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January 2014



cutting through complexity

INSURANCES

Underinsurance

Disability Protection Gap in Australia

kpmg.com.au



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35%

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Australians
aged

45-64

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disability

Executive Summary

KPMG has undertaken a research project to measure the level of underinsurance in Australia in respect of employed people aged 18 to 64 and the consequential impacts on social security benefits.

The level of underinsurance of employed people in Australian families is estimated to be \$304 billion per annum against disability. In determining the level of underinsurance, allowance was made for existing insurance, including insurance held in superannuation.

This is a significant level of underinsurance.

Underinsurance is measured against an adequate level of insurance designed to cover basic needs such as outstanding mortgage balances as well as ensuring that standards of living are broadly unchanged following the disability of an income earner.

The typical employed person requires insurance of 84% of income until retirement age in the event of disability.

Our analysis of the population and the insured coverage suggests that 35% of people do not have any disability insurance.

Underinsurance levels vary significantly by age group, gender and geographical location.

Australians in the age group of 45-64 are the most underinsured (77% underinsured).

The cost of underinsurance is significant to Australia. If Australians were adequately insured, social security benefits could be reduced by a minimum of \$340 million in the first year, even before the impact of foregone tax revenue is taken into account.

After 10 years, the disability support pension that can be saved if people are more adequately insured is estimated at \$2.5 billion, based on the current level of means testing of the pension.

Introduction

Background

The Financial Services Council ("FSC") engaged KPMG to conduct an investigation into the level of underinsurance of Australian lives.

The scope of work was to:

- Collect detailed data from life insurance companies on insurance issued through industry funds and master trusts to supplement data already collected for individual policies and employer sponsored schemes;
- Estimate the level of underinsurance of lives in Australia by age, gender and geographical location; and
- Estimate the cost of underinsurance on the social security system.

In approaching this work we considered that there were two primary insurance needs related to individuals' lives:

- Insurance against future financial income loss in the event of death; and
- Insurance against long-term future financial income loss in the event of disability.

This report covers the latter. A separate report covers the insurance needs against premature death.

Approach

Estimating the Level of Underinsurance

A three step process was required to estimate the level of underinsurance of Australian lives:

- Identify the component of Australia's population who have insurance needs;
- Estimate a desired level of insurance based on providing adequate insurance to meet the insurance needs; and
- Estimate the existing level of insurance by collecting insurance data written in industry fund and master trusts, and combining with data from the KPMG Group Life Survey and the FSC-KPMG experience investigations.



Top Down Analysis

In identifying the level of underinsurance we used population statistics (as published by the Australian Bureau of Statistics (ABS)) and industry insurance data (as published by the Australian Prudential regulation Authority (APRA)) to identify aggregate levels of desired insurance and aggregate levels of existing insurance. We have also used insurance data collected from insurers to provide the granularity required by the analysis.

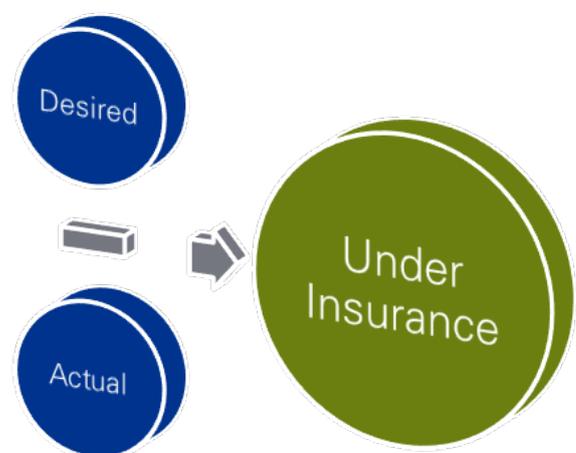
The advantage of a top down approach (as opposed to a bottom up approach) is that the result is more comprehensive.

Estimating the Cost of Underinsurance

Underinsurance has an adverse impact on Australia's social security system. On disability of an income generating family member, an inadequately insured family has a significant reduction of family income and an increased likelihood of requiring assistance from the social security system.

A two-step process was required to estimate the cost of underinsurance to the social security system:

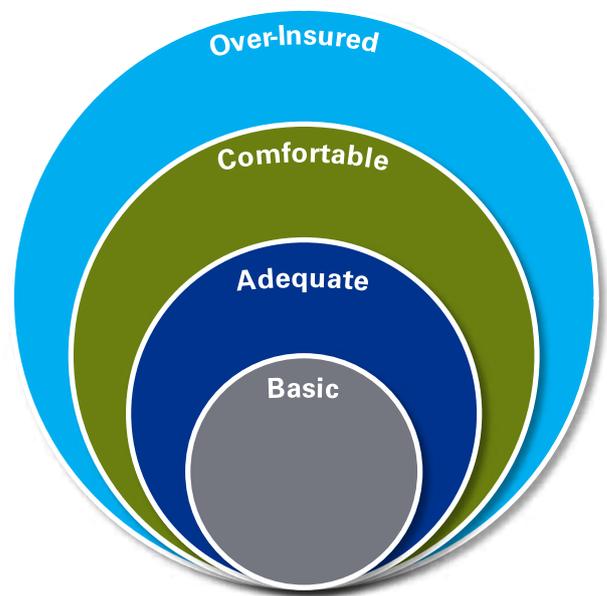
- Estimate the social security benefit level after disability based on the current level of insurance; and
- Estimate the social security benefit level after disability based on the adequate level of insurance.



How much Insurance is Desirable?

The determination of the level of insurance required by each person is unique to their particular circumstances. We have identified four levels of insurance, which are described below in the context of the death of an income generating family member:

- **Basic insurance:** This level of insurance is designed to cover basic needs such that upon the disability the family is not forced to sell their home or belongings due to their inability to make mortgage repayments;
- **Adequate insurance:** This level of insurance is designed to cover the family's needs until the children become adult and if relevant provide ongoing rental support until the partner retires. The healthy partner is expected to continue to work (or return to work);
- **Comfortable insurance:** This level of insurance is designed to ensure the family has no change in financial circumstances following the disability. For example, it might ensure that a non-working parent is not obliged to return to the workforce; and
- **Over insurance:** This level of insurance is in excess of the needs created by the disability.



For the purpose of this report, we have measured underinsurance relative to an adequate level of insurance.

We acknowledge that other definitions of underinsurance may also be reasonable depending on community expectations. What this means is that the level of underinsurance determined in this report is not the maximum level of underinsurance. Many individuals might choose to have higher insurance levels than those set out in this report if they were adequately informed.

Average vs. Typical

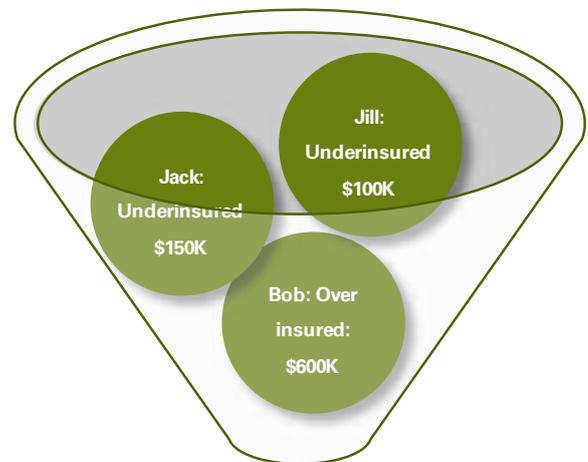
As a top down approach has been adopted, most of the analysis in this report is performed using aggregate data to approximate the sum of typical individual circumstances. The results will therefore approximate the level of underinsurance rather than reflect a true level of underinsurance.

The average person in Australia (or the “mean”) has a higher income, a higher level of assets and is likely to have higher existing levels of insurance than the typical person (or the “median”). For this reason the analysis in this paper is conducted primarily based upon the “typical” person.

It is important exclude over insurance where possible as insurance is not fungible. If a group of people has significantly higher insurance coverage than the desired levels, the excess coverage cannot be used by the group of people who has insurance coverage below the desired levels. This means that a consideration of aggregate underinsurance may understate the extent of the sum of individual underinsurance.

This is illustrated in the following example where the population consists of 3 people, Bob, Jack and Jill. Jack is underinsured by \$150,000, Jill (the typical person) is underinsured by \$100,000, and Bob is over insured by \$600,000.

Jill, the typical person in this population is underinsured by \$100,000, in aggregate a population reflecting the typical person is underinsured by \$300,000. In contrast, the average person in this population is over-insured by \$100,000 and an aggregate population reflecting the average view is over-insured by \$300,000. The averaging of the over and underinsurance, indicates that the population is not underinsured on average. If over insurance is disregarded then the average person is under insured by \$83,333 (or \$250,000 in aggregate).



Aggregates generated by:

Typical view (reflecting Jill): Underinsured by \$300K

Average View: Underinsured by \$250K

(disregarding over insurance)

The analysis has therefore been conducted using two approaches:

- Typical person (reflecting the median or 40th-60th percentile of the population).
- Average person (reflecting the mean); and

In both approaches, the level of over insurance is estimated and excluded.

Data Sources

Introduction

The analysis required two types of data:

- Population data to estimate the desired level of insurance, based on insurance needs; and
- Industry insurance data to estimate the actual level of insurance.

Population Data

Population data was primarily obtained from the Australian Bureau of Statistics (ABS) based on the latest census (August 2011). In addition to the online reporting provided by the ABS, KPMG requested a bespoke data set from the ABS in order to obtain the required level of detail¹.

This data was supplemented where necessary with data from other ABS surveys including:

- 6554.0 Household Wealth and Wealth Distribution, Australia, 2009-10²
- 6523.0 – Household Income and Income Distribution, Australia, 2009-10³
- 5673.0.55.003 - Wage and Salary Earner Statistics for Small Areas, 2009-10⁴
- 6537.0: Government Benefits, Taxes and Household Income, 2009-10⁵.

¹ ABS Bespoke Data contained data on employed people with dependents including housing ownership, mortgage payments, geographic location (capital city vs. other), couple vs. single and income band.

² This is the most recent survey and was released 14 October 2011.

³ This is the most recent survey and was released 30 August 2011.

⁴ This is the most recent survey and was released 28 February 2013.

⁵ This is the most recent report and was released 29 June 2012.

Industry Insurance Data

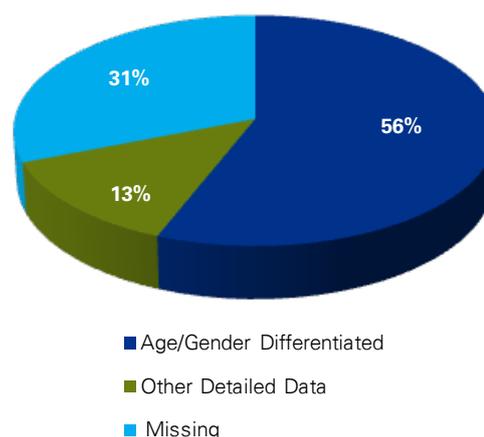
The key data sources for the industry insurance data used in this report are:

1. Statistics from the Australian Prudential Regulatory Authority (APRA). As all life insurers in Australia have to be licensed by APRA, APRA's statistics measure the aggregate level of insurance provided in Australia. They are adjusted to be suitable for the analysis in this report.
2. The FSC-KPMG lump sum risk and disability income claims investigation. This is an ongoing, industry data collection in respect of individual policies, covering death, total and permanent disability and disability income insurance. This investigation covers 15 insurers' data, out of a possible 19 insurers, and includes all the major insurance companies. The 2009 exposure data included total sums insured of just under \$840 billion and 3.2 million lives.
3. KPMG group life survey 2010. There are 10 active contributors and covers approximately 2 million lives. This survey covers insurance through master trusts and employer sponsored schemes.
4. Industry fund and master trust data collected specifically for this report. Although insurance within superannuation has grown rapidly over the last decade, there is currently no comprehensive data collection in respect of the insurance provided within the industry funds. For the analysis in this report, KPMG obtained data from 6 large group risk insurers (including all top 4 insurers in this market). The data collected includes characteristics of the insurance such as the number of members, age, gender and sum insured size.

In aggregate, KPMG collected 84% of the industry's insurance data at a detailed level.

In some instances, employers may offer life insurance cover to employees and self-insure the risk. Insurance cover of this nature has been excluded as it is not possible to accurately quantify. This includes any self-insurance made through public sector superannuation funds.

Disablement Cover Data



Insurance – Disability Cover

Introduction

In Section 1 we identified that one of the primary insurance needs was the need to insure against future financial income loss in the event of disability.

The level of underinsurance for disability will be analysed by the following characteristics:

- Age group;
- Gender; and
- Geographical location.

The underinsurance gap will be calculated as the difference between the insurance need and the level of insurance.

No other offsets are considered. The disabled person is still alive and may one day retire, so they still have a need for their superannuation and other assets.

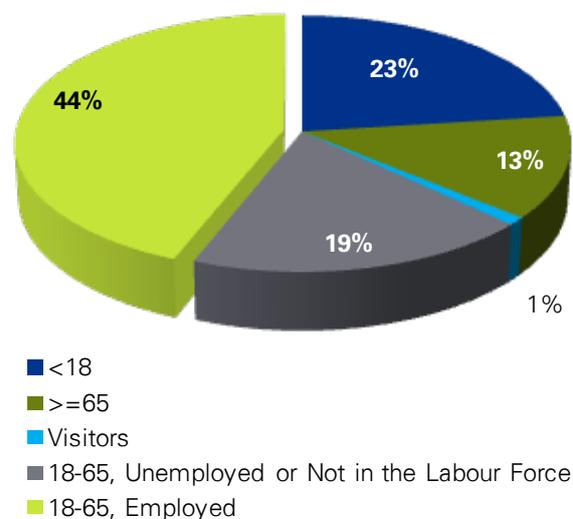
Focus on Employed People

The main group of people who purchase and recognise a need for insurance are employed individuals. This section focuses upon this group of people and compares their desired level of insurance with their actual level of insurance.

The individuals considered to fall into this category have the following characteristics:

- Aged between 18 and 64; and
- Employed and earning an income through their personal efforts.

The chart below sets out the proportion of the Australian population who fall into this category based on data from the last Australian census¹. Roughly 9.5 million Australians or 44% of the population need disability insurance.



* Employed includes self-employed business owners as well as contractors and wage earners.

¹ 2011 Australian Census, ABS

How much Insurance?

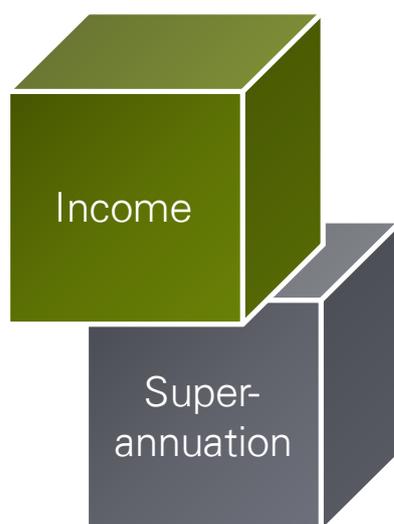
Building Blocks of Insurance Need

The determination of the level of insurance required by each person is unique to their particular circumstances, financial obligations and security needs.

We consider the following to form the basic building blocks of adequate insurance:

- Income replacement: 75% of income generated from personal exertion¹;
- Superannuation replacement: 9% of income generated from personal exertion.

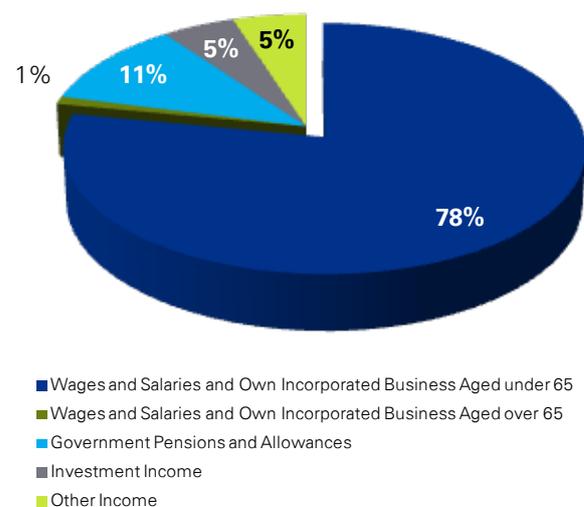
This gives a combined income replacement of 84% of income.



Approach

The adequate level of insurance was calculated using the following approach:

- Only income from personal exertion was considered to be income that should be replaced. This includes wages and salaries and income from own incorporated businesses, but excludes other sources of income, such as investment returns, social security benefits;
- Income data was available from the ABS's Survey of Household Income and Income Distribution¹. This data separately identified components of income. This data was not split by age or gender;
- Income data was also available from the ABS on incomes earned by wage and salary earners². This information was available by gender and age.



¹ 75% is the life insurance industry standard for adequate income replacement levels excluding superannuation.

¹ ABS6523.0: Household Income and Income Distribution 2009-10 Table A3.

² ABS 5673055003_1A Wage and Salary Earner Statistics for Small Areas, 2009-10.

Actual Insurance

Type of Insurance

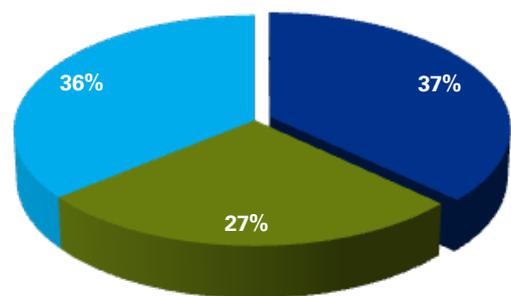
The insurance which we consider best protects against future financial income loss in the event of disability is disability insurance that pays a long-term benefit to the insured person irrespective of how the disability was acquired, for instance,

- Disability Income or Group Salary Continuance Insurance where benefits are paid to at least age 55: An income benefit is paid for each week where the insured life is considered to be incapable of working; and
- Total and Permanent Disability Insurance: A lump sum benefit is paid when the insured life is considered to be incapable of ever returning to work. This payment is converted to an income stream equivalent.

Limited cover insurance where the disability has to occur in certain circumstances to be relevant, or the benefit is paid for a limited time are not allowed for in this analysis. For example:

- Short-term Disability Income or Group Salary Continuance Insurance where income payments are only made for a short period (typically 2 years);
- Trauma cover where a lump sum payment is only made where the individual suffers a specified list of medical conditions, for example cancer, heart attack, Multiple Schlerosis;
- Workers Compensation insurance where a payment is only made where the individual is disabled due to a workplace incident; and
- Compulsory Third Party Insurance where a payment is only made where the individual is disabled due to a car accident.

Disablement Insurance by Insurance Type



- Short Term Disability Income Insurance
- Long Term Disability Income Insurance
- Total and Permanent Disablement Insurance (post income conversion)

Data

Aggregate Insurance Amount

APRA provided KPMG with a more detailed breakdown of the published APRA statistics in order to separately identify reinsured and direct insurance and identify insurance from investment balances¹. A number of adjustments were made to the APRA data to ensure that it was suitable for our analysis. These included removing short-term income protection cover from the total insurance amount and identifying the component of lump sum insurance amounts which relate to total and permanent disablement insurance (TPD) and converting them into an income stream equivalent.

Detailed Insurance Data

Detailed insurance data was obtained from a number of sources:

- Individual insurance data by age and gender was available to KPMG from the FSC-KPMG lump sum and disability income annual investigations.
- Corporate and Master Trust data was available to KPMG from the KPMG Group Life survey.
- Industry fund disability insurance from the data collection made by KPMG for this report.

Table 2: Gross Insurance Amounts (\$ Billion)

	APRA Statistics (Excluding			KPMG Estimate of Long-Term Disablement Cover
	Super	Non-Super	Total	
Individual Income Protection	5.7	45.3	51.1	36.6
Group Income Protection	87.8	44.3	132.1	39.7
Total Income Protection	93.5	89.6	183.2	76.3
Lump Sum TPD Insurance ²	2,480	1,198	3,678	104.0
Total (incl. TPD Conversion)				180.3

¹ APRA statistics – 12 months to December 2011. Bespoke Data (excluding reinsurers)

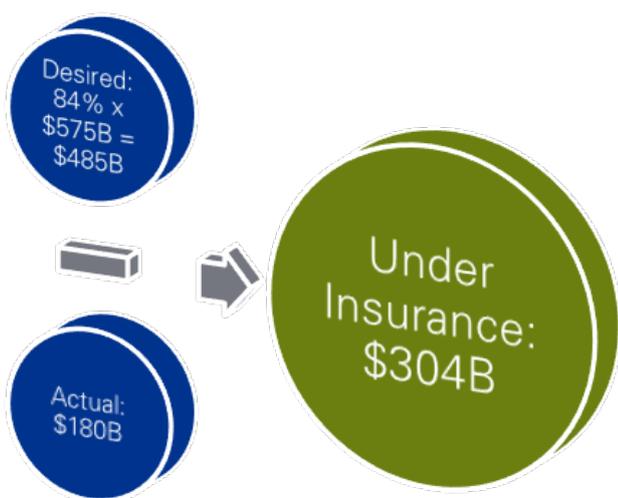
² KPMG estimate based on APRA Statistics
Amounts used are the Gross Insurance Amount/Account Balance or equivalent

Level of Under Insurance

Aggregate

The aggregate level of underinsurance is \$304 billion as set out in the diagram below. This equates to 63% of the adequate insurance need not being met through existing insurance.

Analysis was performed to identify where individuals had insurance cover through multiple sources and aggregate them to identify that 35% of employed Australians do not have any disablement insurance, while the rest have less disability insurance than considered adequate.

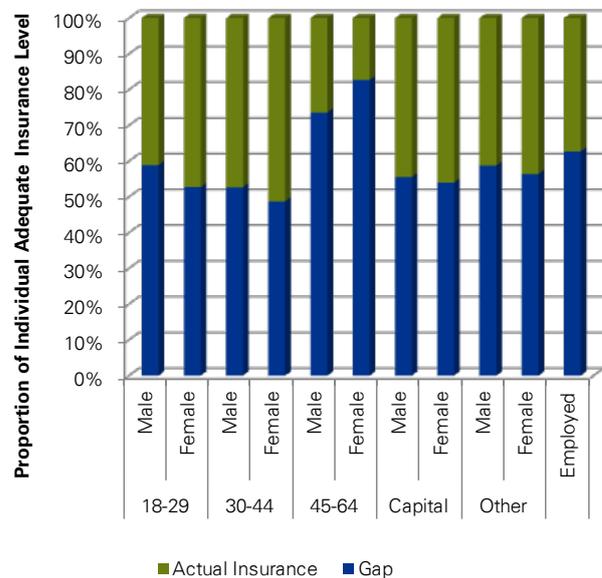


The Individual View

The level of underinsurance will differ between groups of people:

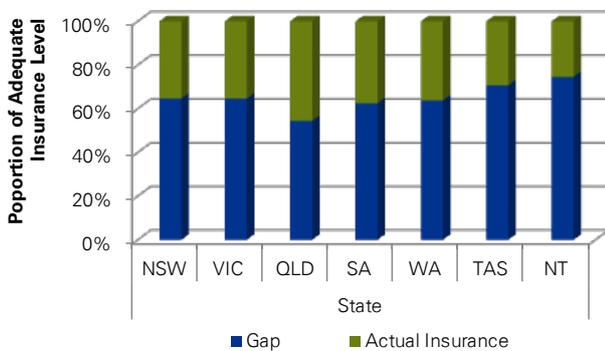
Insights include:

- Men and women aged 45-64 have the highest levels of underinsurance (74%-83% of their total level of adequate insurance).
- All other groups have a reasonably consistent level of underinsurance of approximately 55% of the total level of adequate insurance.



Level of Underinsurance for a typical person in each State/Territory

The underinsurance gap is not significantly different by state, except for the Northern Territory, which appears to be more underinsured.



Note: No calculation was done for ACT due to insufficient data quality.

Underinsurance Gap (\$K) by State in Australia



Impact of Underinsurance on Social Security Benefit – Disability

Introduction

Disability underinsurance impacts social security benefits even more directly than underinsurance for death.

Support for the disabled represents a significant cost to Australia's general revenue. It is the third largest social security benefit category, ranking behind only the age pension and assistance to family with children¹.

Annual assistance to disabled persons and related services were estimated by the Australian Treasury to be \$24 billion in 2012-2013, of which \$14.8 billion relates to the actual disability support pension².

Table 3: Summary of Expenses - Social Security and Welfare

	Estimates 2012-13 (\$m)
Assistance to the aged	50,984
Assistance to families with children	35,256
Assistance to people with disabilities	23,873
Assistance to the unemployed and the sick	8,559
Assistance to veterans and dependents	7,046
General Administration	3,861
Other welfare programs	1,663
Assistance for Indigenous Australians	1,145
Total Social Security and Welfare	132,388

Source: Australian Treasury Budget 2012-13 Statement 6²

How can insurance help?

The disability support pension (DSP) is currently means tested, so that a sufficiently high level of income will disqualify the disabled person from being eligible for a pension³. Given adequate insurance, fewer disabled people would be eligible for the pension. Therefore it is reasonable to expect that an adequate level of disability insurance will reduce the burden of the disability support pension.

It is important to note that in this report, we are measuring the potential impact of higher levels of insurance on replacing income for the disabled. We have not assessed the impact of insurance on the care needs or infrastructure support for disabled people of any severity.

¹ Statement 6: Expenses and Net Capital Investment of Commonwealth Budget 2012-2013. Table 9

² Australian Budget 2012-2013, Statement 6: Expenses and Net Capital Investment. Table 9.3

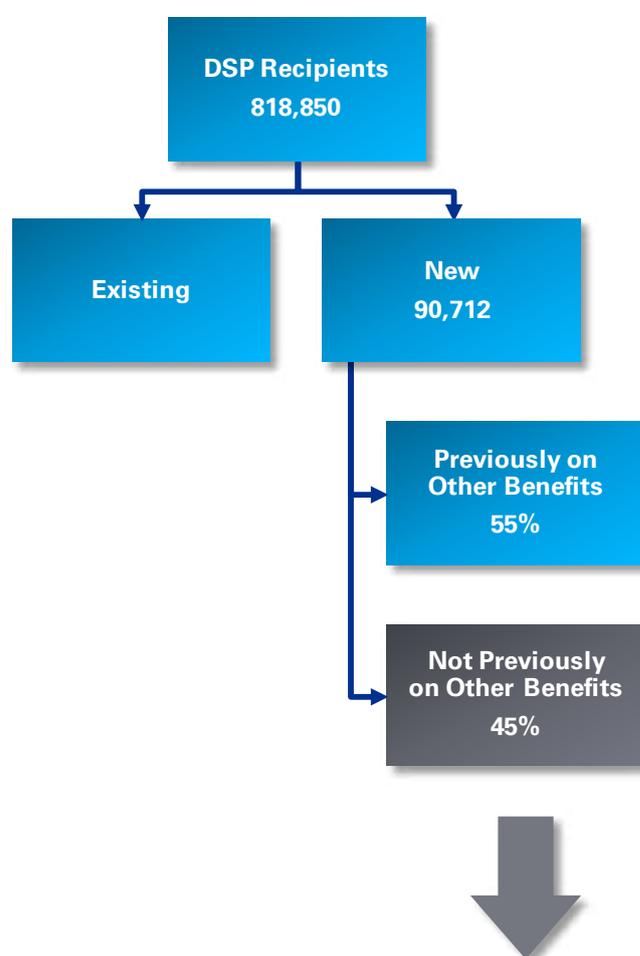
³ No pension is payable for annual incomes above \$46,092 for singles and \$91,250 for couples combined (separate illness).

Proportion Impacted by Insurance

In estimating the impact of disability underinsurance on the social security system, we have taken a top down approach. As at June 2011, there were 818,850 recipients¹ of DSP with an associated cost of \$14.8 billion.

- Benefits relating to existing recipients will not be impacted by increases to insurance as most people who are issued with the DSP tend to continue to receive it until they die or transition to another government benefit².
- Of the people who were newly granted a DSP (90,712 people in 2011), 55% of them were already receiving a social security benefit. We have assumed that these individuals would also not be impacted by increases to insurance.

The table shows our estimate of the proportion of the new entrants who were not receiving other social security benefits by age and gender.



Age Group	Male	Female
15-29	3,947	2,641
30-44	4,869	4,375
45-64	12,622	12,366
Total	21,438	19,382

¹ As at June 2011

² Australian Government Department Families, Housing, Community Services and Indigenous Affairs, *Characteristics of Disability Support Pension Recipients* dated June 2011. This is the latest available report at the time of writing.

Approach

The impact on the DSP was estimated the using the following approach:

- Identify the difference between the actual and desired level of insurance per person by age group and gender (this was determined in Section 4),
- Consider how an increased income or increased assets due to insurance payments would reduce the pension entitlement of a new entrant to the DSP scheme.

As the DSP is means tested:

- Every dollar of income earned over \$3,456 will reduce the pension by 50 cents. This means that every dollar of income from insurance will reduce the DSP by 50 cents.
- The DSP is capped such that no DSP is paid on incomes over approximately \$46,000¹ per person.
- Every \$1,000 of assets over certain caps (e.g. \$196,750 for a single person who owns their own home) reduces the pension by \$1.50 per fortnight.

**\$1 Increase in
Insurance
=
50 cents
Reduction in DSP**

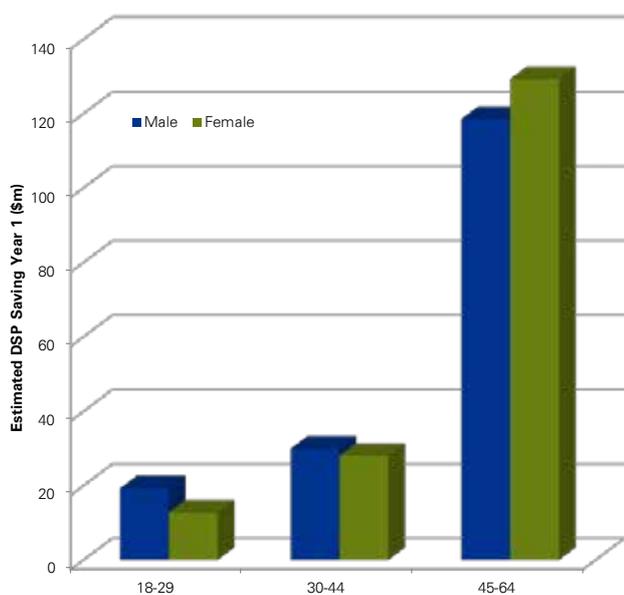
¹ Varies between singles and couples.

Impact of Insurance on Social Security Benefits

New Entrant Saving

Our estimate of this cost saving is \$340 million for new entrants in the first year before the allowance for the impact on tax revenue.

The chart below illustrates the potential saving by age and gender. Most of the savings is expected to come from the age group of 45-64 year olds, which receives most of the new disability pension at the moment, and has the highest level of underinsurance.



Saving over 10 Years

The potential cost saving of \$340 million is an annual cost for each cohort of new disability pensioners. The cumulative saving for government revenue is substantially higher than this over time, as illustrated in the chart below.

If Australia were to have adequate insurance today, the savings in reduced disability support pension would be \$340 million this year, \$650 million the following year, \$940 million the year after that, and so on. In the 10th years, the annual savings (as measured by lower DSP) are estimated at \$2.5 billion.

