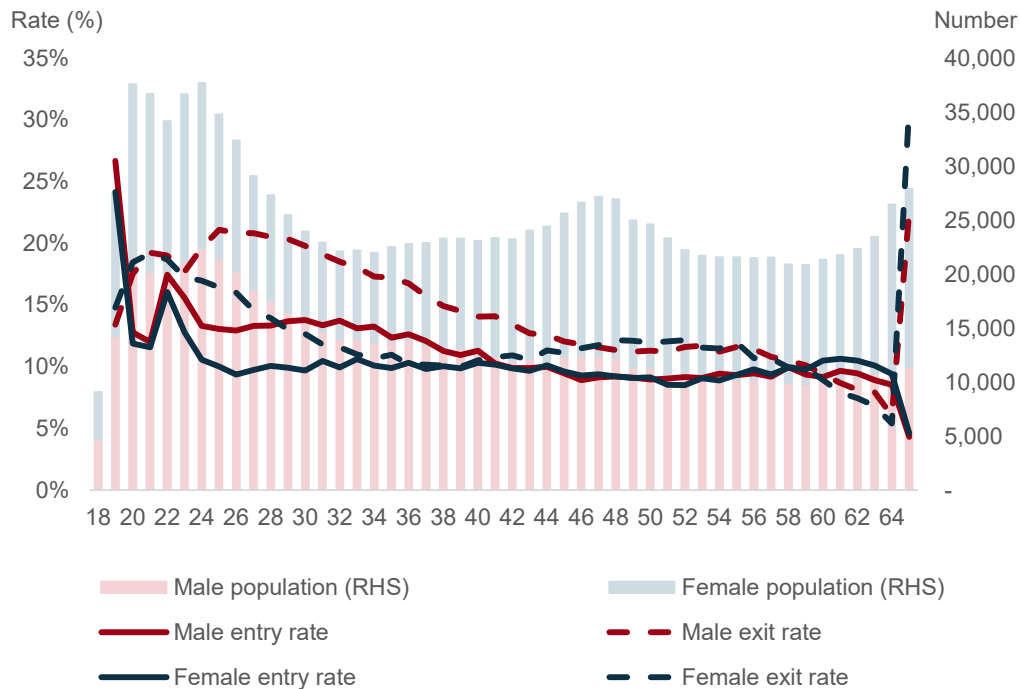


Figure 12: 2018/19 Entry and Exit Experience by Gender and Age for Class 2



- 2.8.16 Similar to Class 1, Class 2 recipients are also highly transient. Most entries are from the non-welfare population.
- 2.8.17 The overall entry rate into Class 2 has been in decline, with a net exit in recent years. This was attributable to a decline in entry from other classes, in particular from Class 1, while exit rates remained steady.
- 2.8.18 The proportion of the Class 2 population is higher at younger ages. The rate of entry is higher for those aged 19 or younger, as this corresponds with the age threshold of Youth Allowance (Other). At age 22 a second peak in the entry rate is apparent, corresponding with the age threshold for Newstart Allowance (which we will henceforth refer to as JobSeeker Payment, to align with the use of that term from 2020 onwards). For those at older ages, there is a declining rate of entry.
- 2.8.19 Entry and exit rates are generally higher for males up to around age 40. This is at least partially due to females more likely accessing parenting or carer payments. Exit rates drop off over age 55 as people are less likely to re-enter the workforce at that age, and most people transfer to the Age Pension at retirement age.

Class 3 (Parenting) Experience

2.8.20 The following analysis summarises trends in key experience parameters for Class 3.

Figure 13: Trends in Entry and Exit Rates for Class 3

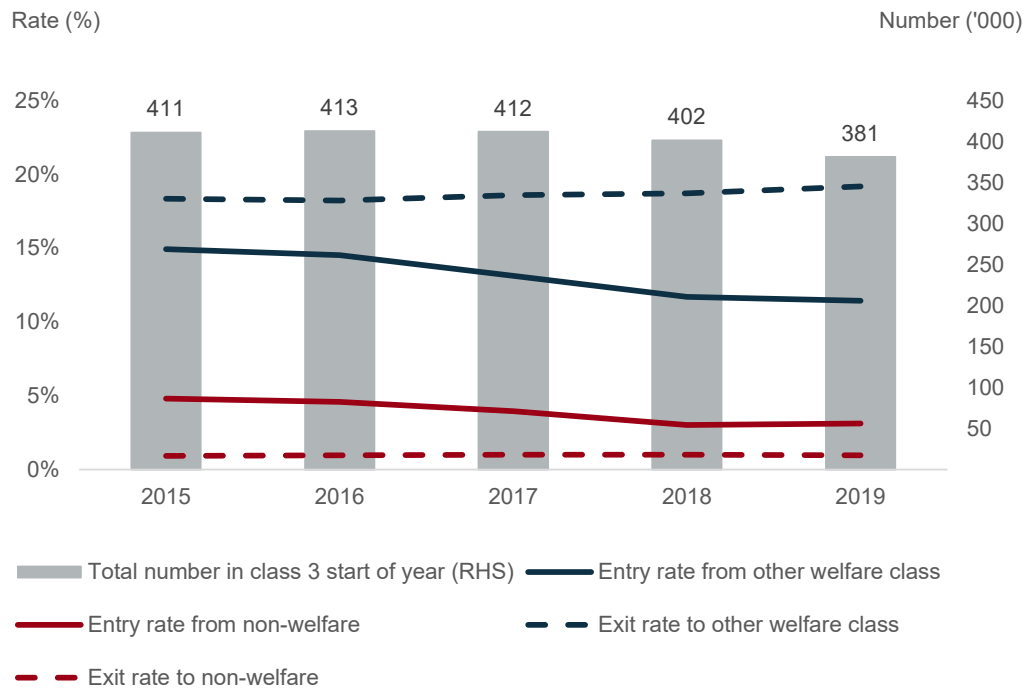
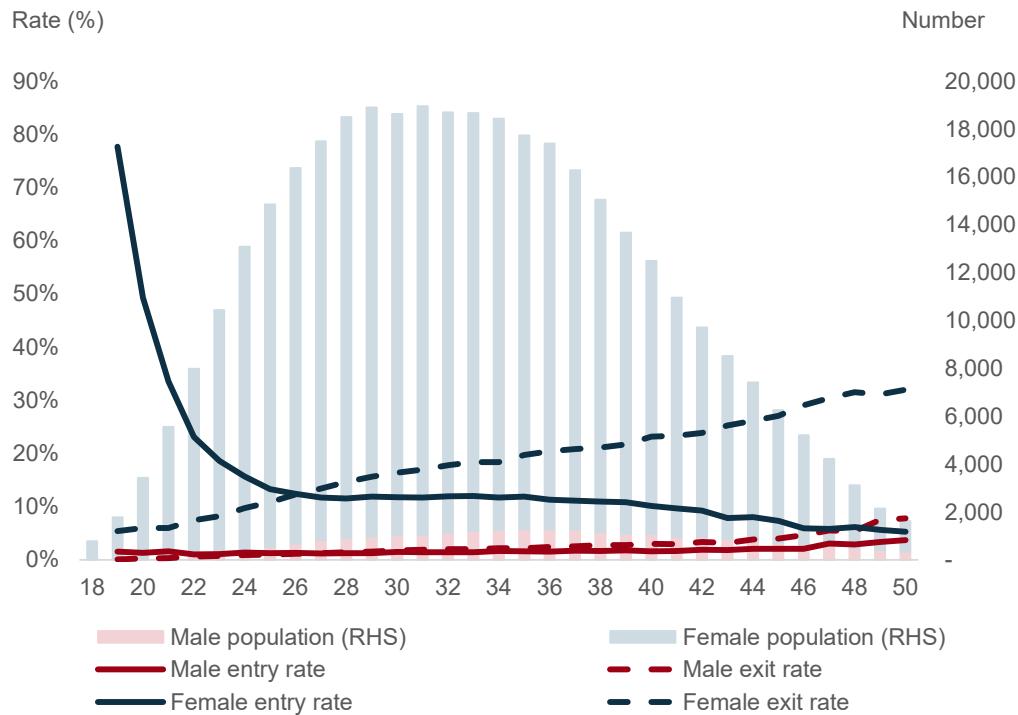


Figure 14: 2018/19 Entry and Exit Experience by Gender and Age for Class 3



2.8.21 Class 3 transitions mainly occur with other welfare classes. The rate of exit to non-welfare is very low, suggesting that those in this class have higher ongoing persistency of remaining on some form of welfare.

2.8.22 Similar to payment classes 1 and 2, the Class 3 population has been in decline, mainly resulting from a decreasing trend in entry rates over time.

2.8.23 As expected, entry rates into Class 3 are higher at younger ages. Exit rates increase with age as children grow older, and eventually exceed the eligible age thresholds.

2.8.24 The vast majority of Class 3 recipients are female.

Class 4 (Carers) Experience

2.8.25 The following analysis summarises trends in key experience parameters for Class 4.

Figure 15: Trends in Entry and Exit Rates for Class 4

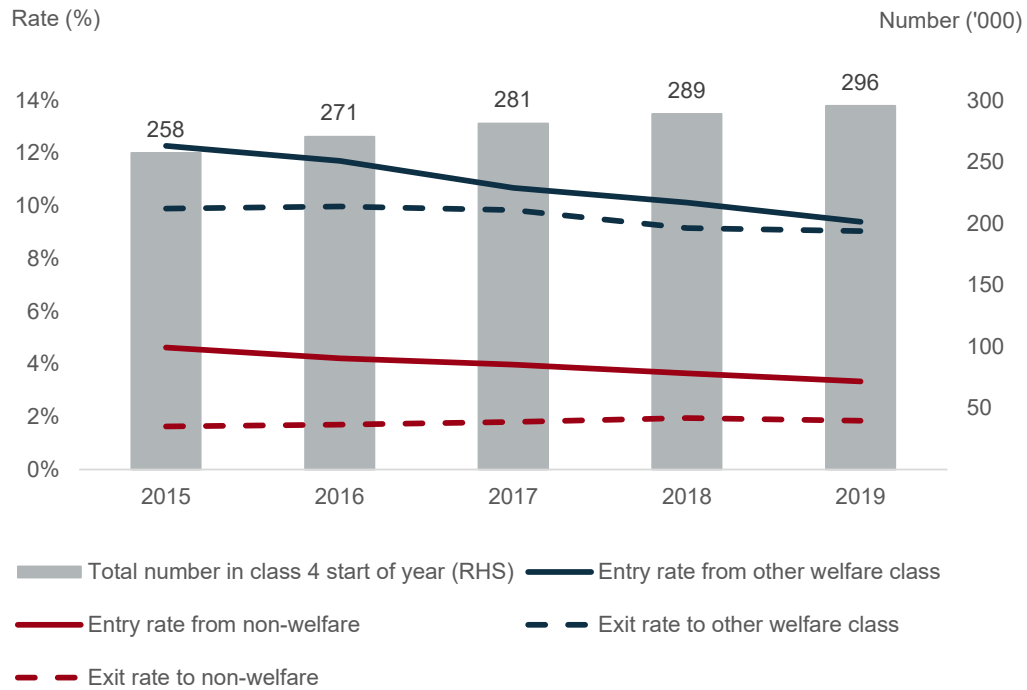
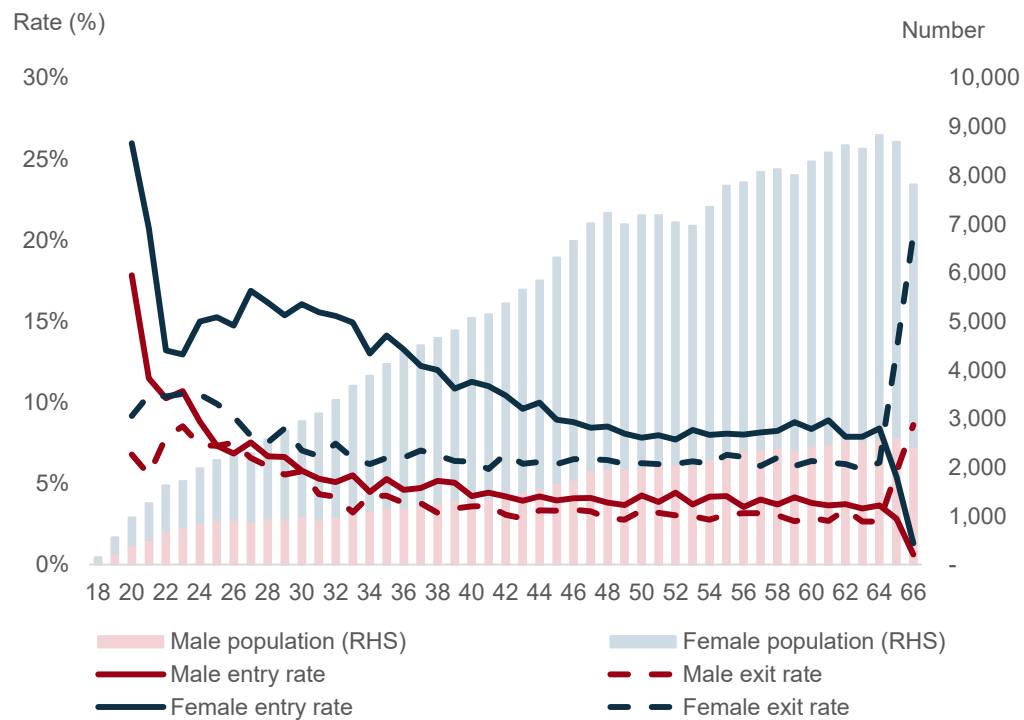


Figure 16: 2018/19 Entry and Exit Experience by Gender and Age for Class 4



2.8.26 Most entries into Class 4 carers are from existing welfare recipients. The overall rate of entry and exit are low, suggesting a greater persistency to remain in Class 4.

2.8.27 The population of Class 4 carers has been steadily increasing, but at a slowing rate of growth in line with a gradual decrease in the rate of entry.

2.8.28 The population of Class 4 recipients increases consistently with age until retirement age when many transfer to the Age Pension.

2.8.29 More females than males receive Class 4 payments, with entry rates for females higher than males, particularly through the child-rearing years.

Class 5 (Disability Support) Experience

2.8.30 The following analysis summarises trends in key experience parameters for Class 5.

Figure 17: Trends in Entry and Exit Rates for Class 5

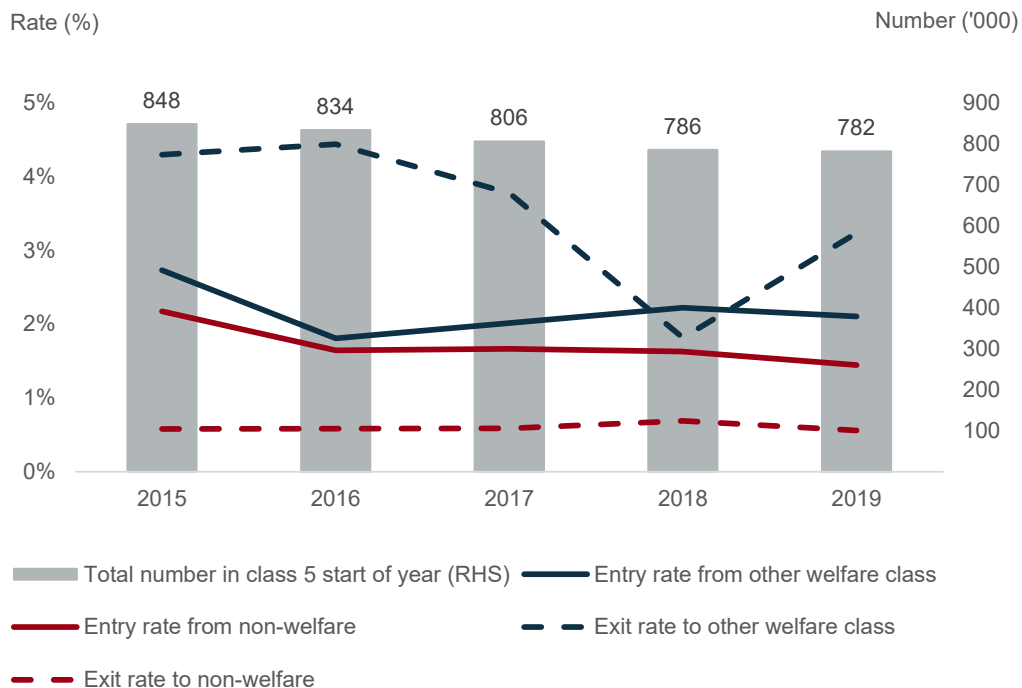
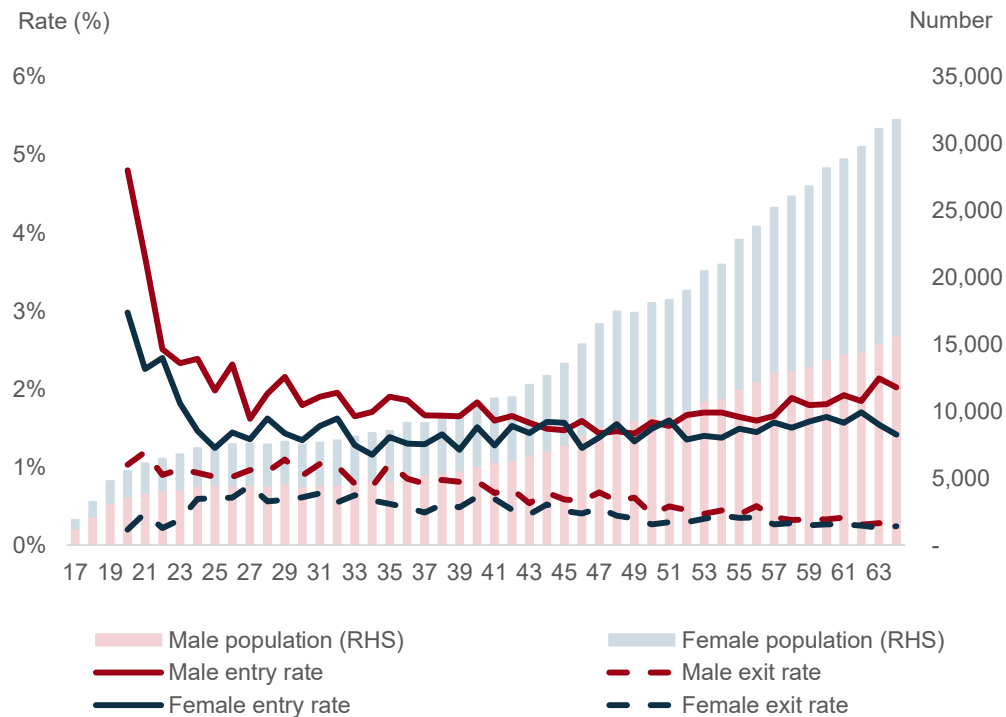


Figure 18: 2018/19 Entry and Exit Experience by Gender and Age for Class 5



- 2.8.31 There have been a number of changes in policy settings in relation to the Disability Support Pension (DSP) over the last few years, which have generated some fluctuations in the number of people entering and exiting Class 5. This includes a tightening of eligibility criteria, which has driven a reduction in the number of entries onto the DSP. This resulted in decreases in entries from outside the welfare system, and an overall decrease in entries to Class 5, but there remained some movements in entries from other welfare classes to Class 5. Class 5 has the lowest entry rate for any payment class.
- 2.8.32 Note that the large decrease in exits in 2017-18, relates to the increase in the Age Pension age from 65 to 65.5. Most exits from Class 5 are due to death or transfer to the Age Pension, which is why a change to Age Pension eligibility has such a significant impact on this class.
- 2.8.33 The population of Class 5 recipients increases significantly with age until retirement age, when many transfer to the Age Pension.
- 2.8.34 The patterns by age for rates of entry and exit are broadly similar for males and females, with males having slightly higher rates of movement into and out of this class overall.

Class 6 (Pension Age) Experience

2.8.35 The following analysis summarises trends in key experience parameters for Class 6.

Figure 19: Trends in Entry and Exit Rates for Class 6

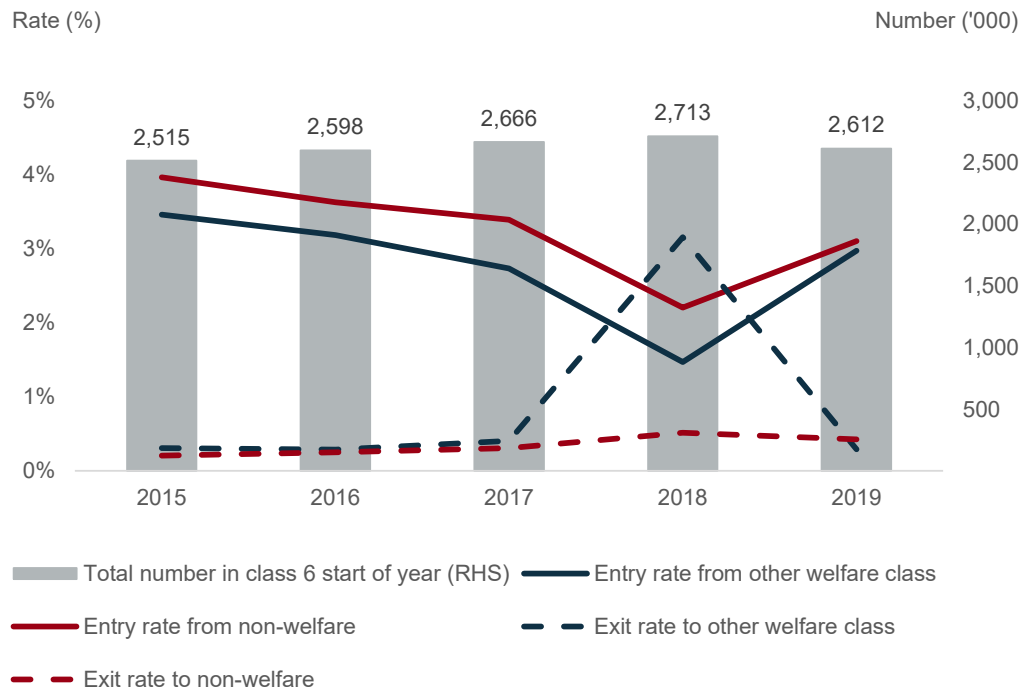
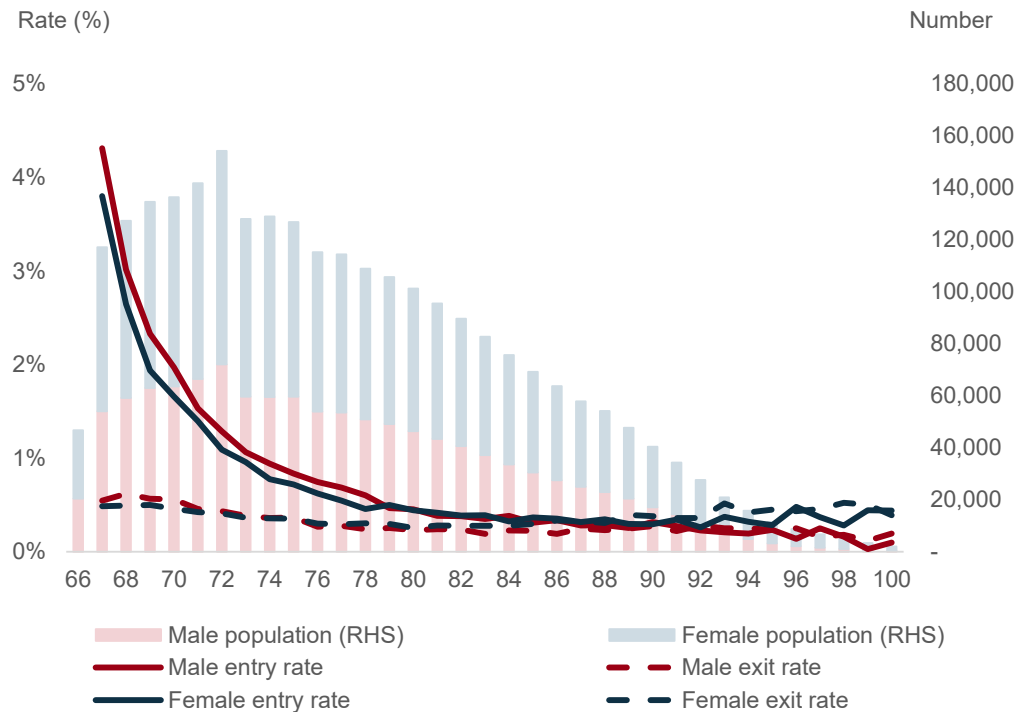


Figure 20: 2018/19 Entry and Exit Experience by Gender and Age for Class 6.



(Note: Death is the primary reason for exit from this class, but is not included in the chart above).

2.8.36 Previous valuation reports have explained that the modelling of the Age Pension is an inherently challenging part of the valuation. Age Pension payments are, for some people, many decades into the future and there are many factors which will influence the demand for Age Pension. These include demographic trends, the economic environment and the returns on superannuation savings. Further challenges arise as the data available to support our analysis does not include information on some key drivers, such as levels of superannuation savings, how superannuation assets are drawn down in retirement, and home ownership.

2.8.37 Some of these factors offset each other. For example, levels of superannuation savings are increasing over time (both from the maturing of the superannuation system and increasing workforce participation of women), which should decrease the reliance on the Age Pension. However, there has also been a material reduction in levels of home ownership, especially for younger generations. This could increase reliance on the Age Pension.

2.8.38 In terms of recent experience, there has been a reduction in the proportion of people who access the Age Pension in the first few years after reaching the Age Pension qualifying age. In particular, there has been a reduction in the proportion of full age pensioners within these cohorts.

2.8.39 Entries into and exits from the Age Pension are impacted by both general experience, and recent policy changes relating to the Age Pension age and the pension assets test. The lower level of entries in the 2018 year was due to an increase in the Age Pension age from 65 to 65.5. A change in the pension assets test on 1 January 2017 also led to a higher rate of exits, of which many transitioned into non-income support classes.

2.8.40 Most people enter into Class 6 at retirement age, although the entry rate does not flatten off until around age 80. These older entrants include people who have continued working past retirement age, people who have drawn down on savings to a point where they are now eligible for the Age Pension, and migrants who have had to wait for an eligibility period. Although not shown in Figure 17, the major reason for exit from Class 6 is death.

Class 7 (Non IS Family) Experience

2.8.41 The following analysis summarises trends in key experience parameters for Class 7.

Figure 21: Trends in Entry and Exit Rates for Class 7

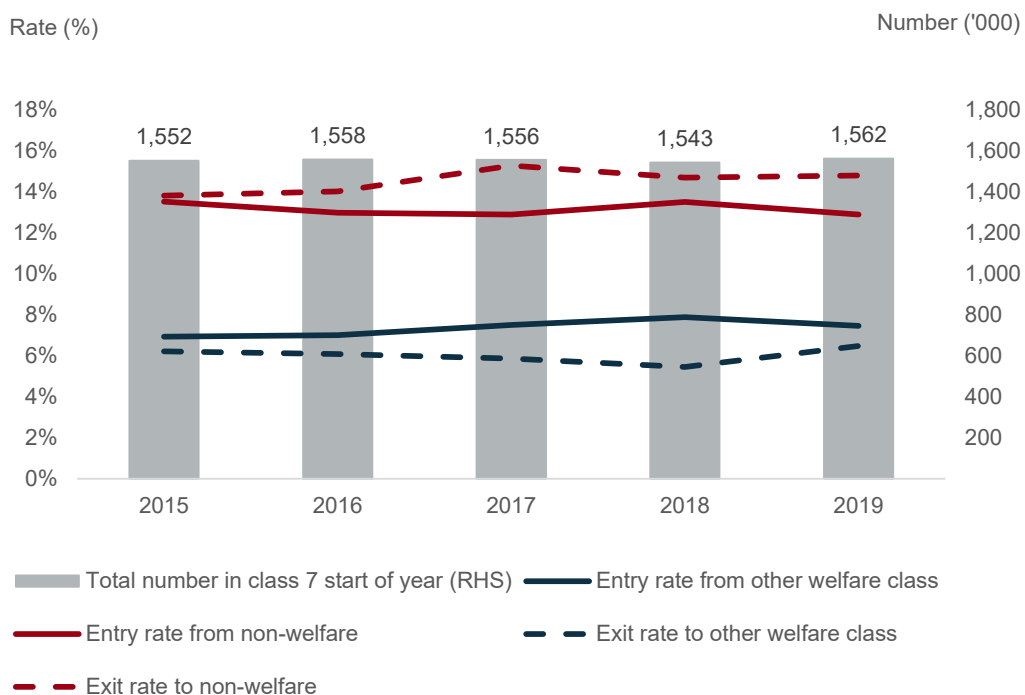
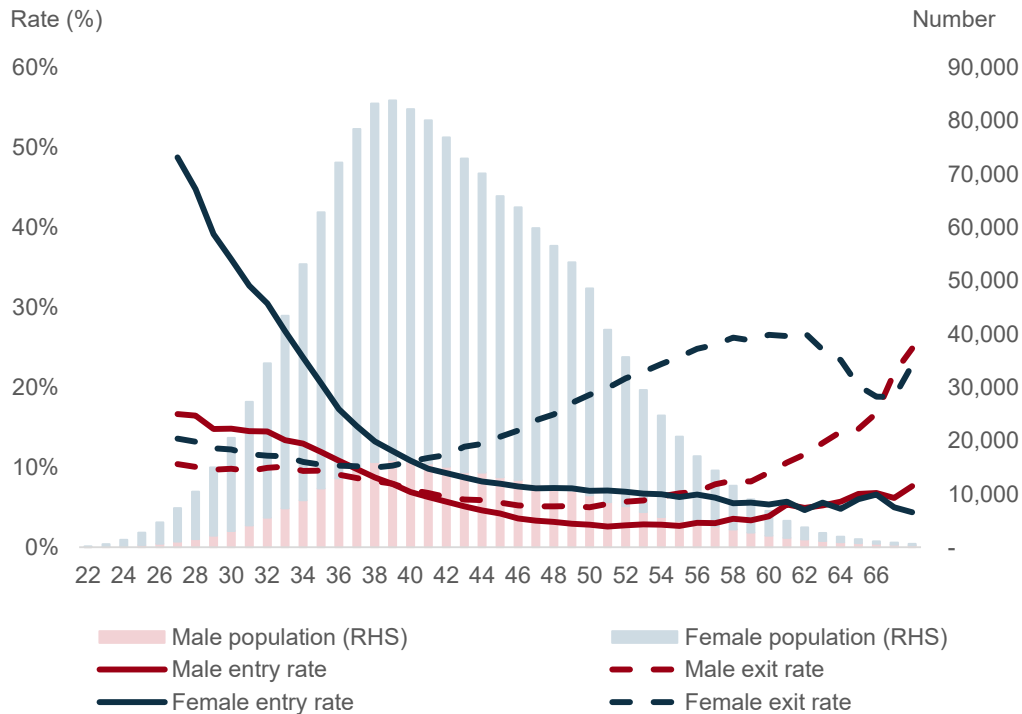


Figure 22: 2018/19 Entry and Exit Experience by Gender and Age for Class 7



2.8.42 Class 7 is a family payment class and, as such, shares some of its characteristics with Class 3.

2.8.43 The Class 7 population has remained relatively constant, with both entry and exit rates relatively stable over time.

2.8.44 Class 7 transitions mainly occur with non-welfare classes, with most people entering from and then leaving to non-welfare. Non-welfare for the purpose of Class 7 is defined as those who enter into Class 7 from non-welfare through Class 9.

2.8.45 At younger ages, entry rates are higher than exit rates as people have children and move into Class 7. Around age 40, exit rates exceed entry rates and there is a net exit from the class as people lose eligibility as, for example, their children become older than the eligible age thresholds.

2.8.46 The majority of Class 7 recipients are female.

2.8.47 We note that the above experience is based on Child Care Benefit (CCB) and Child Care Rebate (CCR) data up to 2018, and Child Care Subsidy (CCS) data in 2019. The CCB + CCR data forms the basis of establishing projected utilisation of this class.

Class 8 (Non IS Carer) Experience

2.8.48 The following analysis summarises trends in key experience parameters for Class 8.

Figure 23: Trends in Entry and Exit Rates for Class 8

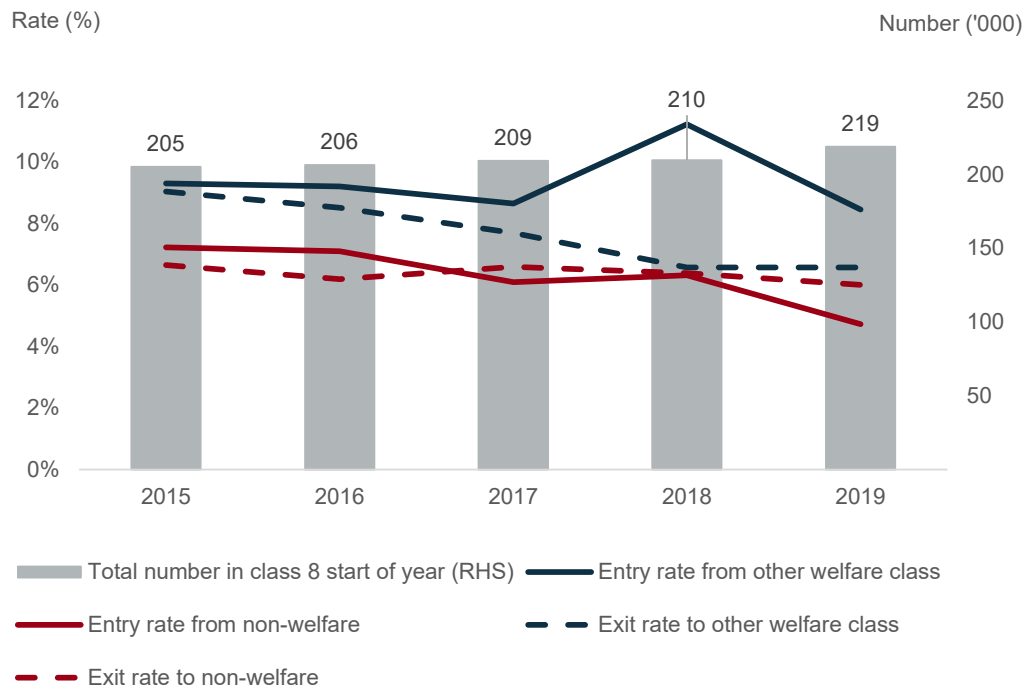
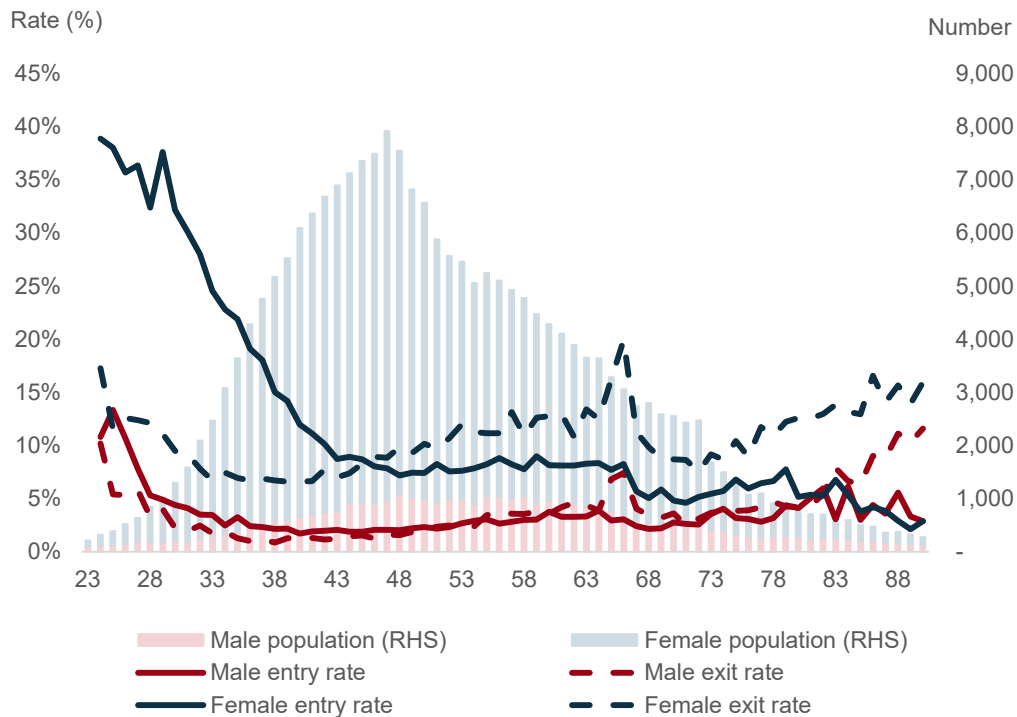


Figure 24: 2018/19 Entry and Exit Experience by Gender and Age for Class 8



2.8.49 Class 8 is a carer payment class and, as such, shares some of its characteristics with Class 4.

2.8.50 The population of Class 8 carers has been increasing, with the rate of exit generally decreasing in recent years. The increase in entry rate in 2018 is linked to the change in asset tests in 2017, which meant some people were no longer eligible for income support payments but still eligible for non-income support payments. This resulted in a movement of people out of income support classes, mainly Class 4 (Carers) and Class 6 (Pension Age), some of whom moved into Class 8.

2.8.51 A majority of entries into Class 8 carers are from existing welfare recipients, whereas exits are more evenly split between welfare and non-welfare classes.

2.8.52 Entry rates into Class 8 are higher at younger ages, where people are more likely to be caring for their children, their parents or their spouse. Class 8 is a non-income support class so many recipients are not eligible for income support payments. Thus, although a reasonable number move to Class 6 at retirement age, the retention of recipients within Class 8 is significant.

2.8.53 The majority of Class 8 recipients are female.

Class 9 (Non IS Other) Experience

2.8.54 The following analysis summarises trends in key experience parameters for Class 9.

Figure 25: Trends in Entry and Exit Rates for Class 9

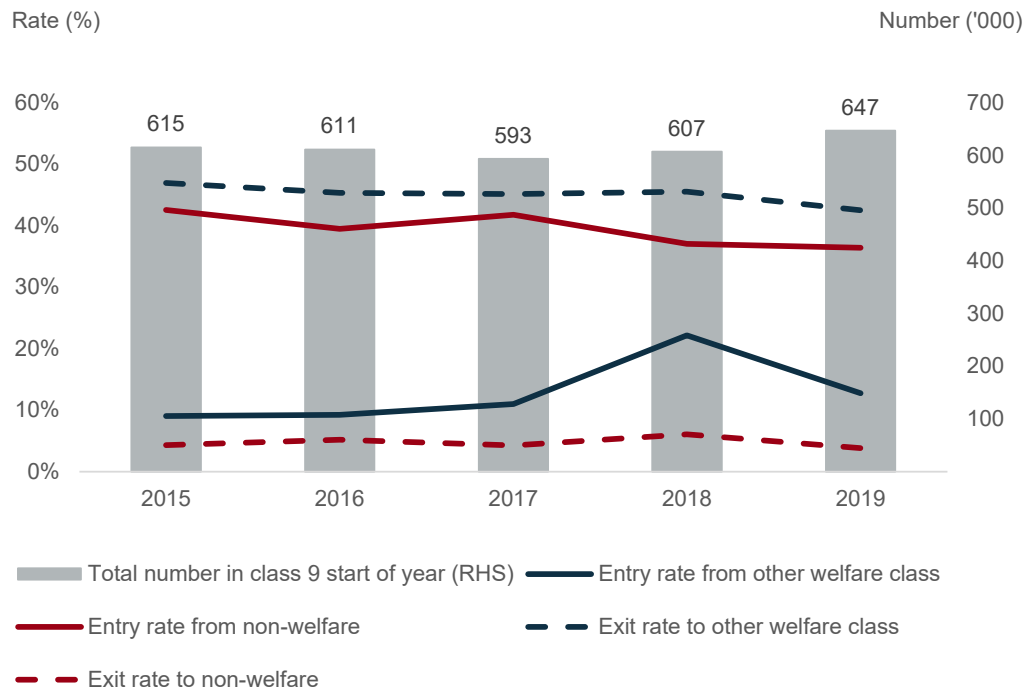


Figure 26: 2018/19 Entry and Exit Experience by Gender and Age for Class 9



2.8.55 The composition of Class 9 is more of a construct for modelling convenience rather than similarity of welfare types. It is composed of three different cohorts:

- Young people receiving school and study related payments (hence, a spike in entries at younger ages);
- Parents transitioning from non-welfare onto families payments (hence, an increase in in entries throughout the early 20s); and
- Retired people receiving supplements (hence, a spike in entries at Age Pension age).

2.8.56 Entries into Class 9 largely relate to people using FTB for the first time. These people will transition into Class 7 if they continue to utilise FTB in the following year. The reason these people enter into Class 9 rather than Class 7 initially, is because of a one year timing lag on the definition of people in Class 7.

2.8.57 Similar to Class 8, the increase in entries in 2018 is linked to the change in asset tests in 2017.

Interactions of movements between classes

2.8.58 As per the prior analysis, the profile of entrants, re-entrants, and exits from the welfare system varies significantly by age and gender, reflecting the way in which females and males access different classes at different stages of life.

2.8.59 Apart from overall entrants and exits, the movements of people between the various parts of the welfare system are also a key driver of changes in Lifetime Cost. The following chart shows the transition experience between each of the 9 welfare classes, based on 2017-18 to 2018-19 experience. Rates of movement are expressed as a percentage of population of class X.

Table 4: FY2018 to FY2019 Inter-Class Transfer Experience. Transfer Rate (%) and number of people (colour) from Class X to Class Y.

Class X	Class Y										
	1	2	3	4	5	6	7	8	9	11	10&12
1	62%	12%	0%	0%	0%	0%	1%	0%	1%	0%	24%
2	2%	71%	1%	1%	1%	2%	2%	0%	1%	0%	17%
3	0%	7%	80%	2%	0%	0%	10%	1%	0%	0%	1%
4	0%	4%	1%	89%	0%	2%	0%	1%	0%	0%	2%
5	0%	0%	0%	0%	94%	3%	0%	0%	0%	2%	1%
6	0%	0%	0%	0%	0%	95%	0%	0%	0%	4%	0%
7	0%	1%	1%	0%	0%	0%	79%	0%	4%	0%	15%
8	0%	1%	0%	2%	0%	1%	2%	87%	1%	0%	6%
9	0%	1%	1%	0%	0%	3%	37%	0%	52%	1%	4%
10&12	2%	4%	0%	0%	0%	2%	0%	0%	4%	0%	88%

Table 5: Legend: Cell Colour Reference

Number of People	Colour
> 100,000	Red
20,000 ≤ 100,000	Orange
5,000 ≤ 20,000	Blue
< 5,000	No fill

2.8.60 Across all classes, the high persistency of staying within a class over the 2018 to 2019 period is evident.

2.8.61 Classes 5 and 6 exhibit the highest persistency, which correspond to the low exit rates demonstrated in Figure 17 and Figure 18 (Class 5), and Figure 19 and Figure 20 (Class 6). Both are characterised by very low transitions to non-welfare (Class 10).

2.8.62 Significant transitions between classes include:

- Movements into working age (Class 2) from studying (Class 1), parents (Class 3), and carers (Class 4).

- Movements into non-income support – family (Class 7) from working age (Class 2) and parents (Class 3).
- Movements into Age Pension (Class 6) occurs from across the spectrum of the welfare and non-welfare population, notwithstanding that some welfare classes are age-restricted and, hence, are associated with transfer rates of 0% to Class 6. Classes 2, 4, 5 and 9 have significant transitions into Class 6 by both number of transfers and transfer rate.
- Age Pension (Class 6) and disability (Class 5) have a significant number (and rate) of exits due to death.

2.8.63 Overall, the main entry points into welfare are through working age (Class 2), non-income support families payments (with entry through Class 9), studying payments (Class 1), and Age Pension (Class 6).

2.8.64 It is important to note that the above rates are not age- or profile- weighted. For example, 3.9% of all people in Class 6 died in the year; although, for older age groups this would have been much higher.

Payment size per class

2.8.65 The average payment per welfare class is a key driver of Lifetime Cost. Table 6 presents the amounts for each class.

Table 6: Average Payments per Welfare Class, 2017-18 and 2018-19.

Class	Average Payment in Year		% Change in Past Year
	2018	2019	
1 Studying	7,500	7,500	0.0%
2 Working Age	11,500	11,800	2.6%
3 Parents	33,000	33,300	0.9%
4 Carers	27,400	28,000	2.2%
5 Disability Support	22,400	22,900	2.2%
6 Pension Age	17,600	18,000	2.3%
7 Non-IS Family	7,200	8,000	11.1%
8 Non-IS Carer	7,100	7,400	4.2%
9 Non-IS Other	2,900	3,200	10.3%
All welfare	14,200	14,800	4.2%

2.8.66 The average amount of welfare received per person on welfare is \$14,800 per annum, a 4% increase over the 2018 total of \$14,200 per annum. This amount is significantly weighted to the large number of those receiving the Age Pension, who in welfare Class 6 have an average payment of \$18,000 per annum. Note

that this average payment is influenced by both the maximum entitlement amount available (which increases in line with AWE each year), and the mix of age pensioners who receive that maximum amount (full pension), and those who receive less than that amount (part-pension). The mix of full and part pensions is expected to change over time in line with changes in means tests, eligibility criteria, employment and other income, the maturity of the superannuation system, and movements in individual superannuation and non-superannuation savings.

2.8.67 There is variability between welfare classes in terms of average payment amounts:

- Classes 1 and 2 recipients receive less payments than the average amount, with reflects the lower maximum amounts available.
- Classes 3-6 recipients each receive payments above the average amount, and show relative stability in the past 2 years.
- Recipients of support from non-income support classes (7-9) all receive payments below the average amount, as they are supplementary payments. An increase for classes 7 and 9 reflects the introduction of the new Child Care Subsidy from 1 July 2018.

3 Population level results

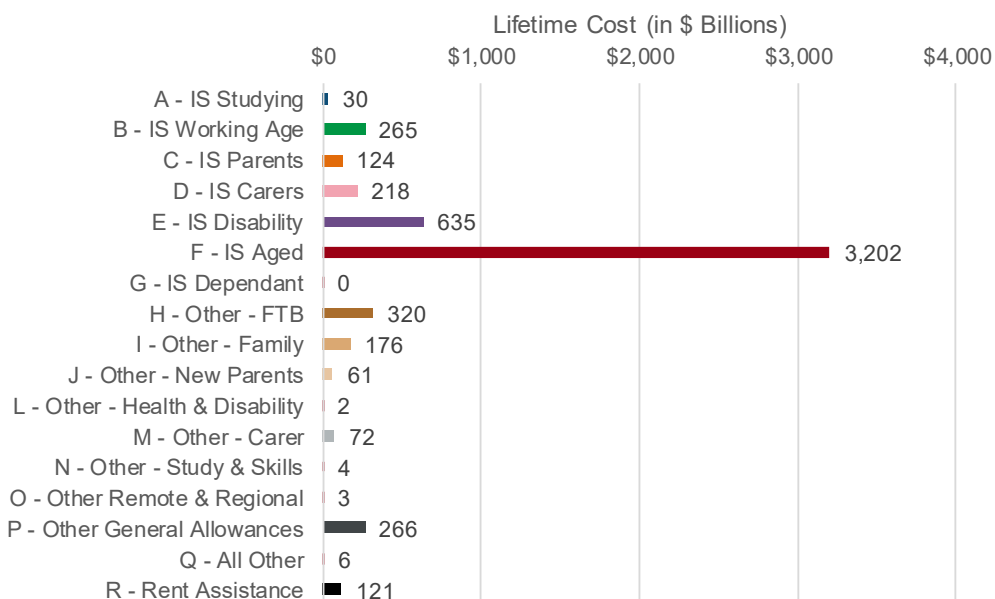
3.1 Total Lifetime Cost

3.1.1 As at 30 June 2019, the total Lifetime Cost for the model population is estimated to be \$5,506 billion. This represents the net present value of the in-scope payments expected to be made over the remaining lifetimes of the full model population. This value also represents a decrease of \$195 billion (3.4%) from the 30 June 2018 rebased valuation of \$5,701 billion.

3.2 Costs by payment category

3.2.1 A breakdown of the total Lifetime Cost by payment category is informative, as it identifies the actual type of welfare being paid. This breakdown is given below. A list of the payments included in these payment categories is included in Appendix C.

Figure 27: Composition of Lifetime Cost (\$ billion) by Payment Category



3.2.2 The major contributors to the total Lifetime Cost are:

- The Age Pension (\$3,202 billion, or 58.2% of the total). The total Lifetime Cost is dominated by the Age Pension, as a large proportion of the model population is likely to receive the Age Pension at some stage in the future.

- The Disability Support Pension (\$635 billion, or 11.5% of the total). Although only a small proportion of the population will access these payments, the average duration on payment and the payment rate are both higher than most other payment types.
- Non-income support families payments (\$557 billion, or 10.1% of the total). This includes payment categories H, I and J. A large proportion of the population will access these payments, however with a shorter duration and payment rate than the Age Pension.

3.3 Costs by modelled welfare class

- 3.3.1 A breakdown of the total Lifetime Cost by starting payment class aggregates the same payments as above, but allocates them according to the hierarchical class structure that is in place to allow the modelling process to run efficiently. For example, an individual in Class 1 at the valuation date will be receiving payments from welfare categories that are part of Class 1, but might also receive payments from other sources of welfare, either at the same time or in future years. A breakdown of payments by category (Figure 27) identifies the actual payment source, whereas a breakdown of payments by starting welfare class allocates payments according to the welfare class that an individual is defined/modelled to be in, in the valuation year.
- 3.3.2 A breakdown of the total Lifetime Cost by welfare class and payment category, and average Lifetime Cost per current recipient, are shown in Table 7 and Table 8.

Table 7: Composition of Lifetime Cost (\$ billion) by Payment Class and Category

Welfare class as at 30 June 2019	Total Lifetime Cost (\$ billion) arising from categories:				Total Lifetime Cost
	Income support		Non-income support		
	F: Age Pension	A-E,G: Other	H-J: Families	L-R: Other	
1 Studying	44	25	16	7	91
2 Working Age	205	168	31	44	447
3 Parents	59	86	60	23	227
4 Carers	59	64	10	25	157
5 Disability Support	54	286	5	41	386
6 Pension Age	487	1	1	57	546
7 Non-IS Family	223	59	74	30	385
8 Non-IS Carer	27	9	4	11	51

Welfare class as at 30 June 2019	Total Lifetime Cost (\$ billion) arising from categories:				Total Lifetime Cost
	Income support		Non-income support		
	F: Age Pension	A-E,G: Other	H-J: Families	L-R: Other	
9 Non-IS Other	56	19	18	8	101
10 Previous welfare recipient	679	123	54	75	932
12 Rest of Aust. population	1,311	433	285	153	2,182
Total	3,202	1,272	557	474	5,506

Table 8: Average Lifetime Cost (\$) by Payment Class and Category

Welfare class	Number in starting population	Average Lifetime Cost (\$) per person arising from categories:				Average Lifetime Cost
		Income support		Non-income support		
		F: Age Pension	A-E,G: Other	H-J: Families	L-R: Other	
1 Studying	340,063	129,073	74,040	46,152	19,738	267,597
2 Working Age	1,164,490	175,884	143,890	26,948	37,546	383,859
3 Parents	359,472	163,343	238,896	165,599	62,726	631,482
4 Carers	299,225	196,052	212,856	31,844	83,527	524,689
5 Disability Support	750,958	72,332	380,609	6,966	54,455	514,010
6 Pension Age	2,554,459	190,494	330	277	22,451	213,744
7 Non-IS Family	1,546,824	143,932	38,046	47,800	19,195	248,897
8 Non-IS Carer	219,193	123,028	41,284	18,649	49,378	232,672
9 Non-IS Other	649,362	85,911	29,235	27,789	13,079	155,537
10 Previous welfare recipient	5,106,718	132,932	24,155	10,602	14,764	182,505
12 Rest of Aust. population	12,491,173	104,941	34,658	22,833	12,274	174,683
Total	25,481,937	125,661	49,923	21,878	18,599	216,075

- 3.3.3 It is important to note that the average age of each class will have an impact on the size and composition of the associated Lifetime cost. For example, Class 6 has the oldest average age; hence, its average lifetime cost is the lowest of the income support classes. Furthermore, people in Class 6 will receive very little other income support or families payments.
- 3.3.4 The major features of the total Lifetime Cost, as allocated according to the currently modelled welfare classes, are as follows:
- The Age Pension dominates the total Lifetime Cost, with its contribution to the total Lifetime Cost equal to 58%. Of that contribution, 15% arises from those currently receiving the Age Pension, 23% from those who are in the welfare system but are not currently in Class 6, and 62% from those not currently in the welfare system. This means 85% of future Age Pension costs (corresponding to 49% of the total Lifetime Cost), arises from the projected future utilisation of the Age Pension, from those not currently in Class 6.
 - The next largest contributor to the total Lifetime Cost are the other income support payment categories which make up 23% of the total Lifetime Cost. Disability payments are the major component of this group, with 750,958 people currently in Class 5 and a high average Lifetime Cost of \$514,010 per person currently in that class.
 - Slightly more than half (54%) of the total non-income support Lifetime Cost arises from families payments. Those who are in classes 3 and 7 are the main contributors from those currently in the welfare system, as they are either currently receiving the payments, or will likely transition onto them. Those in Class 1 are generally several years away from the age of parenthood but will likely access families payments in the future, more so than other non-income support payment categories.
 - Other non-income support payments are primarily supplementary payments received alongside an income support payment, such as Commonwealth Rent Assistance. Amongst current welfare recipients, Class 6 is the highest contributor to the Lifetime Cost here, as everyone receiving the Age Pension in the projection receives a supplementary payment.
- 3.3.5 Those not currently in welfare (classes 10 and 12) account for a large proportion of the total Lifetime Cost as these classes make up 69% of the model population and reflect the expectation that many Australians who are currently not relying on welfare will need to do so at some point in the future. This is especially the case in respect of the Age Pension. A major difference between classes 10 and 12 concern the age distribution of each. Those under 18 years of age are generally in Class 12 as they have not accessed welfare yet, whereas Class 10

has an older demographic profile, as people need to be old enough to have accessed and then exited welfare.

3.4 Key drivers of cost

3.4.1 There are various factors that can be considered to be key drivers of overall Lifetime Cost. These arise from:

- the modelling process itself;
- the features of each benefit available, in terms of eligibility and payment criteria;
- the (demographic) characteristics that are correlated with or indicative of higher welfare utilisation over time; and
- those characteristics (namely, age and future life expectancy) which drive costs in terms of calculating a present value.

3.4.2 In terms of the modelling process, this requires the fitting of selected parameters to the data at each valuation. As a result, the relative influence of each parameter may change over time, and this is also impacted when new variables are added to the model.

3.4.3 An important driver of Lifetime Cost stems from the specific rules around each payment category. These rules, relating to eligibility and entitlement amounts, clearly have a direct influence on future welfare utilisation. For example, age is an important driver of future costs of the Age Pension, as people younger than the age of eligibility cannot receive an Age Pension. For various study benefits, relevant eligibility and, therefore, drivers of cost includes Indigenous status, age and SEIFA status. For working age benefits, SEIFA is again relevant, as is one's capacity to work. For parenting benefits, both the presence of children and the age of the youngest child are important drivers of cost, in terms of eligibility and expected duration of payments respectively. Furthermore, someone's partnering status and history are also key for parenting benefits, as those who are single receive a higher rate of payment. For Disability benefits, clearly the presence of certain medical conditions and/or disability status are part of eligibility criteria, and are therefore important drivers of cost as well. The SEIFA status, acting as a proxy variable for underlying levels of financial means (assets and/or income), underlies the eligibility across many welfare categories.

3.4.4 A further key driver of Lifetime Cost relates to those characteristics associated with higher future welfare utilisation, or entitlement amounts, or both. These drivers are influential not because of eligibility criteria *per se*, but because of individual characteristics that are shown to be correlated with higher overall payments.

- 3.4.5 For various working age benefits, gender and age are important, with gender in particular a significant factor for future families / parenting payments as females are generally expected to have a higher Lifetime Cost. Age is influential for future costs of carer payments, for two main reasons – [1] once younger carers start caring, they may be doing so for a while and have a longer expected future lifetime during which they can receive payment, and [2] carers who are parents looking after a child also face long durations of care. For disability benefits, age turns out to be influential in association with the type of condition involved. For example, those with congenital conditions typically receive welfare support from a young age and can have long durations of such support, whereas those incurring a disability at an older age may have a far shorter duration of welfare support. Parental welfare dependence is also a likely driver of Lifetime Cost for an individual, though the assessment of this factor is currently limited as parental welfare information is only available for a subset of the population.
- 3.4.6 A further driver of Lifetime Cost relates to factors such as age, which significantly impact the present value calculation. For example, those who are close to retirement age will (on average) have a higher Lifetime Cost from the Age Pension (in present value terms) than someone who is not. Gender also has specific significance for the Age Pension. The lower superannuation and financial assets of females, and their greater longevity, means their average Lifetime Cost from accessing the Age Pension will be greater than that for males.
- 3.4.7 Because of the overall influence of age and gender, a specific additional age/gender analysis is provided in the next section.

3.5 Analysis by age and gender

- 3.5.1 Figure 28 and Figure 29 show a breakdown of the Lifetime Cost by age (as at 30 June 2019) and gender.

Figure 28: Total Lifetime Cost by Age and Gender

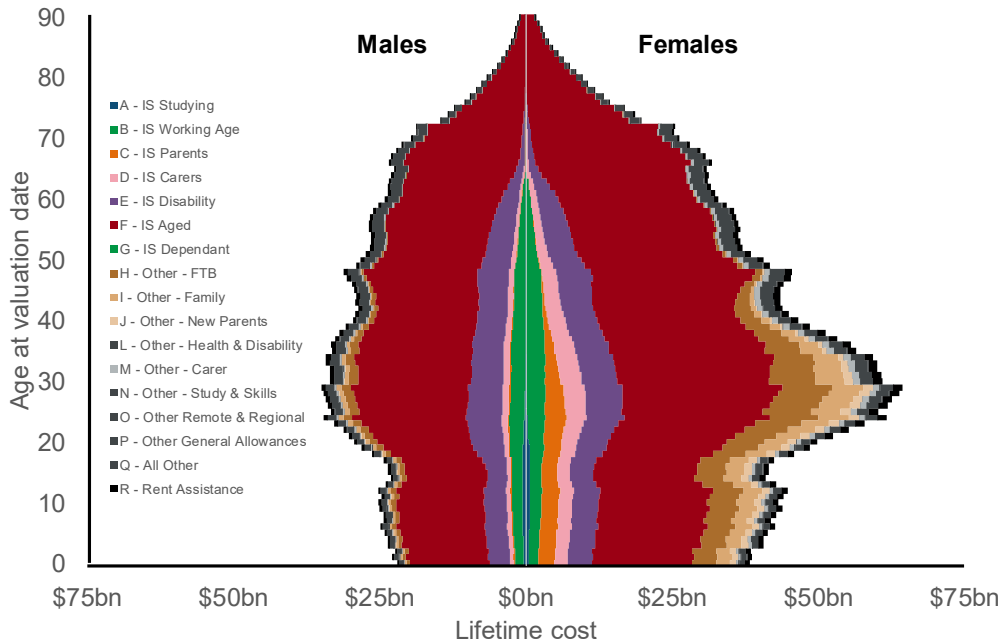
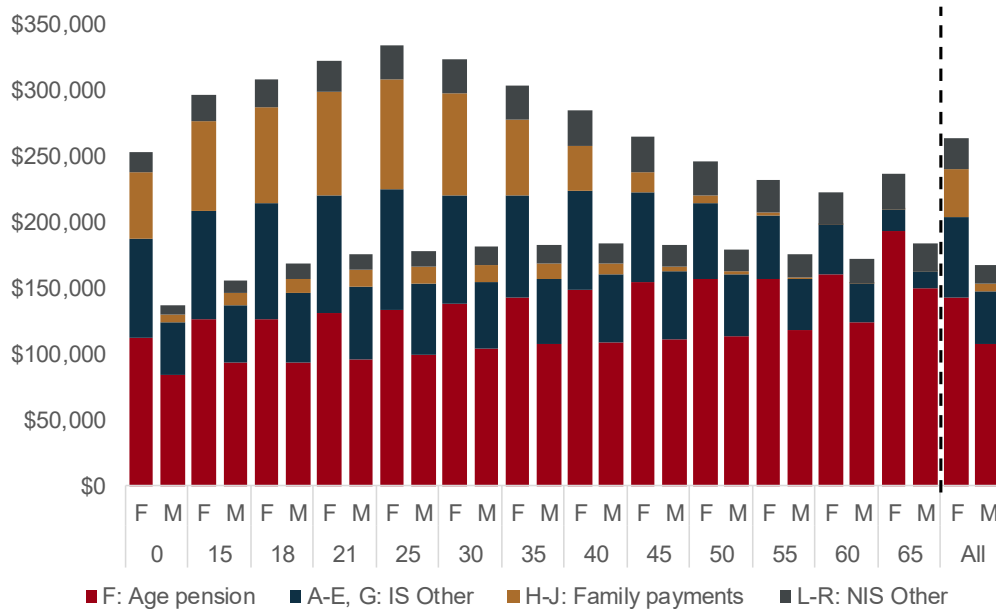


Figure 29: Average Lifetime Cost by Gender and selected ages



3.5.2 The total Lifetime Cost for females is higher than that for males, primarily owing to a higher usage of parenting payments, and non-income support families and FTB payments. It is also due to the higher expected longevity of females

compared to males, which gives a larger present value of Age Pension payments.

- 3.5.3 The Lifetime Cost in respect of the Age Pension is lower for younger people than for those who are older, mainly because their receipt of payments is further into the future, thereby discounting those payments more heavily to the valuation date of 30 June 2019. However, across all ages and both genders the dominant contribution of the Age Pension to the Lifetime Cost is again evident. This is due to: [1] the large number of people currently receiving the Age Pension; [2] the large number of people that will receive the Age Pension in the future; [3] the average annual payment being received under the Age Pension being higher than most other classes; and [4] once an individual starts receiving the Age Pension, they are likely to continue to receive the Age Pension for the remainder of their life. In other words, there is a long duration of receiving payments under the Age Pension payment category.

3.6 Differences in duration of payments

- 3.6.1 The influence of duration of payments also applies to other payment categories. For example, those currently on income support are expected to spend a greater proportion of their future lifetimes receiving income support than those not currently on income support. This is particularly the case for recipients of carer payments and the Disability Support Pension. A further example is those on JobSeeker Payment, where there is a correlation between past duration and future duration of receiving this assistance – that is, those remaining on JobSeeker for some time are more likely than others to be receiving JobSeeker in the future.
- 3.6.2 Table 9 below provides a summary of average duration of payments, by payment category, using two measures, [1] continuous use for someone who has just entered that payment category, and [2] overall future use of that payment category per recipient. For example, consider someone who enters payment category D and stays for 3 years, then exits, and re-enters payment category D later on and stays for 2 years. Under [1], there are two separate periods of welfare utilisation with an average duration of 2.5 years. Under [2], there is a total future utilisation of 5 years for that person who has entered payment category D. Only individuals aged under 15 years are included in the calculations for this table, as this cohort is a relatively homogenous age group and are unlikely to have used welfare. Using only people who have not received welfare, and who are of a similar age, removes the impact and potential bias of age and previous/current welfare utilisation on future utilisation

Table 9: Duration of Payments for Each Welfare Payment Category

Payment Category	Average Years of use per New Entrant	Average Years of use per Recipient	Percentage of Population who will Utilise this Category
A - IS Studying	2.7	3.2	36%
B - IS Working Age	3.6	6.8	53%
C - IS Parents	5.4	7.2	15%
D - IS Carers	7.2	8.6	11%
E - IS Disability	19.8	20.8	11%
F - IS Aged	18.4	19.0	67%
G - IS Dependent	Payment closed to new entrants		
H - Other - FTB	2.9	8.7	49%
I - Other - Family	2.5	6.9	44%
J - Other - New Parents	1.4	2.6	46%
L - Other - Health & Disability	3.0	3.3	7%
M - Other - Carer	6.0	7.5	27%
N - Other - Study & Skills	2.2	3.3	29%
O - Other Remote & Regional	6.1	7.9	10%
P - Other General Allowances	10.2	25.1	89%
Q - All Other	1.2	1.6	25%
R - Rent Assistance	5.8	12.0	60%

3.6.3 Average years of use per new entrant is a measure of the continuous use of a payment. Some payment categories have significantly longer continuous durations, most notably disability and Age Pension payments. Once people start accessing these payments they are unlikely to stop until death (or transfer from disability onto the Age Pension). Carer payments (D and M) also have a slightly longer continuous duration, with duration driven by the needs and lifetime of the caree.

3.6.4 Average years of use per recipient is a measure of the future use of a payment for those who will receive it at some point. The difference between 'average years of use per new entrant' and 'average years of use per recipient' therefore highlights payment categories that people are more likely to access multiple times in their life. One example is JobSeeker (B) where people may be in and out of work, or may access it when they are first looking for work and then again in the years before retirement. Another example is families payments,

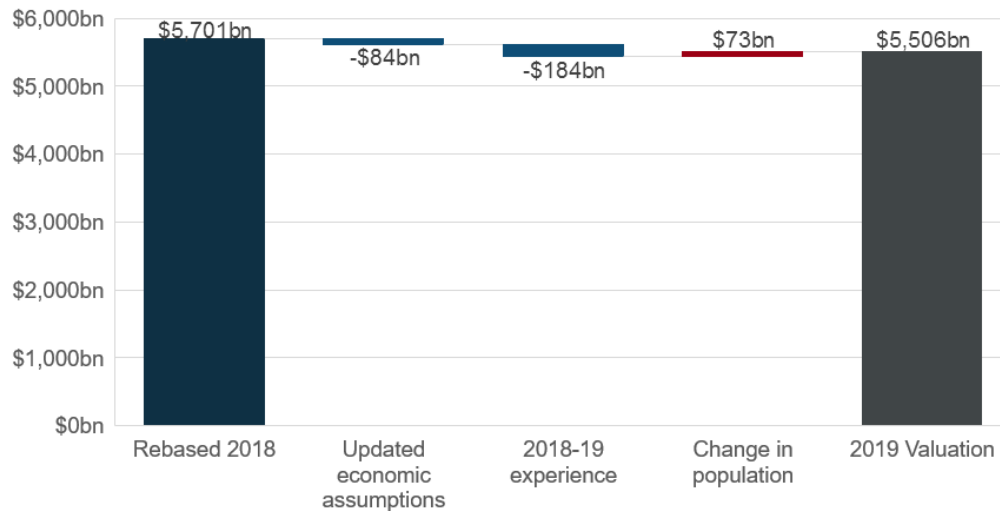
predominantly H & I, where people can access payments multiple times with additional children.

- 3.6.5 In terms of assessing the future use of payments for the average Australian, the final column gives an indication of this and therefore infers the proportion of the population who will not access that payment category at all. This measure highlights payments that are used more broadly across the population, with Age Pension and Working Age payments being the primary examples. Note that people on Working Age payments include those looking for work in the years immediately prior to retirement age.

3.7 Analysis of change from 2018 to 2019

- 3.7.1 Compared to the 30 June 2018 rebased valuation of \$5,701 billion, the 30 June 2019 valuation of \$5,506 billion represents a 3.4% decrease in the Lifetime Cost.
- 3.7.2 Changes in the valuation will occur over time, as measured at each year's valuation date, for a number of reasons. These reasons include:
- changes to the size and composition of the population through, for example, births, deaths, and migration since the last valuation; and the ageing of the remaining population by one year in the interim;
 - the impact of general economic conditions, such as unemployment and inflation;
 - inflationary increases on the rates of payment;
 - changes to welfare payments arising from policy changes, and from the changing profile of those receiving payments;
 - changes to both the current and expected future utilisation of each part of the welfare system; and
 - external changes, such as the change in the discount rate.
- 3.7.3 In order to understand the overall change in the Lifetime Cost, we now present an analysis of change in the valuation over the last year. This analysis groups together factors that have contributed to this change, and examines the changes occurring within each payment category.
- 3.7.4 This analysis is sensitive to the order in which the changes are made. For instance, the impact of updating assumptions regarding movements between modelled welfare classes will be influenced by the numbers of people in that class, and so will differ depending on the order in which the population information and welfare class assumptions are updated.
- 3.7.5 A visual representation of the analysis of change is shown in Figure 30.

Figure 30: Explanation of change in Lifetime Cost (relative to June 2018-rebased)



Movement due to economic changes

- 3.7.6 As a result of changes in economic experience and assumptions, the valuation result has decreased by \$84 billion (1.5%). The primary economic factors relevant to this valuation are unemployment, wage growth and inflation.
- 3.7.7 The primary driver of the economic change is the longer forecasted timeframe for AWE to reach its long-term rate of 4%. Age Pension payments are most impacted by this change.

Movement due to 2018-19 experience and policy changes

- 3.7.8 Movement due to 2018-19 experience and policy changes formed the primary driver of the lower 2019 valuation result, decreasing the rebased 30 June 2018 result by \$184 billion (3.2%).
- 3.7.9 Changes in class-specific experience flow on from the discussion in Section 2, which summarises recent changes in each modelled welfare class. In general, slightly lower utilisation of welfare, combined with relative stability in average payment size, has given rise to the overall decrease.
- 3.7.10 Changes to the welfare system also directly influence the utilisation and entitlement amounts within each welfare class and payment category. The impact of such policy changes in 2018-19 have been relatively minor and are included in the \$184 billion experience change.

Movement due to population changes

- 3.7.11 Each year, we expect the total Lifetime Cost to change in line with movements in the population. At the June 2019 valuation, the overall Lifetime Cost increased by \$73 billion (1.3% of the 30 June 2018 rebased valuation) due to the change in the starting population.
- 3.7.12 There are two main population drivers of this change in Lifetime Cost. One is the size of the starting population, which grew over the 2018-19 financial year by 1.8%. The other is the proportion of the population on welfare at the valuation date, which decreased and now represents 30.9% of the population (down from 31.8% at June 2018). The combined impact of a larger overall population, but a lower proportion of that population currently on welfare, gives rise to 1.1% fewer people overall on welfare, in the starting population, in terms of absolute numbers.

Total movement by payment category

- 3.7.13 Movements in the Lifetime Cost arising from all changes described above do not impact every welfare class or payment category in the same way. For instance, certain assumption changes will only affect particular classes, population growth may differ by class, and the observed trends in welfare utilisation and behaviour will also differ by class. These changes are better examined by considering category-specific impacts of emerging experience observed over the year, together with changes about assumptions in the future, which are themselves reflective of this experience.
- 3.7.14 For each payment category, the change in Lifetime Cost is considered in respect of changes in experience and future assumptions, regarding entries, exits, and average payment amounts. An analysis of change is shown in Table 10.

Table 10: Change in Lifetime Cost by payment category

Payment Category	Lifetime Cost \$m for Year End:		Change in Lifetime Cost	
	30 June 2019	30 June 2018	\$m	%
A - IS Studying	29,704	34,770	-5,066	-14.57%
B - IS Working Age	265,256	311,024	-45,768	-14.72%
C - IS Parents	124,481	143,314	-18,833	-13.14%
D - IS Carers	217,769	250,752	-32,983	-13.15%
E - IS Disability	634,716	628,517	6,199	0.99%
F - IS Aged	3,202,087	3,276,644	-74,557	-2.28%
G - IS Dependent	201	385	-184	-47.89%

Payment Category	Lifetime Cost \$m for Year End:		Change in Lifetime Cost	
	30 June 2019	30 June 2018	\$m	%
H - Other - FTB	320,370	324,086	-3,716	-1.15%
I - Other - Family	175,876	178,150	-2,274	-1.28%
J - Other - New Parents	61,252	53,736	7,516	13.99%
L - Other - Health & Disability	1,634	3,538	-1,904	-53.83%
M - Other - Carer	72,169	71,906	263	0.37%
N - Other - Study & Skills	4,337	4,440	-103	-2.32%
O - Other Remote & Regional	2,566	2,356	210	8.93%
P - Other General Allowances	265,558	280,484	-14,926	-5.32%
Q - All Other	6,289	6,108	181	2.97%
R - Rent Assistance	121,382	130,331	-8,949	-6.87%
Total	5,505,647	5,700,540	-194,893	-3.42%

3.7.15 The major contributor to the overall decrease in Lifetime Cost is the Age Pension, which contributes \$75 billion (38%) of the total decrease. A decreased use of the Age Pension is projected in the future, driven by a number of factors:

- The ongoing accumulation of superannuation over time will help delay entry into the Age Pension for many people, resulting in fewer people accessing the Age Pension in a given year. Although this simulation includes assumptions regarding this likelihood, annual adjustments are expected as additional data brings more information.
- The increasing Age Pension eligibility age will further delay entry into the Age Pension.
- Reduced pre-retirement welfare dependence is projected to result in reduced Age Pension usage in the future.
- The lower AWE forecasts result in lower present value of future payments.
- Partially offsetting the above factors are the policy changes implemented in 2018-19, relating to changes to the Work Bonus and deeming rates. These policy changes slightly increased pension payments.

3.7.16 Most of the pre-retirement income support categories have also decreased, with continued falls in entry rates for these classes being the primary driver. The

longer forecasted timeframe for AWE and CPI to reach their respective long-term rates also contributed to lower Lifetime Costs, through a reduced present value of future payments. For the disability class, other than a large decrease in exits in 2017-18 arising from an increase in the Age Pension age, experience has been relatively stable, resulting in little change in its Lifetime Cost.

- 3.7.17 Overall, there has been a slight increase in non-income support families, in aggregate across payment categories H, I and J. Policy changes introduced in 2018-19 have had an impact here, although the full impact of changes from Child Care Benefit (CCB) and Child Care Rebate (CCR) to Child Care Subsidy (CCS) are not yet represented in the data.
- 3.7.18 The other significant movements were in payment categories P and R. These payments are predominantly supplementary payments for people on income support payments. The reduction in the number of people projected to access income support has thus had a flow on impact to these payment categories.

3.8 Sensitivity analysis

- 3.8.1 Clearly, many factors may influence future welfare utilisation and the Lifetime Cost. These include changes on the demand side of welfare, with changes in patterns of life and work; changes in the composition of households; and changes in the mix of industries and work opportunities. On the supply side, impacts of trends in population health and healthcare are important, as are changes in the availability and usefulness of informal support provided between members of families and other social groups. Furthermore, the long-term nature of cashflows underlying the Lifetime Cost means that there is some sensitivity of the Lifetime Cost to key assumptions.
- 3.8.2 We vary key assumptions relating to mortality, economic factors and welfare utilisation in order to indicate the sensitivity of the Lifetime Cost to changes in these assumptions. This highlights that the central estimate of the Lifetime Cost is subject to uncertainty, and some contributors to that uncertainty are broadly quantified in the following analysis. The likelihood of each variation is not assessed.
- 3.8.3 One key demographic assumption relates to future rates of improvement in mortality. With the Age Pension typically having a long duration of payments in respect of an individual recipient, changes to how mortality may change in the future can have a significant impact on how long they receive Age Pension payments. Hence, some variation in this future improvement is considered.
- 3.8.4 Other key assumptions relate to the broader economic environment. The Lifetime Cost is based on this remaining relatively consistent over time, particularly with respect to inflation and unemployment. However, many welfare

payments are not received until many years into the future – for example, the Age Pension for those who are currently young. This means small changes in indexation rates can have a large impact on the Lifetime Cost. Rates of unemployment also influence the future utilisation of welfare, thereby the Lifetime Cost as well. The overall Lifetime Cost is also sensitive to the interest rate used to discount future cashflows. As a consequence, variations in these assumptions are considered as well.

- 3.8.5 Any projection of future welfare utilisation is sensitive to a range of factors and, therefore, the projected entry rates and exit rates under each modelled class are sensitive to variations in these assumptions. One such factor relates to legislated policy, for which current policy is assumed to remain in perpetuity, despite the fact that policies relating to the welfare system change frequently. Furthermore, some policy settings, already adopted and included in the valuation, are recent changes which are not yet fully reflected in the observed experience. These considerations mean that the assumptions are inherently uncertain and the actual future experience may differ from that modelled.
- 3.8.6 As well as uncertainties arising from policy assumptions, the behaviour and response of current and future welfare recipients may also change over time – to either policy, and/or economic changes. In addition, changes over time in key individual characteristics do occur, for example educational attainment, SEIFA status, capacity to work, partnering status, and number and ages of children.
- 3.8.7 Importantly, the Lifetime Cost assessment for the non-welfare population may be even more uncertain than the Lifetime Cost for people currently and recently in receipt of welfare. This is because less is known about the characteristics of those not within the DSS data, and because their projected future welfare utilisation is further into the future than for current welfare recipients. Hence, variations in the entry and exit assumptions from welfare to non-welfare, and non-welfare to welfare, are considered as part of the sensitivity analysis.

Sensitivity results

- 3.8.8 The sensitivity of the Lifetime Cost to key assumptions is provided in Table 11. Economic sensitivities are additional changes relative to valuation assumptions (that is, an additive change [\pm %]), and mortality and welfare utilisation sensitivity are proportional change relative to valuation assumptions (that is, a multiplicative change [\times {100% \pm change%}]).

Table 11: Sensitivity of Lifetime Cost to Changes in Assumptions

Sensitivity Test			Change (%) in future Lifetime Cost in payment categories:				Total change in Lifetime Cost	
			Income support		Non-income support		\$billion	%
			F: Age Pension	A-E,G: Other	H-J: Families payments	L-R: Other		
Mortality	Future improvements: +10%		0.9%	0.3%	0.0%	0.1%	74	1.3%
	Future improvements: -10%		-0.7%	0.0%	0.0%	0.0%	-35	-0.6%
Economic	Discount rate	+1%	-17.1%	-4.5%	-1.4%	-1.7%	-1,353	-24.7%
		-1%	29.2%	6.8%	1.7%	2.6%	2,209	40.3%
	CPI	+1%	0.0%	1.2%	1.5%	2.4%	281	5.1%
		-1%	0.0%	-0.9%	-1.2%	-1.6%	-202	-3.7%
	MTAWE	+1%	28.8%	5.6%	0.0%	0.0%	1,882	34.4%
		-1%	-17.2%	-3.6%	0.0%	0.0%	-1,138	-20.8%
	Long term unemployment rate	+2%	2.4%	4.4%	0.2%	0.7%	419	7.7%
		+1%	1.2%	1.9%	0.1%	0.3%	193	3.5%
		-1%	-1.2%	-1.5%	0.0%	-0.3%	-164	-3.0%
Welfare Utilisation	Overall entry rates into welfare from non-welfare: +10%		2.1%	1.0%	0.4%	0.3%	210	3.8%
	Overall entry rates into welfare from non-welfare: -10%		-2.6%	-0.8%	-0.4%	-0.3%	-227	-4.1%
	Overall exit rates from welfare to non-welfare: +10%		-0.2%	-0.4%	-0.1%	-0.1%	-42	-0.8%
	Overall exit rates from welfare to non-welfare: -10%		0.2%	0.7%	0.2%	0.1%	66	1.2%

3.8.9 Changes in mortality improvements primarily impact the Age Pension and disability payments. The greater the future improvement in mortality, then the higher the life expectancy in the future, and longer duration of payments that results. The 10% movements in future mortality improvements have an impact of approximately 1% on the Lifetime Cost.

3.8.10 The discounting assumptions have a large impact on the lifetime cost results. Many of the payments, particularly the Age Pension, are not received until many years into the future and, for some of the population, are concentrated in the latter part of people's lives. This means small changes in the discount rates can

have a large impact on the Lifetime Cost. Note that the change in discount rate has no impact on future cashflows; it only impacts the net present value of these cashflows and, therefore, the estimated lifetime cost.

- 3.8.11 Indexation and discount rates both impact on the Lifetime Cost. The impact to the Lifetime Cost is greatest for changes to the discount rate (assuming indexation remains constant) as this impacts all future payments over all timeframes. Changes to AWE have a greater impact than changes in the CPI (assuming a constant discount rate) as the payments that occur later in people's lives benefit from AWE benchmarking and have a longer average duration.
- 3.8.12 The AWE assumptions directly impact the size of payments made, which for the Age Pension, and Disability Support Pension have the most significant effect on the Lifetime Cost. To highlight the impact of increasing the AWE assumption, a 1% increase to the base 4% assumption represents a 25% proportional increase. The CPI assumptions directly impact the size of some income support and non-income support payments. These payment categories have smaller future Lifetime Costs than Age Pension and Disability Support Pension so the sensitivity impact is smaller.
- 3.8.13 Changes in the unemployment rate affect the number of people both entering and exiting welfare. JobSeeker is one of the main payment categories that is directly impacted, but a range of impacts are also evident across the spectrum of payment categories. Some of the impacts are downstream; for example, a rising unemployment rate may lead to more people entering JobSeeker, which will then increase their propensity for future Age Pension usage.
- 3.8.14 Adjusting entry and exit rates impacts all payment categories, as would be expected, as this directly changes the number of people in welfare. The Lifetime Cost is far more sensitive to changes in entry rates from non-welfare into welfare, than exit rates from welfare to non-welfare. Two drivers of this effect are [1] the relative size of the non-welfare population means that small changes result in large movements of people, and [2] someone who exits from welfare is more likely to re-enter welfare than someone who has never previously been in welfare. As an increase in new entrants brings someone into welfare who was not previously in the system, this increases both the immediate cost and the associated costs of greater connection with the welfare system in the longer term. Those leaving welfare are likely to have a continuing connection with welfare at some stage, so the proportionate increase in Lifetime cost is less with lower exits, than it is with higher entries.

Adverse scenarios

- 3.8.15 The sensitivity analysis considers each area of uncertainty independently from another. In reality, there is dependence between one item of experience

changing, and another. For example, the sensitivity analysis looks at an unemployment increase of 1% in isolation and does not consider any related changes in AWE that may happen. It is likely that an economic shock would not only have an immediate impact on unemployment, but subsequent government responses would impact inflation, welfare policy would likely change, individuals would change their circumstances and plans to adjust, and so on. In an extreme economic shock, aggregate mortality would also be impacted.

- 3.8.16 The recent COVID-19 pandemic, occurring after the valuation date of 30 June 2019, highlights the above point. It will clearly have a widespread and significant impact on a range of welfare policies, payments and services, and will adversely impact the result of the next valuation.
- 3.8.17 The 2020 valuation will be required to account for the direct costs of short-term support provided, the impact on unemployment, the time taken for employment to recover, and longer term impacts on retirement savings that will likely eventuate due to periods of lower contributions and asset volatility. The 2019-20 financial year data will provide information on the first few months of COVID-19 related welfare usage.

APPENDIX A: GLOSSARY

Actuarial valuation

Estimation of the Lifetime Cost of future social security payments to the Australian Government using generally accepted actuarial principles.

Allowances

Allowances provide income support and access to a range of concessions for eligible Australians. The term Allowance is used by DSS to refer to income support payments that are generally at lower payment levels than Pensions.

Assumptions

Assumptions are the parameters that guide the model - these include 'macro' assumptions such as economic forecasts and demographic assumptions; and 'micro' assumptions such as probabilities of individuals moving into and through the welfare system based on various risk factors.

Average Lifetime Cost (future)

The net present value of the payments that we expect to be made to an individual over their future lifetime. Note that these will be assessed for groups of similar individuals, not for specific people.

Data

Data refers to sets of information that are being used to inform the project.

Datasets

A set of values of qualitative (characters) or quantitative (numbers) variables that is data coded in a form suitable for using in analysis.

Data maturity

The model data is built by attributing payment information into the year in which a welfare recipient was entitled to a payment (which may differ in some cases from the year when the payment was actually received). The data includes all information known and recorded up to 3 months after the valuation date, i.e. 30 September, which is also the 'as known at' date for the data. In some cases, further information about a previous entitlement year will only be known at a later date, and the currently known data is said to be immature in these cases. The main maturity issues noted in the valuation relate to the latest entitlement year and a key example is FTB, which is received through the tax system and is often only claimed after the end of the year of entitlement. The model makes various adjustments to allow for the impact of data maturity.

Discounting

The process of determining the present value of a payment or a stream of payments that is to be received in the future. Given the time value of money, a dollar is worth more today than it would be worth tomorrow given its capacity to earn interest.

Duration on welfare

The number of financial years in which an individual has received a welfare payment. This includes income support payments, as well as non-income support payments.

Dynamic

A term we are using to describe information or data variables that change with the progression of time (e.g. a person's partner status).

Flow assumptions

This comprises the set of assumptions used to ascertain how each person's individual demographic and risk characteristics change as time progresses.

Group

In this report we have used the term group to refer to a group of people defined by a set of common characteristics in the model - for example, a group could be "females aged 20 to 24 who were in welfare class 'Studying' in 2014/15" or could be "male carers". Generally, groups will be defined by the model structure and individuals' characteristics.

Income support payments

Income support payments provide for the basic living costs of adults, and are paid on a fortnightly basis. Income support payments are the primary form of financial assistance for individuals who are unable, or not expected, to fully support themselves. Examples include Age Pension, JobSeeker Payment (formerly Newstart Allowance), Disability Support Pension, Carer Payment and Parenting Payment. Other supplementary payments are also available to assist people with other specific costs. For example, Family Tax Benefit Part A is provided for the direct costs of raising children and child care assistance is provided to assist with the costs of child care. For the purposes of this document, these payments are referred to as non-income support payments.

Indexation

Indexation is a technique to adjust payments by means of an index, in order to maintain an equivalence in values across years. For example, indexing in line with price inflation will maintain an equivalence of payments after indexation relative to purchasing power; while indexing in line with wage inflation will maintain an equivalence of payments after indexation relative to community living standards.

Liability

In finance, the term liability is used to refer to general obligations to make future payments. The specific meaning varies depending on the person using the term and context of its use. Actuaries may also use this term to describe the net present value of the cashflows arising from future obligations.

Lifetime Cost

The Lifetime Cost is the net present value of all future welfare payments (to the in-scope population).

Method

The method refers to the description or specification of the process for selecting modelling techniques, taking the data, analysing it, developing or incorporating assumptions about the future, and projecting forward and summarising the expected welfare payments for each individual within the model population.

Model

The model refers to the set of computer programs, spreadsheets, formulae, techniques and tools that are built in order to apply the method. In a sense, the model is intended to represent, in a mathematical way, what happens to people as they move in, through and out of the social support system based on various assumptions. The model is a collection of modules and sub-components that fit together in applying the method.

Model population

The model population is the set of individual person records used in the model. The model design allows the model to be run for either a sample of the population or the whole population. Where the model is run for the entire model population, and not a sample, we refer to this as the full population.

Model (Australian) population

The set of individual person records used in the model, representing the Australian resident population together with current overseas welfare recipients.

Mutual obligation requirements

A set of activities that must be completed by an individual in order to receive JobSeeker Payment (formerly Newstart Allowance), Youth Allowance as a job seeker, Parenting Payment Single after the recipient's youngest child turns 6, and some types of Special Benefit. Welfare recipients may be granted either a permanent or a short-term exemption from these obligations in some situations; for example, due to disability or a personal crisis.

Net Present Value

The sum of the present value of incoming and outgoing cashflows over a period of time.

Neural Network

Neural Networks (or artificial neural networks to differentiate them from biological brains) are a machine learning algorithm originally inspired by biological brains, that can automatically identify patterns in data and then make predictions based on those patterns. For the 2019 valuation they have replaced the Generalised Linear Models (GLMs) used in previous valuations as they require less manual fitting and are more able to identify complex patterns in the data such as interactions between predictors.

Parental welfare dependence

A measure of the level of welfare dependence of a person's parents / guardians during the course of that person's childhood (up to the age of 15). For the purposes of this

document, we have only considered the use of income support payments (excluding the Age Pension) by a person's parents / guardians.

Payment

A generic term used to describe all the different types of benefits an individual can be paid. This includes pensions, allowances, entitlements etc.

Payment assumptions

The assumptions that describe the payments which individuals receive given that they use a specific payment category.

Payment categories

The groupings of individual payment types used for modelling purposes.

Payment types

A term used to describe the labels assigned to all the underlying payments so they can be considered for modelling purposes. The assignment has been through a mapping process, with around 2,000 underlying payments identified by codes and mapped to around 100 payment types.

Payment utilisation assumptions

The assumptions that describe the probabilities with which individuals use different payment categories.

Pensions

Pensions provide income support and access to a range of concessions for eligible Australians. The term Pension is used by DSS to refer to income support payments that are generally at higher payment levels than allowances.

Present Value

The present value is the value of an expected income stream determined as of the date of valuation. The present value is always less than or equal to the future value because money has interest-earning potential, a characteristic referred to as the time value of money.

Probability

Probability is the measure of the likelihood that an event will occur. Probability is quantified as a number between 0 and 1 (where 0 indicates impossibility and 1 indicates certainty). The higher the probability of an event, the more certain we are that the event will occur.

Projection

The use of the model to forecast the future payment experience of the population based on current statistics and trends.

Rebased June 2018 valuation results

The results from the June 2018 valuation, adjusted to allow for the updated modelling approach and use of more recent demographic data. Rebasing the June 2018 valuation results allows an analysis between June 2018 and June 2019 valuation results that depends only on relevant movements in experience between 1 July 2018 and 30 June 2019.

Risk characteristics

Measurable or observable factors or characteristics used to assign each individual to one of the risk classes of a risk classification system. Examples of risk characteristics in the context of the actuarial valuation model include age, gender, family situation and education status.

Risk classes

A set of risks grouped together under a risk classification system.

Risk classification system

The process of systematically arranging risks into groups or categories according to similar risk characteristics.

Risk factors

See 'Risk characteristics'.

SEIFA

Socio-Economic Indexes for Areas. A product developed by the Australian Bureau of Statistics that ranks areas in Australia according to relative socio-economic advantage and disadvantage.

Simulation

Simulation is the imitation of the operation of a real-world process or system over time. In the context of the actuarial valuation model, we will simulate how the payment system operates. Where the system is stochastic, multiple simulations may be used to show the range of possible outcomes.

Static

A term we are using to describe information or data variables that do not change over time. For example, a person's date of birth or country of birth.

Statistics

The study of the collection, analysis, interpretation, presentation, and organisation of data.

Stochastic

The term stochastic describes events or systems that are unpredictable due to the influence of random variables. A stochastic model will not produce the same output from a given starting condition or initial state even if run in the same way.

Valuation

See Actuarial valuation

Valuation Date

The reference date for the actuarial valuation. The valuation will consider the Lifetime Cost as at the valuation date for all payments after the valuation date.

Valuation Results

The summarised outputs from the model, in aggregate for the entire model population as well as population subgroups of interest.

Work capacity assessment

An assessment of an individual's level of functional impairment and work capacity. This is expressed in the data as the number of hours in a week they are capable of working.

Welfare class

Unique segments within the model which each person is assigned to. There are 12 classes: 6 for income support recipients, 3 for non-income support recipients, and 3 for the rest of population. Each person is assigned to the single most appropriate category for each financial year, and can move between classes in future years.

Welfare class assumptions

The assumptions that describe the probabilities with which individuals move between welfare classes.

Welfare dependence

Welfare dependence is used to describe the historical and / or expected future level of welfare use for a group of people. A group with high welfare dependence would either have high historical welfare use or high expected future welfare use.

Welfare system interaction

The receipt of a welfare payment (including both income support and non-income support payments) by an individual.

Welfare utilisation assumptions

A term covering both the welfare class and payment utilisation assumptions.

APPENDIX B: POLICY AND OPERATIONAL CHANGES

B.1 The following table summarises the list of policy changes provided by DSS in respect of earlier years' model development. This includes policy changes that [1] took effect prior to the previous valuation of 30 June 2018, [2] took effect subsequent to the previous valuation date of 30 June 2018 but prior to the current model's census date of 30 September 2019, and [3] will take effect beyond the current model's census date of 30 September 2019.

B.2 Adjustments made in the previous model to account for potential impacts of policy changes given below, were reviewed and then updated if required.

Table 12: Policy changes advised prior to 30 June 2018

Amendment	Year Effective	Description
Parenting Payment transitional arrangement Social Security Amendment (Parenting Payment Transitional Arrangement) Act 2011	2011	Changed ability to access transitional arrangements.
Work rule for Disability Support Pension Social Security and Other Legislation Amendment (Disability Support Pension Participation Reforms) Act 2012	2012	From 1 July 2012, all Disability Support Pension recipients can work up to 30 hours a week without having their payment suspended or cancelled.
Changes to the eligibility criteria for Youth Allowance (Other) and Newstart Allowance Social Security and Other Legislation Amendment (Income Support and Other Measures) Act 2012	2012	The maximum age for Youth Allowance for non-students and the minimum qualification age for Newstart Allowance increased from 21 to 22 years. The income free area value was increased from \$62 per fortnight to \$143 per fortnight and the working credit limit value was increased from \$1000 to \$3500 for all Youth Allowance (Other) recipients.
Clean Energy Advance (CEA)	2012	The Clean Energy Advance (CEA) was introduced in May 2012.
Clean Energy Supplement and other measures Clean Energy (Household Assistance Amendments) Act 2011	2012-2013	From 1 July 2013, the normal payment indexing arrangements and the Clean Energy Supplement (CES) began to deliver assistance related to carbon pricing. In addition, amendments were introduced for the Low Income Supplement, Essential Medical Equipment Payment, Single Income Family Supplement and aged care.
Family Tax Benefit and Youth Allowance	2012	The maximum age limit for a young person to qualify as a dependent child for Family Tax Benefit Part A (FTB-A) changed from aged under 25 to aged 21.

Amendment	Year Effective	Description
Family Assistance and Other Legislation Amendment Act 2011		This change aligns with the age of independence recognised in Youth Allowance. As at 1 January 2012, a young person is considered independent for Youth Allowance purposes once they turn 22.
Supporting Families with Teenagers	2012	From 1 January 2012, Family Tax Benefit Part A increased for eligible families with dependent 16-19 year olds who are undertaking full-time secondary study. The maximum rate increased by up to \$161.42 per child per fortnight, to \$214.06.
Removal of the grandfathering provisions and other measures Social Security Legislation Amendment (Fair Incentives to Work) Act 2012	2013	Grandfathering provisions for some Parenting Payment recipients were removed. For certain Newstart recipients, there were changes to the eligibility for certain supplements and allowances and to income taper rates.
New Income Support Bonus Social Security and Other Legislation Amendment (Income Support Bonus) Act 2013	2013	The Act created a new Income Support Bonus to be paid to recipients of Newstart Allowance, Youth Allowance, Parenting Payment, Sickness Allowance, Austudy Payment, Special Benefit, ABSTUDY Living Allowance, Exceptional Circumstances Relief Payment, and Transitional Farm Family Payment.
Austudy	2013	The maximum length of temporary absence was reduced.
Age / study rules for children for family assistance payments Social Security and Other Legislation Amendment (2012 Budget and Other Measures) Act 2012	2013	The maximum age of eligibility for FTB Part A was further reduced to 17 for children who have completed secondary education or a vocational equivalent. Children still in secondary study can continue to access FTB Part A until the end of the calendar year they turn 19.
Child Care Rebate	2013	The government changed the eligibility criteria for the Jobs, Education and Training Child Care Fee Assistance (JETCCFA) program. From 1 July 2013 parents who were studying an enabling course (commonly referred to as bridging or foundation courses) may be eligible for Jobs, Education and Training Child Care Fee Assistance. Changes to the amount of JETCCFA subsidy could impact the amount of CCR that a child is entitled to. There were changes to JETCCFA eligibility and subsidy rules in 2013, 2014 and 2015.
Disability Support Pension	Various	The tightening of eligibility criteria including, but not limited to, the 'Program of Support' rule in September 2011 and the revised Impairment Tables in January 2012.
	2014	From 1 July 2014, DSP recipients under age 35 years, granted between 1 January 2008 and 31 December 2011, were subject to review of their impairment (using the revised Impairment Tables) and capacity to work. People with a severe or manifest disability were not reassessed.

Amendment	Year Effective	Description
		<p>People who have some capacity to work now or in the future will be helped to do this through programs, services and activities.</p> <p>Under this reform, recipients under 35 have a participation plan which includes activities that will genuinely assist in labour market participation. These activities could include Work for the Dole, job search, work experience, education and training, and connection with Disability Employment Services.</p>
Seniors Supplement Cessation Social Services and Other Legislation Amendment (Seniors Supplement Cessation) Act 2014	2014	<p>The Budget 2014 introduced 15 measures on the cessation of the Seniors Supplement – Commonwealth Seniors Health Card holders commenced on 20 June 2015.</p> <p>The Seniors Supplement for Commonwealth Seniors Health Card (CSHC) holders ceased being paid beyond the June 2014 quarterly payment. From this date CSHC holders continued to receive only the Energy Supplement each quarter.</p>
Child Care Rebate (indexation)	2014	<p>In the 2010-11 Budget, the Child Care Rebate annual cap was reduced to \$7500 and indexation was paused for four years. This arrangement ceased on 30 June 2014. Under this measure, the pause in indexation continued for the 2014-15, 2015-16 and 2016-17 financial years.</p> <p>For the income years 2014-15, 2015-16, 2016-17, CCR entitlement was calculated as 50% of out-of-pocket child care expenses up to a limit of \$7,500 (capped) per child per year for approved child care. The annual indexation is paused for a further 3 income years. The first indexation of the \$7,500 maximum limit occurred on 1 July 2017.</p>
Energy Supplement (ES) Social Services and Other Legislation Amendment (2014 Budget Measures No. 6) Act 2014	2014	In September 2014, the Energy Supplement (ES) replaced the CES and indexing was removed.
Other Measures Social Security Amendment (Supporting More Australians into Work) Act 2013	2014	<p>From 20 March 2014, the income free area that applied for certain payments was increased.</p> <p>From 1 January 2014, eligibility for the Pensioner Education Supplement (PES) was extended.</p>
Austudy	2015	The residence requirements changed for Austudy in January 2015 and temporary absence is no longer included.
Family Tax Benefit Part B - primary earner income limit reduced from \$150,000 to \$100,000 per year Social Services And Other Legislation Amendment (2014 Budget Measures No. 6) Act 2014	2016	The FTB B higher income earner test changed to \$100,000 from 1 July 2015. Families with one parent earning over \$100,000 are not eligible for FTB B.

Amendment	Year Effective	Description
Family Tax Benefit Part A - higher income free area per-child add-on abolished Social Services And Other Legislation Amendment (2014 Budget Measures No. 6) Act 2014	2016	Removed the FTB Part A per-child add-on to the higher income free area for each additional child after the first.
Changes to the treatment of defined benefit income streams (Age Pension) Social Services Legislation Amendment (Defined Benefit Income Streams) Act 2015	2016	This introduced a 10% cap on the amount of a superannuant's defined benefit income that is excluded when applying the social security income test.
Student Start-up Loan (SSL) replaced the Student Start-up Scholarship (SSS) Labor 2013-14 Budget Savings (Measures No. 2) Act 2015	2016	For new recipients of Youth Allowance, Austudy and ABSTUDY who are in higher education full-time, the Student Start-up Loan (SSL) replaced the Student Start-Up Scholarship (SSS). SSL is a \$1,025 voluntary income contingent loan that can be paid twice per year at the beginning of each semester. SSS will be grandfathered for pre-1 January 2016 recipients and they will continue to receive it until they leave the student payment.
Portability of Family Tax Benefit Social Services Legislation Amendment (Family Measures) Act 2016	2016	Reduced to six weeks the period during which FTB Part A, and additional payments that rely on FTB eligibility, will be paid to recipients who are outside Australia.
No Jab, No Pay Social Services Legislation Amendment (No Jab, No Pay) Act 2015	2016	Immunisation requirements apply to children aged from 12 months up to 20 years for the FTB Part A Supplement, and for children aged under 20 years for Child Care Benefit and Child Care Rebate.
Cessation of the Large Family Supplement Social Services Legislation Amendment (Family Measures) Act 2016	2016	Ceased the Large Family Supplement, which was a component of FTB Part A paid for the fourth and each subsequent FTB child in the family.
Remove Family Tax Benefit Part B to couple families with a youngest child aged 13 and over Social Services Legislation Amendment (Family Payments Structural Reform and Participation Measures) Act 2015	2016	Couple families with a youngest child 13 or over (excluding grandparents and great-grandparents) no longer eligible for FTB Part B. Single parents, grandparents and great-grandparents with a youngest child between 13 and 18 will continue to receive FTB Part B.
Changes to Family Assistance Law affecting Child Care Benefit (CCB) approved Family Day Care (FDC) services. Aimed at ending 'child swapping' Child Care Benefit (Children in respect of whom no-one is eligible) Determination 2015	2016	FDC educators and their partners are no longer entitled to receive child care fee assistance for their own child's session of FDC if, on that same day, the FDC educator provides FDC for an approved FDC service, unless specified circumstances apply.

Amendment	Year Effective	Description
Changes to the parental means test (Impacting on Studying class, a small section of Working Age class and the non IS family class) Social Services Legislation Amendment (More Generous Means Testing For Youth Payments) Act 2015	2016	Family Actual Means Test (FAMT) and Family Assets Test (FAT) removed from Youth Allowance Parental Means Test arrangements.
Repeal of the income support bonus and the schoolkids bonus Minerals Resource Rent Tax Repeal and Other Measures Act 2014	2016	The final instalment of the Schoolkids Bonus was paid in July 2016. The Income Support Bonus continued until December 2016, with the last instalment paid in September 2016.
Changes to assets test Social Services Legislation Amendment (Fair and Sustainable Pensions) Act 2015	2017	From 1 January 2017, the pension assets test was rebalanced. The assets test free areas were increased to: <ul style="list-style-type: none"> • \$250,000 for a single homeowner (an increase of \$48,000) • \$375,000 for a homeowner couple (an increase of \$88,500) • \$450,000 for a single non-homeowner (an increase of \$101,500) • \$575,000 for a non-homeowner couple (an increase of \$142,000). The assets test “taper” (or withdrawal) rate for assets above the new free areas were increased to \$3.00 per fortnight for each extra \$1,000 in assessable assets (from the current rate of \$1.50, reversing the 2007 change). When announced in the 2015-16 Budget, the measure was to save \$2.4 billion across the forward estimates, the majority of which would be related to the Age Pension.
Cessation of Low Income Supplement Social Services Legislation Amendment (Low Income Supplement) Act 2015	2017	The low income supplement ceased on 30 June 2017.
Changes to the parental means test Social Services Legislation Amendment (More Generous Means Testing For Youth Payments) Act 2015	2017	Treatment of Child Support maintenance income was further reformed by applying a separate Maintenance Income Test, reducing payments for around 850 young people aged under 18. This test is similar to the one currently applying to Family Tax Benefit Part A.
Closing Carbon Tax Compensation Budget Savings (Omnibus) Act 2016	2017	New recipients of FTB or Seniors Health Cards were no longer paid the Energy Supplement from 20 March 2017. Those people already receiving the Energy Supplement prior to 20 September 2016 will continue to receive it. Those people receiving the

Amendment	Year Effective	Description
		Energy Supplement after 20 September stopped receiving it from 20 March 2017 onwards.
Backdating provisions for Carer Allowance Budget Savings (Omnibus) Act 2016	2017	Changes to the rules for backdating Carer Allowance to be in line with the rules for Carer Payment and other social security payments and concessions. Prior to this amendment Carer Allowance start date could be backdated earlier than the start date for Carer Payment.
Newly Arrived Residents - removal of exemptions Budget Savings (Omnibus) Act 2016	2017	Removed the exemption from the 104 week waiting period for new migrants who are family members of Australian citizens or long-term permanent residents. This change aligned the social security waiting period for working age payment for all newly arrived migrants (except for refugees, former refugees and their family members).
Parental Leave Pay - Consistent treatment for income support assessment Budget Savings (Omnibus) Act 2016	2017	Commonwealth Parental Leave Payments and Dad and Partner Pay payments under the Paid Parental Leave Act 2010 are now treated in the same way as employer-provided parental leave payments when determining eligibility for income support payments.
New treatments of Fringe Benefits for Family Assistance and Youth Payments purposes Budget Savings (Omnibus) Act 2016	2017	This changed the way fringe benefits are treated under the income tests for family assistance and youth income support payments and for other related purposes. "Adjusted fringe benefits total" is now defined to be gross rather than adjusted net value of reportable fringe benefits. There are a few exceptions to this for people working in particular industries.
Age Pension - aligning means testing Budget Savings (Omnibus) Act 2016	2017	From 1 January 2017, net rental income earned on the former principal residence of new entrants into residential aged care, is treated the same way under the pension income test as it is under the aged care means test, regardless of how the resident chooses to pay their accommodation costs.
Extend existing freezes on family payments Budget Savings (Omnibus) Act 2016	2017	Higher income free area (HIFA) for Family Tax Benefit (FTB) Part A and the primary earner income limit for FTB Part B were maintained for a further three years. This was to prevent indexation of income limits for FTB Part A, FTB Part B and Paid Parental Leave for the three years including 2017, 2018 and 2019. It was anticipated that there would be around 100,000 affected recipients.
General interest charge to debts Budget Savings (Omnibus) Act 2016	2017	Introduced a new interest charge scheme to former recipients of social welfare payments who have outstanding debts and have failed to enter into, or have not complied with, an acceptable repayment arrangement. The interest charge applies to social security, family assistance (including child care), paid parental leave and student assistance debts.
Enhanced Welfare Integrity	2017	Debt recovery allows departure prohibition orders to prevent targeted debtors from leaving the country. It also removes the six-year limitation on recovery of

Amendment	Year Effective	Description
Budget Savings (Omnibus) Act 2016		welfare debts, in line with arrangements applied by other government agencies.
One-off Energy Assistance Payment Social Services Legislation Amendment (Energy Assistance Payment & Pensioner Concession Card) Act 2017	2017	A one-off energy assistance payment made to approximately 3.8 million people.
Fee Cap for Grandparent Child Care Benefit (GCCB) or Special Child Care Benefit (SCCB) Child Care Benefit (Session of Care) Amendment Determination 2017	2017	Child care provided by an approved Family Day Care service is no longer a 'session of care' for Grandparent Child Care Benefit (GCCB) or Special Child Care Benefit (SCCB) purposes where reported fees involve amounts for which no individual has incurred a genuine liability, or the reported fees exceed a maximum amount of \$12.67 per hour (indexed to \$12.84 on 1 July 2017).
Age Limit for Child Care Benefit Child Care Benefit (Children in respect of whom no-one is eligible) Amendment Determination 2017	2017	Introduced restriction so that no one is eligible for child care fee assistance for Family Day Care provided to either an individual who has turned 18; or a child aged 14 years or older, or who attends secondary school, unless specific circumstances apply.
Parental Income Test and family pool arrangements for Youth Allowance and ABSTUDY Social Services Legislation Amendment (More Generous Means Testing For Youth Payments) Act 2015	2017	Parental Income Test and family pool arrangements for Youth Allowance and ABSTUDY take into account all dependent siblings in the family aged 0-19, who meet the definition of a Family Tax Benefit child. Around 13,700 families with dependent children in both the Family Tax Benefit Part A and youth systems became eligible for an average increase in payment of \$43 per fortnight (\$1,118 per annum). Around 5,800 families, who missed out on payments due to the higher taper rates, became eligible for an average payment of around \$50 per fortnight (\$1,300 per annum).
Qualifying age for the Age Pension Social Security and Other Legislation Amendment (Pension Reform and Other 2009 Budget Measures)	2017	The Age Pension age was increased from age 65 to age 67, at a rate of six months every two years, beginning in 2017.
Income Limit for FTB Part A Supplement Budget Savings (Omnibus) Act 2016	2017	Introduced an income limit of \$80,000 on payment of the Family Tax Benefit (FTB) Part A supplement, commencing from the 2016-17 income year. If an individual's adjusted taxable income (which includes the adjusted taxable income of their partner if any) is more than \$80,000 for the relevant income year, then the individual's FTB Part A supplement in relation to that year will be nil.
Closing Carbon Tax Compensation Budget Savings (Omnibus) Act 2016	2017	From 1 July 2017, the single income family supplement is not paid to new recipients. Existing recipients continued to receive the supplement if they remained eligible.

Amendment	Year Effective	Description
Family Tax Benefit - Maintain child rates for 2 years Social Services Legislation Amendment Act 2017	2017	Maintained the current Family Tax Benefit (FTB) rates for two years, from 1 July 2017. This change applies to the maximum standard, base rate and approved care organisation rate of FTB Part A and the maximum rate of FTB Part B.
Amendments to Disability Services Act Disability Services Amendment (Linking Upper Age Limits for Disability Employment Services to Pension Age) Act 2017	2017	Allowed technical amendment to correct a mismatch between Disability Employment Services eligibility and the age of qualification for the Age Pension that would otherwise arise from 1 July 2017. This removed the reference to '65 years' and replaced it with the term 'pension age'.
Seasonal horticultural work income exemption Social Services Legislation Amendment (Seasonal Worker Incentives for Jobseekers) Act 2017	2017	This measure provided a social security income test incentive aimed at increasing the number of job seekers who undertake specified seasonal horticultural work, such as fruit picking. This change was trialled for 2 years, commencing 1 July 2017.
Remove grandfathering for Student Start-Up Scholarships Budget Savings (Omnibus) Act 2016	2018	This bill closed the Student Start-up Scholarship for all existing recipients of the scholarship. Current recipients of the Student Start-up Scholarship payment may be qualified for a Student Start-up Loan or ABSTUDY Start-up Loan after the commencement of this change.
Indexation maintain at level for three years the income free areas for working age Social Services Legislation Amendment Act 2017	2018	Maintains at level for three years the income free areas for all working age allowances (other than student payments) and for Parenting Payment Single.
Indexation maintain at level for three years the income free areas for student payments Social Services Legislation Amendment Act 2017	2018	Maintains at level for three years the income free areas and other means test thresholds for student payments, including the student income bank limits.
Ordinary Waiting period - Working Age Payments (excluding Widows Allowance) Social Services Legislation Amendment Act 2017	2018	Created a new ordinary waiting period for Parenting Payment, and for Youth Allowance for a person who is not undertaking full-time study and is not a new apprentice - referred to as Youth Allowance (Other).
Reduce the qualification period for Youth Allowance / Independent test for Youth Allowance and scholarship payments for students Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2018	Students who qualify under this provision are eligible for Youth Allowance as independent after 14 months, rather than the current 18 month period, provided they have earned at least a minimum rate of pay.
Align means test with other payments / Means testing for social security benefits	2018	Simplification of means testing for student payments.

Amendment	Year Effective	Description
Social Services Legislation Amendment (Simplifying Student Payments) Act 2017		
Automatically updating geographical classifications / Remoteness structure Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2018	This measure was part of the 2016-17 Budget and simplifies the process for updating the Australian Statistical Geography Standard (ASGS) remoteness structure published by the Australian Statistician, which is used to assess eligibility for student payments under the Social Security Act. This will ensure an assessment of qualification for Youth Allowance and qualification for, and rate of, Relocation Scholarship payments is based on up-to-date geographical classification information.
Reinstate Pensioner Concession Cards to former recipients Social Services Legislation Amendment (Energy Assistance Payment & Pensioner Concession Card) Act 2017	2018	This provided a pensioner concession card to various social security pensioners and veterans' payments recipients where the recipient's payment or pension was cancelled on 1 January 2017 due to the rebalancing of the assets test parameters by the Social Services Legislation Amendment (Fair and Sustainable Pensions) Act 2015.
Queensland Commission Income Management Regime - Cape York Social Services Legislation Amendment (Queensland Commission Income Management Regime) Act 2017	2018	This enabled a two year continuation of the Income Management element of Cape York Welfare Reform in the communities of Aurukun, Coen, Hope Vale, and Mossman Gorge. The continuation of Income Management until 30 June 2019 was a key element of the reforms and assisted in stabilising people's circumstances and fostering behavioural change, particularly in the areas of school attendance, parental responsibility and increasing individual responsibility.
Cessation of Widow Allowance Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	Widow allowance closed to new entrants from 12 April 2018 and will cease entirely from 1 January 2022.
Start day for some participation payments Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	Changed the date at which payments commence for people transferring to Newstart Allowance and Youth Allowance recipients.
Changes to reasonable excuses Social Services Legislation Amendment (Welfare Reform) Act 2017	2018	This amended the Social Security Administration Act to provide a new power to make a legislative instrument setting out matters that must not be taken into account when deciding whether a person has a reasonable excuse for committing a 'no show no pay' failure, a connection failure, a reconnection failure, a serious failure, or a non-attendance failure.
Better Alignment of Student Payments	2018	From 1 January 2018, approval of tertiary courses for student payments changed. Approved courses have been restricted to VET courses (at diploma level and above) and education providers approved for VET Student Loans and higher education courses offered

Amendment	Year Effective	Description
Student Assistance (Education Institutions and Courses) Amendment Determination 2017		by providers approved for the Higher Education Loan Program. These changes affect Youth Allowance (Student), Austudy, ABSTUDY and the Pensioner Education Supplement. Existing student payment recipients were grandfathered for the duration of their current course.
Remove the exemptions for Parents in Employment Nil Rate Periods Budget Savings (Omnibus) Act 2016	2018	From 1 July 2018, people are no longer exempt from income testing arrangements and their actual income will be taken into account for the purpose of calculating family and student payments.
Targeted compliance framework	2018	From 1 July 2018, a two-phase compliance framework was introduced to apply strong penalties to job seekers who persistently and deliberately do not comply with their employment pathway plan (EPP) requirements. Explicit adjustments for this framework were removed for the 2019 valuation, with the experience seen in the data sufficient for incorporating the outcomes of this framework into the models.
Introduction of a family income test for Carer Allowance	2018	Introduction of a non-indexed family income test for Carer Allowance with a threshold of \$250,000. Savings realised will be invested in a support package for carers, which was introduced progressively from 20 September 2018.
Introduction of Child Care Subsidy (CCS) and Additional Child Care Subsidy (ACCS), and cessation of Child Care Benefit (CCB) and Child Care Rebate (CCR). Family Assistance Legislation Amendment (Jobs for Families Child Care Package) Act 2017	2019	The CCS replaced the child care payments including CCB and CCR. ACCS provides improved and targeted support to those families who require it most, such as: families with children at risk of serious abuse or neglect; families experiencing temporary financial hardship; families on income support transitioning to work; and grandparent carers on income support.
Changes to activity tests for persons aged 55 to 59 Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Newstart and certain Special Benefits recipients aged 55-59 are no longer be able to satisfy the activity test by engaging in voluntary work for at least 30 hours per fortnight. Recipients will be taken to satisfy the work test if they are engaged for at least 30 hours per fortnight in a combination of approved unpaid voluntary work and suitable paid work, at least 15 hours of which must be in suitable paid work.
Removal of intent to claim provisions Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Previously, claim entitlement was backdated to the date a claimant initially contacted the Department of Human Services and indicated their intention to claim. It is now be the date the claim was made.
Removal of exemptions for drug or alcohol dependence	2019	Exemptions from the activity test and participation requirements are no longer available in relation to circumstances directly attributable to drug or alcohol misuse (including abuse of drugs or alcohol) for certain social security recipients.

Amendment	Year Effective	Description
Social Services Legislation Amendment (Welfare Reform) Act 2018		
Streamlining tax file number collection Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Allows for a request to provide a tax file number and/or a relevant third party's tax file number as part of a claim for a social security payment, seniors health card or income-tested health care card. Payments or the provision of the cards can be prevented until the request is satisfied.
Information management Social Services Legislation Amendment (Welfare Reform) Act 2018	2019	Information or documents obtained about a person under the coercive information gathering provisions in the course of an administrative action by the Department of Human Services can now be used in subsequent investigation and prosecution of criminal offences.
Cashless debit card extensions Social Services Legislation Amendment (Cashless Debit Card) Bill 2017	2019	Amendments to support the extension of cashless debit card arrangements in current sites, and enable the expansion of the cashless debit card to further sites.
Automatically issue Health Care Cards / Health care cards Social Services Legislation Amendment (Simplifying Student Payments) Act 2017	2020	All students receiving income support will be automatically issued a health care card (HCC).
Creation of the JobSeeker Payment Social Services Legislation Amendment (Welfare Reform) Act 2017	2020	Seven current working age payments have been consolidated into the new JobSeeker Payment, creating a single payment for those of working age with capacity to work now or in the future. From 20 March 2020, recipients of Newstart Allowance, Sickness Allowance, Wife Pension, Bereavement Allowance and Widow B Pension were transitioned into JobSeeker Payment, Age Pension or Carer Payment depending on their circumstances. From 1 January 2022, recipients of Widow Allowance and Partner Allowance will transition to Age Pension.

- B.3 In addition to the legislative changes above, prior operational developments have also had a material impact on valuation outputs. In particular, changes relating to the medical assessment for the Disability Support Pension are as follows:
- i. Assessments were first introduced as part of the process for new DSP claims from 1 January 2015.
 - ii. A process of reviewing DSP medical assessments for current recipients under the age of 35 commenced from 1 July 2014.
 - iii. From 1 July 2016, additional medical reviews were undertaken for DSP recipients.
- B.4 These developments have resulted in changes to the welfare population over recent years. In particular, as most of those impacted started receiving Newstart in place of Disability Support Pension, there was a reduction in the number of DSP recipients and an equivalent increase in Working Age payment recipients. However, whilst the assessments resulted in reduced numbers of DSP recipients, they did not directly impact the average payment levels for Disability Support Pension.

APPENDIX C: PAYMENT MAPPING

Table 13: Description of Payments

Income support (IS) payment category	Components
A - IS Studying	ABSTUDY - studying
	Austudy
	YA (Student)
B - IS Working Age	ABSTUDY - working
	Austudy – working
	Newstart Allowance (closed on 20 March 2020, existing recipients transferred to JobSeeker Payment)
	Sickness Allowance (closed to new entrants on 20 March 2020, ceases on 20 September 2020, existing recipients transferred to JobSeeker Payment)
	Special Benefit
	YA (Other)
C - IS Parents	Parenting Payment - Partnered
	Parenting Payment - Single
D - IS Carer	Carer Payment
E - IS Disability	Disability Support Pension
F - IS Age	Age Pension
	Widow B Pension (closed on 20 March 2020, existing recipients transferred to Age Pension)
	Wife Pension (closed on 20 March 2020, recipients living in Australia who also receive Carer Allowance transferred to Carer Payment, recipients Age Pension age transferred to Age Pension, all other recipients living in Australia transferred to JobSeeker Payment)
G - IS Dependent	Partner Allowance (ceases on 1 January 2022 by which time the remaining recipients will transfer to Age Pension as they will be Age Pension age)
	Widow Allowance (closed to new entrants on 1 July 2018. New entrants under Age Pension age were required to claim Newstart Allowance (now JobSeeker Payment)., Ceases on 1 January 2022 when existing recipients will transfer to Age Pension as they will be Age Pension age)
H - Other FTB	Family Tax Benefit A
	Family Tax Benefit A Supplement

Income support (IS) payment category	Components
	Family Tax Benefit B
	Family Tax Benefit B Supplement
	Multiple Birth Allowance
	Family Tax Benefit Bereavement Payment
I - Other Family	Child Care Subsidy
	Additional Childcare Subsidy
	Double Orphan Pension
	Single Income Family Supplement
J - Other New Parent	Dad and Partner Pay
	Multiple Birth Allowance
	Newborn Supplement and Newborn Upfront Payment
	Parental Leave Pay
	Stillborn Baby Payment
K - Other Living	<i>(None - this category was discontinued in the 2017 valuation)</i>
L - Other Health & Disability	Mobility Allowance
	Essential Medical Equipment Payment
	Incentive Allowance (abolished when DSP was introduced. However, IA remains payable at the rate applicable at 11 November 1991 to recipients who were qualified for IA immediately before 12 November 1991, and were receiving DSP on 12 November 1991.)
	Youth Disability Supplement
M - Other Carer	Carer Allowance
	Carer Supplement
	Child Disability Assistance Payment
N - Other Study & Skills	Pensioner Education Supplement
	Fares Allowance
	Relocation Scholarships
	Education Entry Payment
	Language Literacy & Numeracy Supplement
	School Fees Allowance
	School Term Allowance
	Student Start-up Loan
	Work for the dole
	Approved Program of Work Supplement

Income support (IS) payment category	Components
	Energy Supplement for ABSTUDY Masters and Doctorate Living Allowance
O - Other Remote & Regional	Assistance for Isolated Children
	Remote Area Allowance
P - Other General Allowances (for general pension supplements)	Work Bonus
	Pension Supplement
	Pension Bonus Scheme (closed to new entrants)
	Pension Bonus Bereavement Payment
	Pension Loans Scheme
	Energy Supplement
	Living Allowances
	Pharmaceutical Allowance
	Residential Costs
	Telephone Allowance
	Utilities Allowance
	Incidentals Allowances
	Seniors supplements and concessions
Q - All Other	Bereavement Allowance (closed to new entrants on 20 March 2020, ceases completely when all current recipients have completed their bereavement period)
	Crisis Payment
R – Rent Assistance	Rent Assistance