KPMG

Value Proposition of Financial Advisory Networks - Update and Extension

This report was prepared for the Financial Services Council.

18 January 2011

ADVISORY

Inherent Limitations

This report has been prepared as outlined in the Engagement Letter from KPMG Econtech to the Financial Services Council (FSC) dated 7 May 2010. The services provided in connection with this engagement comprise an advisory engagement which is not subject to Australian Auditing Standards or Australian Standards on Review or Assurance Engagements, and consequently no opinions or conclusions intended to convey assurance have been expressed.

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This report only takes into account information available to KPMG Econtech up to the date of this report and so its findings may be affected by new information.

The findings in this report have been formed on the above basis.

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Any economic estimates in this report of the impacts of possible events hold all other factors constant. They also rely on economic parameters that are subject to unavoidable statistical variation.

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Key Results

The Financial Services Council (FSC) has a view that the provision of quality financial advice has the potential to provide consumers with an improved financial outcome as a result of a more appropriate asset allocation given a particular level of risk and from having greater financial discipline to save. The scope of this study focuses on the latter; specifically, it provides an analysis of how financial advice affects saving behaviour.

- KPMG Econtech's detailed analysis indicates that those with a financial adviser save more than those without a financial adviser. Importantly, the KPMG Econtech analysis adjusts for other factors that may influence saving behaviour, such as, wealth, employment status and salary. **The results of the regression analysis show that an individual that has a financial adviser is estimated to have saved an additional $6,900 over the period from 2005-06 to 2008-09 when compared to similar individuals without a financial adviser. This is equivalent to an additional $1,725 in saving each year for those with a financial adviser.**

- There are costs associated with obtaining financial advice. As the analysis focuses on capturing the quantitative impact of financial advice on saving behaviour, it is appropriate to solely consider the costs associated with the development of a saving plan. According to the FSC, the one-off average cost of developing such a plan is approximately $530. This means that after allowing for the cost of obtaining advice, an individual with a financial adviser saves $6,370 over 2005-06 to 2008-09 or an additional $1,590 each year or compared to a similar individual without a financial adviser.

- **This additional saving leads to additional wealth for an individual**. Based on a real risk-free rate of return of 3 per cent per annum and accounting for the saving behaviour of different age groups, this additional saving accumulates to an average additional wealth at retirement (age 65) of approximately (in $2009/10):

  - $91,000, if the additional saving commenced from age 30;

  - $80,000, if the additional saving commenced from age 45; and

  - $29,000, if the additional saving commenced from age 60.

The estimates above also allow for the one-off cost of developing a savings plan with a financial adviser. These may be conservative estimates should the additional savings be successfully invested in assets that attract a risk premium. The estimated wealth impacts indicate a potential for long term benefit from engaging a financial adviser throughout an individual's life such as when planning to start a family, paying off a mortgage, or planning to fund retirement.

- Based on the results of our analysis into the impact of financial advice on savings, KPMG Econtech then undertook economy-wide modelling to estimate the broader impact of more Australians receiving financial advice. **The additional saving by individuals receiving financial advice lifts household saving and hence national saving. Specifically, the key economic implications of an extra 5 per cent of Australians receiving financial advice are as follows.**

    - A 0.3 per cent of GDP or approximately $4.2 billion (in 2009/10 dollars) gain in national saving by 2016-17 compared to what would otherwise be the case.

    - The higher wealth of Australia, as a result of the lift in national saving, leads to less dependence on foreign financing of domestic capital. In the long run, foreign liabilities are approximately 1.3 per cent of GDP lower under the saving scenario.

    - The lower reliance on foreign investment in this scenario could lower the risk premium for investment in Australia, so that gains in business capital are sustained in the longer term.

- KPMG Econtech also undertook further analysis to consider the level of insurance held by those with and without a financial adviser. The results indicate that, on average, those with a financial adviser:

    - are more likely to hold insurance, by at least a multiple of four, for each type of insurance covered in this analysis;

    - held $29,000 more life insurance than those without a financial adviser in 2008-09;

    - held $5,000 more total and permanent disability (TPD) insurance than those without a financial adviser in 2008-09; and

    - held a similar level of monthly income protection insurance than those without a financial adviser in 2008-09.

    These results are based on those in the sample who hold some level of insurance and do not include those account holders identified as not holding insurance with the financial institutions participating in the study. As such, the analysis errs on the conservative side. If we were able to identify and include those individuals who do not hold insurance with any provider in the analysis, then it is likely that the disparity between the levels of insurance held by those with an adviser and without an adviser would be greater. This is because those individuals with an adviser are more likely to hold insurance.

Executive Summary

Background

Australia's Financial Advisory Networks (FANs) play an important role in providing professional financial advice to assist individuals and households (retail investors) in accumulating, managing and protecting their wealth. Financial advisers have the potential to provide advice on the most appropriate asset allocation given an individual's:

- risk tolerance;

- investment risks of each individual investment; and

- accumulation or diversification of risk across the entire portfolio.

Many Australians receive financial advice at various stages in their lives, including but not limited to when they are planning on starting a family, paying off their mortgage, or planning for retirement. Recent research has shown that the tangible and intangible benefits from receiving financial advice include the following:[1]

- providing peace of mind;

- giving greater control of finances;

- improving the prospect of more comfortable retirement;

- helping in the avoidance of bad investments;

- making it easier to follow a budget; and

- creating and aiding the ability to save.

There are potential benefits for the broader economy from having more individuals receive professional financial advice. A tailored financial plan has the ability to encourage additional saving, such as additional contributions to superannuation, while managing risks. This lift in individual savings flows into national savings levels.

In 2009, KPMG Econtech was engaged by the Financial Services Council (the then Investment and Financial Services Association) to investigate the impact of financial advice on individual saving behaviour. In addition, KPMG Econtech was also engaged to undertake economy-wide modelling to estimate the broader implications of this boost in savings. As part of this engagement, KPMG Econtech qualitatively analysed the role of FANs in providing quality financial advice. The results of our analysis were presented in the report "Value Proposition of Financial Advisory Networks" (2009 Report). [2]

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[1] Galaxy Research March 2007

[2] This report is available on the Financial Services Council website:
http://www.fsc.org.au/downloads/file/PublicationsFile/2009_1105_KPMGEcontech(FinalReport).pdf

The Financial Services Council has now engaged KPMG Econtech to update and extend the 2009 Report to include:

- the impact on savings arising from the provision of financial advice over time;

- an expanded data set that captures more than one participant and data over a number of years; and

- the impact of financial advice on the level of insurance coverage held by individuals.

As this report provides updated results and extends our 2009 Report, it should be read in conjunction with this earlier report. Importantly, this report focuses on the quantitative impact of financial advice on savings behaviour. An analysis of the overall value of advice received from financial advisers would need to consider the rates of return, associated risks, and the fees associated with the financial advice, and this approach is outside the scope of this report.

Methodology

To undertake this analysis, KPMG Econtech received data from three major FANs who are members of the Financial Services Council. The data includes approximately 3.4 million individual accounts for the 2005-06 to 2008-09 financial years. This data set is a more detailed data set, in terms of the number of observations and scope, than that utilised in the 2009 Report. The 2009 Report used data from one major FAN including approximately 840,000 individual accounts and focused solely on financial outcomes in 2007-08.

The focus of the study is to estimate the impact of financial advice on savings behaviour, thus it is appropriate to solely consider the costs associated with the development of a saving plan. The Financial Services Council also provided KPMG Econtech with data regarding the cost of financial advice on developing a savings plans.

The initial dataset was subjected to a number of tests to review data integrity and suitability for further analysis. However, as with all analysis of this nature, drawbacks with the dataset remain. Notwithstanding these drawbacks, the data was able to provide indicative insights into the impact of professional financial advice on saving behaviour and insurance coverage.

Following the data integrity tests, statistical analysis was undertaken on the sample data to determine whether those individuals with a financial adviser:

- saved more than those without an adviser; and

- held greater levels of insurance coverage than those without an adviser.

KPMG Econtech then undertook regression analysis to control for other factors influencing saving behaviour such as wealth levels, age, employment, and salary.

Based on the regression analysis, economy-wide modelling was undertaken to estimate the impact of more Australians receiving financial advice. Specifically, KPMG Econtech modelled

the impact on the economy if an additional 5 per cent of Australians received financial advice using KPMG Econtech's dynamic model, MM2. MM2's well-defined long-run economic properties and long horizon is particularly important in this project as the majority of benefits stemming from financial advice, namely increased saving and wealth accumulation, will accrue in the longer term.

Data Characteristics

As indicated earlier, the initial dataset was subjected to a range of tests to review data integrity and suitability for further analysis. As part of this process, analysis was also undertaken to consider the demographic profile of the sample. Using postcode data on each of the approximate 3.4 million account holders included in the sample, a demographic profile in terms of income per capita, age, gender, and employment status was developed. This demographic profile was then compared to the national demographic profile. The complete data set covers a wide demographic and is considered to be suitable for this analysis. In other words, the data set is a representative sample of the Australian population.

Saving Behaviour

Chart A presents the average additional contributions made by individuals with financial advisers to their investment, superannuation and other accounts between 2005-06 and 2008-09. Importantly, Chart A presents the results of the initial statistical analysis and the regression analysis.

Chart A: Average Additional Contribution to Investment, Super and Other Accounts between 2005-06 and 2008-09 ($2009-10)
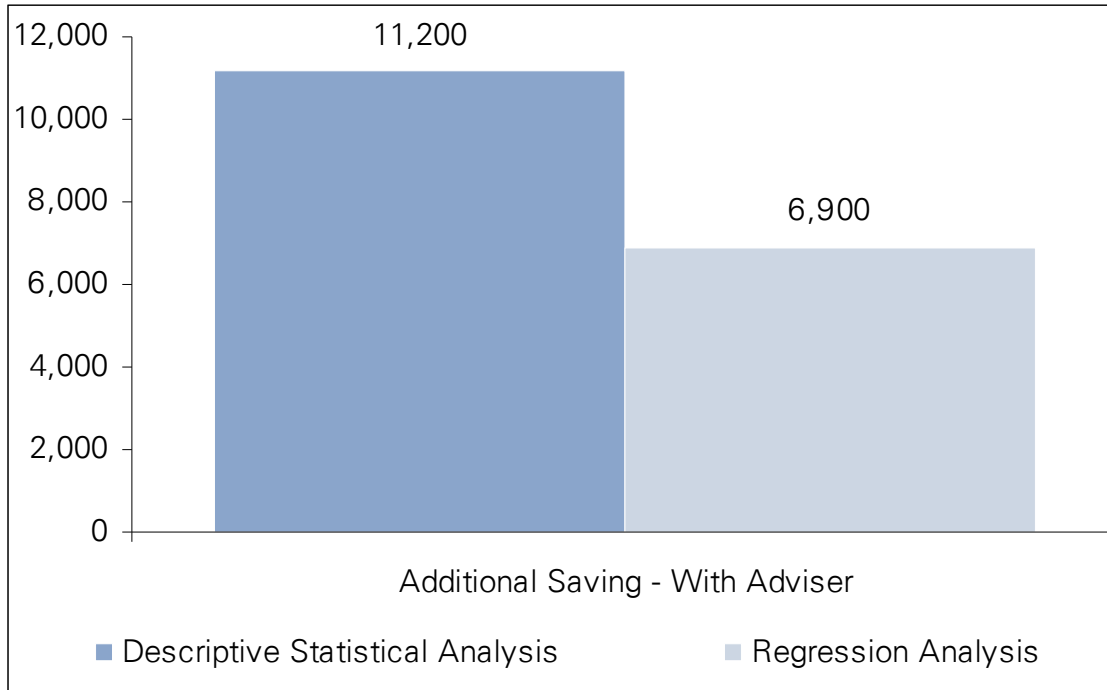
Source: KPMG Econtech.

Based on the descriptive statistical analysis, individuals with a financial adviser save more than individuals who do not have a financial adviser. For the period from 2005-06 to 2008-09, those with an adviser are estimated to save on average $11,200 more than those without an adviser.

After controlling for other factors which affect saving behaviour, the regression analysis indicates that an individual with a financial adviser is estimated to save an additional $6,900 over the period from 2005-06 to 2008-09 compared to similar individuals without a financial adviser. This is equivalent to an additional $1,725 in saving each year for those with a financial adviser.

According to the FSC, the one-off average cost of developing a savings plan is approximately $530[3]. This means that after allowing for the cost of obtaining advice, an individual with a financial adviser saves $6,370 over 2005-06 to 2008-09 or an additional $1,590 each year or compared to a similar individual without a financial adviser.

This additional saving leads to additional wealth for an individual. Based on a real risk-free rate of return of 3 per cent per annum[4] and capturing the saving behaviour of different age groups[5],

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[3] This figure is average of the costs at three different FANs who are all members of the Financial Services Council. The respective costs at these FANs are $450, $489 and $650.
[4] This estimate involves using a nominal rate of return equivalent to the 10-year bond rate and an inflation rate at the mid point of the RBA's target band of 2-3 per cent.

this additional saving accumulates to an average additional wealth at retirement (age 65 years) of approximately (in $2009-10):

- $91,000, if the additional saving commenced from age 30;

- $80,000, if the additional saving commenced from age 45; and

- $29,000, if the additional saving commenced from age 60.

The estimates above also allow for the one-off cost of developing a savings plan with a financial adviser. These may be conservative estimates should the additional savings be successfully invested in assets that attract a risk premium. The estimated wealth impacts indicate a potential for long term benefit from engaging a financial adviser throughout an individual's life such as when planning to start a family, paying off a mortgage, or planning to fund retirement.

By providing financial discipline, a tailored financial plan has the ability to encourage additional saving, while managing risks. If more individuals receive financial advice, this is likely to boost the level of national saving in Australia. Chart B shows that national saving is expected to be 0.3 per cent of GDP or approximately $4.2 billion (in 2009/10 dollars) above baseline in 2016-17 if an additional 5 per cent of individuals receive financial advice.

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[5] As the level of saving is expected to change over an individual's lifetime, additional regression analysis was undertaken to identify the average level of saving for each key age group included in this study. These results have been used to calculate the estimated wealth impacts.
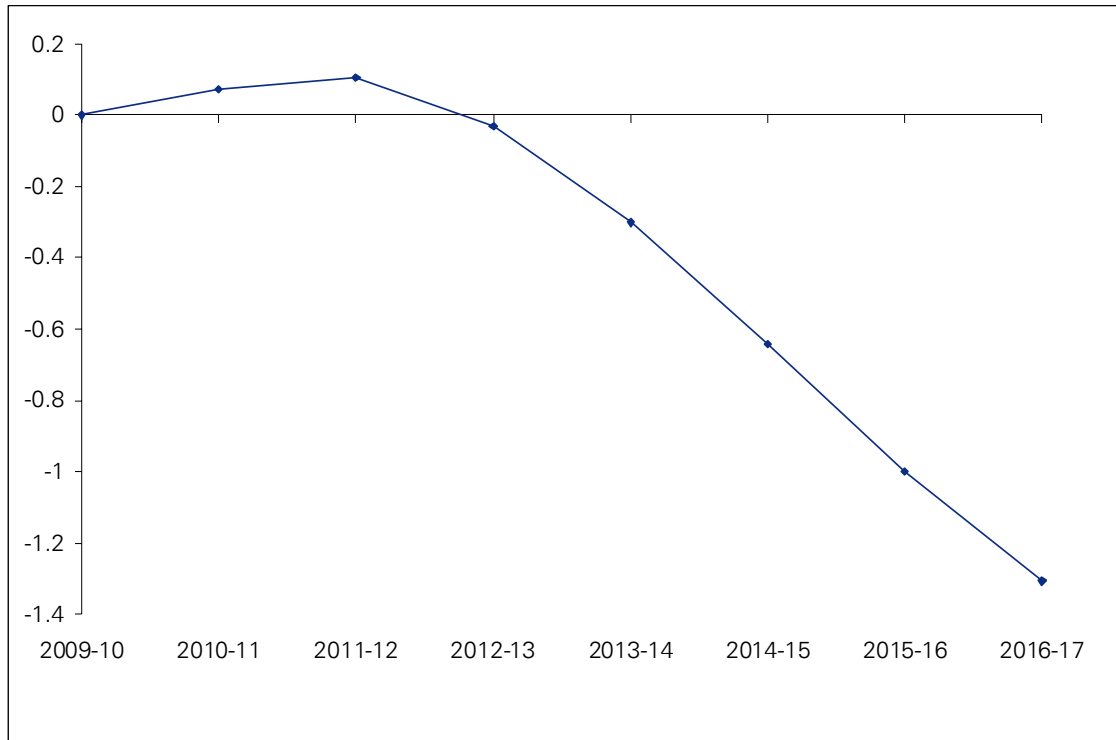
Chart B: National Saving (per cent of GDP)
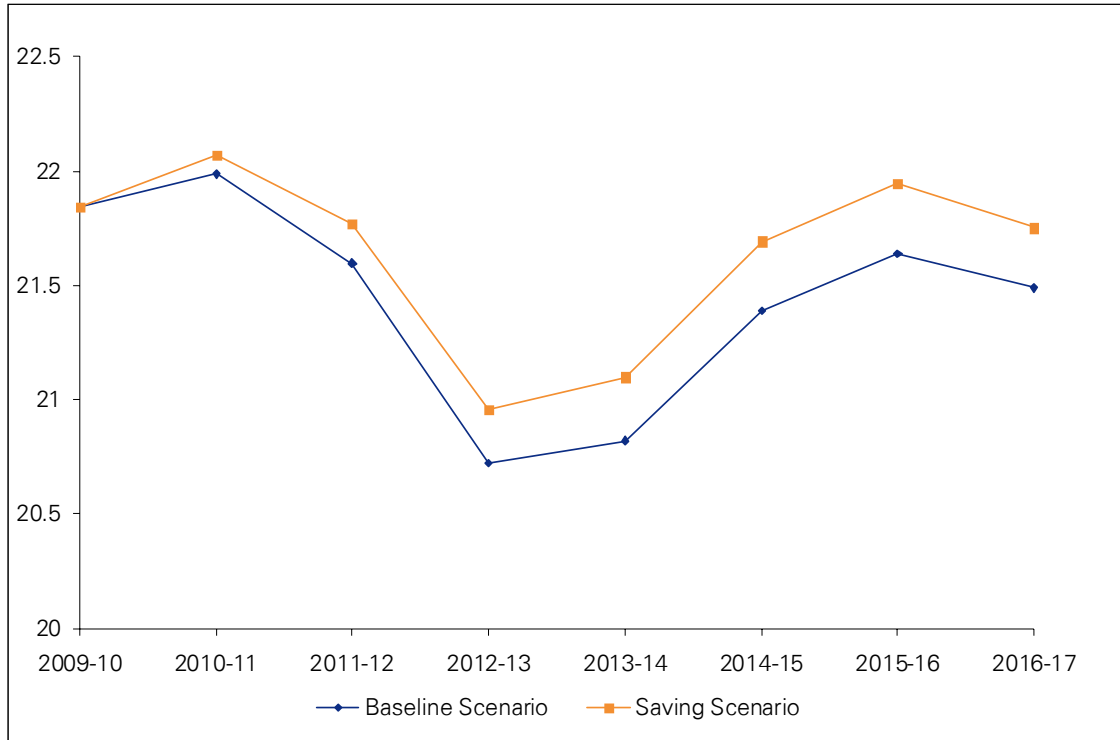
Source: KPMG Econtech MM2 simulation.

This gain in national saving has important economy-wide implications. A gain in national saving increases the wealth of Australians. The higher wealth of Australians means there is less dependence on foreign financing of domestic capital. The following chart shows the foreign debt deviation from baseline between 2009-10 and 2016-17. The increase in national saving as a result of more Australians receiving financial advice leads to a long-term reduction in foreign liabilities by 1.3 per cent of GDP than would otherwise have been the case. The lower reliance on foreign investment in this scenario could lower the risk premium for investment in Australia, so that gains in business capital are sustained in the longer term

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Chart C: Foreign Debt (deviations from baseline, per cent of GDP)

Source: KPMG Econtech MM2 simulation.

During the transition phase towards this higher domestic asset position there are important economic consequences. The majority of the gain in national saving finances a reduction in the current account deficit, while the remainder finances a gain in investment. The ongoing reduction in the current account deficit leads to the mounting reduction in foreign liabilities discussed above. In addition, a prolonged period of higher investment leads to mounting gains in the capital stock. These gains in the capital stock support gains in GDP.

It is important to note that the gain in the prevalence of financial advice modelled is not due to any particular policy, but rather through a behavioural change by individuals. The results from this behavioural change provide some guide to the likely economy-wide effects of a policy that that successfully increases the number of Australians with financial advisers, but the precise effects will depend on the exact nature of the policy.

Insurance Coverage

Studies on insurance coverage suggest that, on average, Australian individuals are underinsured.[6] One of the reasons why individuals are underinsured may be because of a lack of information about the true costs and benefits associated with insurance. As such, by providing information on the true costs and benefits of insurance, financial advisers may

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[6] For example, S. Kelly, V. Quoc Ngu, Understanding the social and economic cost of underinsurance, National Centre for Social Economic Modelling, Feb 2010; Understanding the Social and Economic Cost of Underinsurance, NATSEM Research Report, Feb., 2010; and Low level of insurance cause for concern, AXA Media Release, 2003.

encourage individuals to more adequately insure themselves. A boost to insurance levels has the potential to benefit the individual and the economy as a whole. For example, adequate insurance coverage may assist in reducing reliance on social security payments and improve the quality of life of individuals who claim against it.

The sample data was used to compare the level of insurance held by those with and without a financial adviser. The analysis of the level of insurance held by those with and without a financial adviser is based on data from two out of the three FANs. The insurance dataset gathered from the two FANs includes insurance information on approximately 2.3 million account holders. For this sample, the insurance coverage by adviser status is summarised in Table A.

Table A: Insurance Coverage by Adviser Status

	Adviser	**Without Adviser**
Life Insurance	47.3%	10.8%
TPD	16.2%	3.5%
Income Protection	6.6%	1.4%

Source: KPMG Econtech estimates.
Note: Total sample size for this analysis is 2.3 million account holders. Of this sample, 1.1 million account holders have a financial adviser and 1.2 million account holders do not have a financial adviser.

The subset data indicates that those with a financial adviser are more likely to hold insurance, by at least a multiple of four for each type of insurance covered in this analysis. For example, as shown in Table A, 47.3 per cent of individuals in the sample with a financial adviser hold Life Insurance. In contrast, only 10.8 per cent of those without a financial adviser hold life insurance. Similar observations can be made for both the total and permanent disability (TPD) and income protection insurances.

For this sample of 2.3 million account holders, there are large segments of the sample that are identified as not holding insurance with either of the two FANs who provided data. That is, 71.6 per cent of the sample are listed as not holding life insurance; 96.1 per cent are listed as not holding income protection insurance; and 90.4 per cent are listed as not holding TPD insurance. This indicates that either these account holders do not hold insurance with any provider or that these account holders have insurance with a provider other than the two participating FANs. To overcome this limitation, the analysis of the average level of insurance held for those with and without a financial adviser has been restricted to the account holders that are listed as holding insurance with the participating FANs. As such, the analysis presented below errs on the conservative side. **If we were able to identify and include those individuals who do not hold insurance with any provider in the analysis, then it is likely that the disparity between the levels of insurance held by those with an adviser and without an adviser would be greater.** This is because, as discussed above, those individuals with an adviser are more likely to hold insurance.

Table B outlines the level of insurance held, on average, by individuals in our sample according to their financial adviser status and type of insurance. The table also indicates the average level of insurance cover recommended by industry.[7]

Table B: Average Level of Insurance for Insured Persons by Adviser Status and Recommended Levels of Insurance

	Adviser	Without Adviser	Cover Required
Life Insurance	$142,000	$113,000	$431,000
TPD	$199,000	$194,000	$437,000
Income Protection	$4,000	$4,000	$3,750

Source: KPMG Econtech and Australian Institute of Superannuation Trustees (2008).

The statistical analysis indicates that those with a financial adviser typically held higher levels of insurance than those without an adviser. Specifically, those individuals with a financial adviser held:

- $29,000 on average more life insurance than those without a financial adviser in 2008-09;

- $5,000 on average more TPD insurance than those without a financial adviser in 2008-09; and

- a similar level of income protection insurance to those without a financial adviser in 2008-09.

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[7] AIST Media Release, Under-insured and most don't know it: Super fund Survey, Australian Institute of Superannuation Trustees (2008).

1 Introduction

The Financial Services Council (FSC) has a view that the provision of quality financial advice has the potential to provide consumers with a more appropriate financial outcome. In 2009, KPMG Econtech was engaged by the Financial Services Council (the then Investment and Financial Services Association) to investigate the impact of financial advice on individual saving behaviour. In addition, KPMG Econtech was also engaged to undertake economy-wide modelling to estimate the wider implications of this boost in savings. As part of this engagement, KPMG Econtech qualitatively analysed the role of Financial Advisory Networks (FANs) in providing quality financial advice. The results of our analysis were presented in the report "Value Proposition of Financial Advisory Networks" (2009 Report).[8]

The Financial Services Council has now engaged KPMG Econtech to update and extend the 2009 Report to include:

- the impact on savings arising from the provision of financial advice over time;

- an expanded data set that captures more than one participant and data over a number of years; and

- the impact on financial advice on the level of insurance coverage held by individuals.

As this report provides updated results and extends our 2009 Report, it should be read in conjunction with this earlier report. Importantly, this report focuses on the quantitative impact of financial advice on savings behaviour. An analysis of the overall value of advice received from financial advisers and planners (herein referred to as financial advisers) would need to consider the rates of returns, associated risks, and the fees associated with the financial advice, and are outside the scope of this report.

1.1 Report Structure

The report is structured as follows:

- Section 2 firstly describes a Financial Services Council FAN. Following this, the section discusses the potential benefits of financial advice. Lastly, this section discusses the potential benefits of adequate insurance coverage.

- Section 3 outlines KPMG Econtech's approach to investigate the impact of financial advice on savings behaviour and insurance levels. This section outlines the approach for modelling the economy-wide impacts of the additional saving generated from the provision of financial advice to more Australians.

- Section 4 presents the key implications for the economy of a boost in the level of national saving as a result of more Australians receiving financial advice.

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[8] This report is available on the Financial Services Council website:
http://www.fsc.org.au/downloads/file/PublicationsFile/2009_1105_KPMGEcontech(FinalReport).pdf

2 Value of Financial Advice

The value of financial advice provided to individuals is linked to several driving factors. This section presents an update of the key findings of the research contained in the 2009 Report.

This section begins with a description of a Financial Services Council FAN. Following this, the section discusses the potential benefits of financial advice. This section also discusses the need for adequate insurance coverage. This section concludes with a review of recent studies considering the potential benefits of insurance.

2.1 What is a Financial Services Council FAN?

The information presented below follows closely the discussion included in the 2009 Report and has been included here for completeness.

A FAN is an entity that holds an Australian Financial Services (AFS) License, enabling authorised representatives of the network to provide financial advice to the public. A Financial Services Council FAN is an entity that not only holds an AFS License, but also has a membership with the Financial Services Council. Financial Services Council members not only comply with statutory regulations, but have elected to comply with additional standards implemented by the Financial Services Council. Financial Services Council members include wholesale and retail funds management and life industry companies, a range of service suppliers supporting the industry, for example legal and accounting firms, research houses, asset consultants, and information technology providers.[9]

FANs have been established to assist financial advisers to meet their regulatory and professional obligations. FANs assist advisers through the provision of process services such as IT systems, client management platforms, compliance processes and product research. These services incur relatively high 'fixed' costs, and as such the central provision of them by a FAN allows them to achieve economies of scale.

Due to the increased regulatory complexity and requirements imposed on the financial industry and the assistance needed by advisers to meet their obligations, combined with the numerous products available to retail investors, FANs have grown and developed.

There are three variations of a FAN even though the basic structure is similar. FANs can be:

- one which is part of a larger institutional group and whose authorised representatives may be salaried or commission based;

- a franchise structure where authorised representatives operate their own businesses under the FAN's brand and subject to any restrictions imposed by the FAN; or

- an independent model where the FAN provides support for independent financial advice practices which operate under their own brand.[10]

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[9] Financial Service Council website *FSC Members* available: www.ifsa.com.au
[10] IFSA, Financial Advisory Networks, p. 5.

There are approximately 158 FANs operating in Australia employing approximately 15,800 financial advisers.[11]

2.2   The Potential Benefits of Financial Advice

Individuals and families seek financial advice is advice provided to an individual or family to assist them to increase, manage and protect their wealth. Many Australians receive financial advice at various stages in their lives, including but not limited to when they are planning on starting a family, paying off their mortgage, or considering retirement. Financial advisers are able to add value to families and individuals by providing tangible financial benefits such wealth creation and protection.[12] Recent research has shown that the benefits from receiving financial advice (including intangible benefits) include the following:[13]

• providing peace of mind;

• giving greater control of finances;

• improving the prospect of more comfortable retirement;

• helping in the avoidance of bad investments;

• making it easier to follow a budget; and

• creating and aiding the ability to save.

Australians have one of the largest levels of personal investment in the world. Despite this fact, it still falls short of the investment needed for a comfortable retirement. To live a 'comfortable' lifestyle, it is estimated that a couple would require $48,648 per annum. For this to be achievable, a lump sum of roughly $600,000 is needed at retirement age[14]. Given the large contributions at stake, quality financial advice on product choices, investment strategies and level of investment is important.

Additionally, research has shown that Australians are unprepared for retirement with one study citing that 44 per cent of baby boomers feel they have not made enough preparations for retirement.[15] Further, the study showed that 24 per cent have given some thought, and 11 per cent had given no thought or made no preparations for retirement. Of those surveyed, most individuals felt that an investor was someone who invested on a full-time basis and that they were just simply saving for there retirement.[16] Many Australians have said they are not confident and would like to learn more about investing and ensuring they have enough money for retirement.[17]

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[11] IBISWorld, 2010, Planning for change: The industry's future holds serious structural upheavals, *Financial Planning & Investment Advice in Australia*, October.
[12] McKee A, 2010, Role of Advisers within the Financial Services Market – Lynchpin or Leech?
[13] Galaxy Research March 2007
[14] Westpac-ASFA Retirement Standard research report – Rice Warner's Superannuation Market Projections.
[15] Mercer Wealth Solutions 2007, *Simple Super Research*, May.
[16] ASIC Investor Research 2007, *Consultation Paper 89*, August.
[17] Financial Literacy Foundation 2007, *Australian's Understanding Money*, September.

There are numerous risks facing those preparing for or entering retirement. Most of the risks are manifested via the sooner-than-expected depletion of retirement savings. This inadequacy of funds is often the result of:

- living longer than expected;

- a reduction in expected income due to poor market returns;

- the loss of real purchasing power;

- poor outcomes due to inappropriate retirement planning;

- an inability to supplement post-retirement income;

- the failure of financial institutions; and

- adverse changes to government policy.[18]

The amount of funds expected to transition into the retirement or drawdown phase is forecast to reach $1.2 trillion (or 39 per cent) of total superannuation assets in Australia over the next 15 years[19]. As such it becomes increasingly important that people plan strategically for their retirement.

2.3   The Value of Financial Advice

As noted earlier, the FSC has a view that the provision of quality financial advice has the potential to provide consumers with an improved financial outcome. This section summarises the findings of prior research which support this assertion.

Financial advice is obtained on a diverse range of services from investment and retirement planning, risk management and estate planning to specific product advice, superannuation and life insurance. An integral part of an adviser's role is to make recommendations to consumers on these investment options. These recommendations have regard to:

- the risk tolerance of the client;

- the investment risks of each individual investment; and

- the accumulation or diversification of risk across the client's entire portfolio.

For a rational consumer, when the expected benefits of the financial advice received outweigh the expected costs of receiving the advice, the consumer will engage a financial adviser[20]. Due

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[18] Matterson W., 2008, Risk in Retirement: Impact of the Market Downturn and Implications for Retirees and Product Providers, *Journal of Financial Advice*, Volume 1 No. 3, pp. 23-32.
[19] Ibid.
[20] McKee A, 2010, Role of Advisers within the Financial Services Market – Lynchpin or Leech?

to the extensive range of services financial advisers provide, it is reasonable to presume that there is value in obtaining financial advice, but this value is difficult to quantify.

Assessing the expected benefits of financial advice requires an understanding of what motivates individuals to seek out such advice. The Australian financial services industry is a highly complex legislative and financial environment. Research has shown that demand for advice in this industry is generated through two factors, the complexity of the financial markets and the perceived materiality or the importance of the decision to an individual's financial wellbeing.[21]

Due to the complexity of the financial services industry, financial advice can have a significant impact on the individual. This complexity is expected to continue in the future, particularly with the reviews into Australia's financial advice, superannuation and tax regulations.

In addition, with the recent turmoil in the global financial markets, financial advisers have the capacity to create value for investors by providing strategies to safeguard investments and assets. During these uncertain times, value is received from financial advice in areas including market and investment foresight, knowledge of financial products, tax and risk management strategies, and investment vehicles to ensure the investors goals are met.[22] Essentially, a financial adviser may help bring control over an investor's potentially irrational investment behaviour and assist in attempting to create a more optimised asset allocation.

An internet-based survey taken in April 2008 at the time of the financial downturn showed that education provided by financial advisers helped investors feel better prepared and insulated from the downturn.[23] Of those surveyed, one fifth of the investors rebalanced their portfolios. This indicated that the investors were comfortable with the advice they received from their financial advisers, and that their strategies were considered appropriate to pursue at the time. This survey indicated that obtaining financial advice and maintaining quality investment strategies can help reassure investors and potentially keep them from making incorrect and sub-optimal rebalancing decisions.

A survey undertaken by the Financial Services Council (then IFSA), showed an increase in the satisfaction level of individuals who had financial advisers, in regards to financial preparation for retirement.[24] The survey showed that regardless of whether investors have or do not currently have an adviser, professional financial advice is valued strongly. Across all age groups, between 68-83 per cent of investors with advisers and 29-59 per cent of investors with no advisers agree that they value the help of a qualified financial adviser in managing their money. Various other studies found that 83 per cent of Australians listed financial advisers as their preferred source of financial information, followed by accountants at 81 per cent.[25] A range of other studies have found that investors with a financial adviser also reported that they received more than just 'product' advice from their adviser, with 80 per cent agreeing that their adviser has given them greater:

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[21] Ali A. Z 2008, Investor Reaction to Financial Turmoil – Can Financial Planners Help?, *Journal of Financial Advice*, Vol 1 No. 2, pp. 68-74.
[22] ibid
[23] ibid
[24] IFSA 2008, *Investors confidence: Improving financial understanding of Australians June 2008*
[25] Financial Literacy Foundation 2007, *Australian's Understanding Money*, September.

- understanding of finances;

- knowledge and education about investment options;

- confidence that they will achieve their lifestyle and financial goals; and

- confidence that they are prepared for retirement.[26]

Although the value of financial advice is difficult to quantify, the research indicates there is value from receiving quality financial advice. In spite of the apparent value placed on financial advice, the survey shows that only 40 per cent of active investors and 15 per cent of passive investors have a financial adviser.[27]

2.4   The Potential Benefits of Insurance

Theory on the economics of insurance suggest that an individual's decision on how much insurance to hold is based on two factors; their level of risk aversion and the cost of insurance, namely the premium charged by the insurance company.

It is widely accepted that most individuals are risk averse, that is, individuals are willing to pay to avoid risk. In the context of insurance, this means individuals are willing to pay the insurance premium in exchange for the certainty that, if an adverse event eventuates, all or part of their wealth will be restored. Essentially they are paying to have the risk reduced or eliminated.

The most commonly held types of insurance in Australia include life insurance, total and permanent disability (TPD) insurance and income protection insurance. Life insurance is an insurance policy which pays a lump sum on the insuree's death or diagnosis of a terminal illness. TPD insurance is a policy that pays a lump sum if the insuree becomes disabled and is unable to work again. Income protection insurance provides a replacement income while the insuree is temporarily unable to work because of sickness or injury.[28]

A large number of studies have found that many Australians do not have sufficient insurance cover to protect their families and their income. Estimates suggest only 4 per cent of Australian families with dependent children have adequate levels of insurance cover.[29] Furthermore, an AXA report[30] found the life insurance cover of the average Australian is only 26 per cent of that required. All superannuation fund members in Australia receive benefits in the event of death or permanent disability. However, research suggests that even after taking into account the value of superannuation, the average Australian has death cover and disability income cover worth only 30 per cent and 27 per cent respectively of that required.

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[26] IFSA/TNS Investor Sentiment Research November 2006.

[27]   IFSA 2008, *Investors confidence: Improving financial understanding of Australians June 2008* page 66

[28] Understanding the Social and Economic Cost of Underinsurance, NATSEM Research Report, Feb., 2010.

[29] ibid.

[30] Low level of insurance cause for concern, AXA Media Release, 2003.

In 2008, the Australian Institute of Superannuation Trustees (AIST) and the Industry Funds Forum (IFF) established a formula for estimating the appropriate level of life, TPD and income protection insurance for individuals based on their income, assets, debt and number of dependants.[31] Using member details from across nine superannuation funds they compared the actual level of insurance held with the estimated "required level". The study found that the average life insurance cover held is $189,000, whilst the average needed is $431,000. Based on these comparisons the following table shows the percentage of people in the Sweeney Research sample that held life insurance for under $100,000, between $100,000 and $200,000 and greater than $200,000, and the percentage of people that required that amount of coverage.

Table 2.1: Life Insurance Coverage

Life Insurance			
	Held	Needed	Gap
<$100,000	38%	29%	-9%
$100,000-200,000	28%	11%	-17%
>$200,000	34%	59%	25%

Source: Sweeney Research (2008)

The difference indicates that the percentage of people in the sample that are holding Life insurance of under $100,000 is 9 per cent more than those that need that amount of insurance coverage. At the other end of the scale, 59 per cent of the individuals in the sample require life insurance of over $200,000, but only 34 per cent of the sample holds the required amount.

For the sample, the average TPD cover held of $162,000 is also insufficient compared to the required level of $437,000. The table below indicates that at least 50 per cent of the people in the sample are insured for under $200,000 where they need more than this amount of insurance coverage.

Table 2.2: TPD Insurance Coverage

TPD			
	Held	Needed	Gap
<$100,000	43%	8%	-35%
$100,000-200,000	32%	17%	-15%
>$200,000	25%	75%	50%

Source: Sweeney Research (2008)

Turning to income protection insurance, the monthly amount insured for is $2,700 whilst the monthly income protection insurance required is estimated to be $3,750, which again represents significant underinsurance. The following table contains percentages of surveyed individuals holding the levels of income protection insurance, and percentages of individuals who need to hold those levels of cover. Overall, 45 per cent of people in the sample holding cover for less than $2,000 per month require more than this amount of insurance.

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[31] Sweeney Research, IFF and AIST Member Insurance Research, Presented for The Superannuation Insurance Symposium, 3rd June 2008.

Table 2.3: Income Protection Insurance Coverage

Income Protection Monthly			
	Held	Needed	Gap
<$2000	68%	23%	-45%
$2001-5000	28%	50%	22%
>$5000	2%	26%	24%

Source: Sweeney Research (2008)

Consequently, based on this research there appears to be significant underinsurance in life, TPD and income protection insurance.

The underinsurance problem is notable in Australia, and has the potential to impact not only affected families, but also the economy as a whole. A study conducted in 2005 by Rice Walker Actuaries gives an indication of the magnitude of the life insurance policy required to maintain a family.[32] They estimate that a 40-year-old full time worker earning $50,000 a year with young children would require as much as $650,000 to pay off their debts and adequately maintain their family in the event of their death, yet such an individual is typically covered for only $90,000. Overall, at the extreme, they estimate that Australians with dependent children are exposed to a potential $1.3 trillion shortfall as a result of under insurance. To give an idea of how much underinsurance is actually costing the economy, in terms of social security payments alone, Rice Warner Actuaries estimate that $250 million a year is being paid out to support uninsured and underinsured families with children where a parent has died.

The above-mentioned report by AXA revealed that the cause of the under-insurance problem in Australia is that consumers are over-confident and feel that they are 'bullet-proof'.[33] That is, individuals are under estimating the probability that a loss will occur and/or the size of that loss. As such, the value they place on insurance against the risk of loss is too low, and the premium appears to be too high.

The study also found a widespread misunderstanding amongst individuals about the benefits of insurance protection cover and how it works. This equates to an additional cost of insurance from the insuree's perspective in the form of uncertainty surrounding the coverage of the policy[34]. This potentially gives rise to the need for financial advice on the potential risks that individuals face, the consequences of these risks, as well as on the details of various insurance policies available. It also suggests that financial advice may encourage a boost to the level of insurance held by individuals by eliminating the cost of being under-informed.

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[32] McRae. G, Dunsford. G, "Investment and Financial Services Association Cost of Underinsurance Project – Analysis of Life Insurance Needs", Rice Walker Actuaries, May 2005.
[33] Most Australians are still Significantly Under-insured, AXA Australia, 2005.
[34] When individuals are considering a product they build into their decision a cost for the fact that they are at a disadvantage in terms of a complete understanding of the product. The fact that there are many claims contested in courts each year indicates that insurees are not fully informed of what risks they are insuring against. Hence, in addition to the costs of the insurance premium, insurees add an implied cost of being ill informed of the policy. A more complete understanding of the insurance contract on offer may result in individuals that choose more insurance, as this cost of ignorance is removed (Doherty and Schlensinger, 2009)

3 The Value of Quality Financial Advice

As discussed earlier, the Financial Services Council has the view that the provision of quality financial advice has the potential to provide consumers with a more appropriate financial outcome. In addition, appropriate advice may also lead to individuals taking out more adequate levels of insurance.

This section outlines the modelling approach employed to update and extend the 2009 Report and is structured as follows.

- Section 3.1 outlines the broad approach to measure the value of financial advice.

- Section 3.2 details the sources of data employed for the quantitative part of this study.

- Section 3.3 outlines the statistical analysis that was employed for this study.

- Section 3.4 presents the economic theory underpinning the regression analysis.

- Section 3.5 details KPMG Econtech's approach to the economy-wide modelling.

3.1 Approach to Valuing Financial Advice

Our 2009 report for the Financial Services Council modelled the economy-wide impacts of additional savings generated from the provision of financial advice to more Australians. To do this, KPMG Econtech undertook the following broad steps:

- Descriptive statistical analysis – This step involved subjecting the initial data set to a range of tests to review data integrity and suitability for further analysis. This initial analysis of the dataset provided indicative insights into the saving behaviour of those individuals who have, and who do not have, a financial adviser.

- Regression analysis – Following the initial descriptive statistical analysis, KPMG Econtech undertook regression analysis to control for other factors influencing saving behaviour such as wealth levels, age and employment.

- Economy-wide modelling – Lastly, economy-wide modelling was undertaken to estimate the impact of more Australians receiving financial advice. Specifically, KPMG Econtech modelled the impact on the economy if an additional 5 per cent of Australians receive financial advice.

It is important to note that the 2009 report and this report focus on the impact of financial advice on savings behaviour and not on valuing the advice received from financial advisers. If such analysis was to be undertaken, the analysis would need to consider the rates of return, associated risks, and the fees associated with the financial advice. Such an analysis is outside the scope of this report.

For this report, which updates and extends the 2009 report, KPMG Econtech has undertaken the same broad steps outlined above. However, for this report, KPMG Econtech has also considered:

- the impact on savings arising from the provision of financial advice over time;

- an expanded data set that captures more than one participant and data over a number of years; and

- the impact on financial advice on the level of insurance coverage held by individuals.

The following sections provide more detail on each of the steps undertaken to quantify the contribution of financial advice to the individual and the national economy.

3.2 Data

For the 2009 Report, two large FANs provided data responses for the quantitative analysis. However, due to the stringent data requirements for the analysis, only data from one FAN was suitable for the quantitative analysis contained in the 2009 Report.

As noted earlier, one aim of this study was to expand the data set so that it captures more FANs and data over a number of years. For this 2010 Report, three of Australia's biggest FANs provided data. The data set collated included information on approximately 3.4 million individual accounts for the years from 2005-06 to 2008-09.

For all of the data, where possible the same definition of each variable has been applied. However, in some cases it was difficult to apply the exact definition due to the different nature of the products and the information available across the three FANs. For example, income data was not readily available in a consistent form across the three FANs. As a result, a proxy using the per capita income by postcode has been employed to capture the impact of income on savings behaviour.

However, as with all analysis of this nature and as noted above, drawbacks with the dataset remain. Notwithstanding these drawbacks, the data is able to provide indicative insights into the saving behaviour of those individuals with and without a financial adviser.

To protect the privacy of individual account holders, only results at the aggregate level are presented in this report. In addition, the data received by KPMG Econtech did not include any detail that allowed individuals to be identified. A complete list of the variables requested in the survey is provided at Appendix A.

3.2.1 Data Characteristics

As indicated earlier, the initial dataset was subjected to a range of tests to review data integrity and suitability for further analysis. As part of this process, analysis was also undertaken to consider the demographic profile of the sample. Using postcode data on each of the approximate 3.4 million account holders included in the sample, a demographic profile in terms of income per capita, age, gender, and employment status was developed. This demographic profile was then compared to the national demographic profile.

Using income per capita from the ABS (2007), the sample data and population data was classified into ten per capita income groups. Chart 3.1 details the percentage of the sample and the population in each of the income groups. This analysis shows that the per capita income distribution of the sample closely resembles the per capita income distribution at the population level. The largest difference is in the lowest income group. However, this difference as a proportion of the entire sample amounts to approximately only two percentage points, which is negligible.

Chart 3.1: Per Capita Income Distribution (per cent)
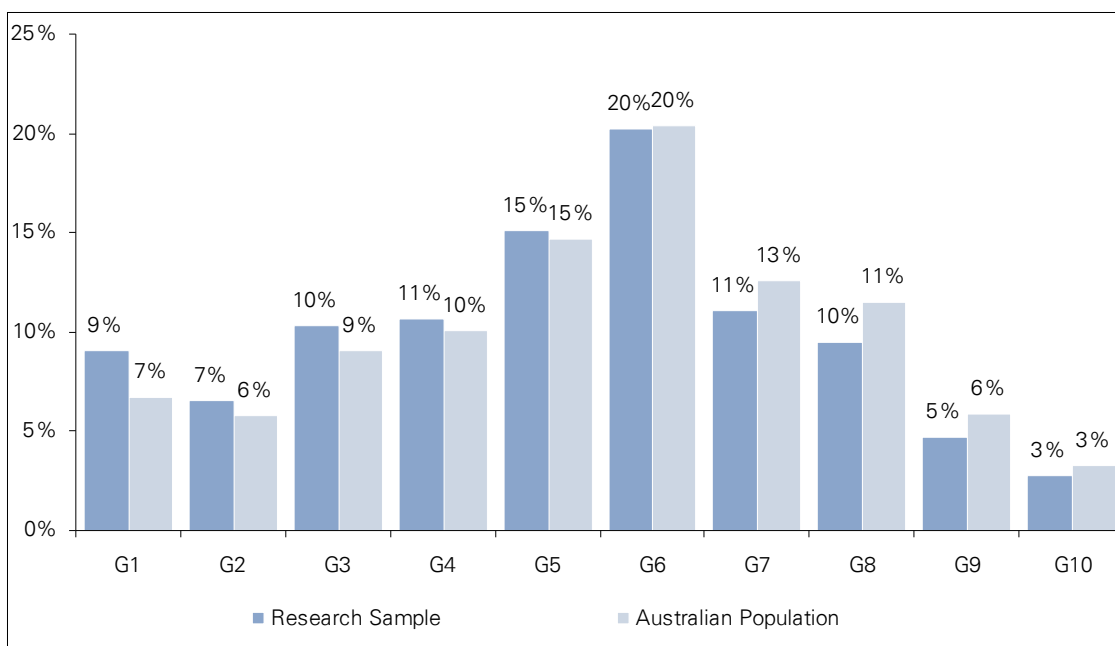
Source: ABS Census Tables Cat. No. 2068.0 (Age by Sex) (2007) and KPMG Estimates.

The remainder of the demographic analysis undertaken is outlined at Appendix B. Overall, the data set covers a wide demographic and is considered to be suitable for this analysis.

3.3   Descriptive Statistical Analysis

The data provided by each of the members was initially subjected to a range of tests to review data integrity and suitability for further analysis. Following the initial analysis, the data from the three FANs was combined into a single data set before undertaking further analysis.

The statistical analysis was undertaken on the sample data to determine whether those individuals with a financial adviser:

- saved more than those without an adviser; and

- held greater levels of insurance coverage that those without an adviser.

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3.4   Regression Analysis

Following the initial descriptive statistical analysis, the next step involved controlling for other factors influencing saving behaviour such as wealth levels, age and employment status. To control for these other factors, KPMG Econtech developed an equation that relates an individual's saving to the factors that influence an individual's saving behaviour.

The basic model used to estimate the driving forces of an individual's saving decision may be expressed as:

$$Sav_t = a_0 + a_1 PLA + a_2 FUM + a_3 EMP + a_4 Gender + a_5 Age_{1to5} + a_6 POA_{1to10} + \varepsilon$$

where:

- Sav = Captures the saving of each individual for the period 2005-06 to 2008-09 financial years.

- PLA = A dummy variable to indicate if an individual has a financial adviser or not.

- FUM = Details the total Funds Under Management (FUM) at the beginning of the period.

- EMP = A dummy variable to identify if the individual is employed or not.

- Gender = A dummy variable to identify if the individual is male or female.

- Age = A dummy variable to identify the age group classification the individual account holder falls in. The five groups include: less than 35 years; between 35 and 45 years; between 45 and 55 years; between 55 and 65 years; and more than 65 years.

- POA = Dummy variables to identify the per capita income group the individual account holder falls in.

The purpose of the equation above is to model the factors that influence an individual's level of savings over the period from 2005-06 to 2008-09. In particular, it shows how the level of savings depends on a number of factors, including, age, wealth, employment status, gender, age and per capita income levels. In addition, to control for the impact of an individual receiving financial advice, one dummy variable was included, PLA.

The estimated coefficient of the dummy variable provides an indication of the impact financial advice has on an individual's saving behaviour. Specifically, the coefficient of the adviser dummy variable (PLA) indicates the amount of additional saving that an individual who has a financial adviser undertakes compared to an individual with the same characteristics who does not have a financial adviser. The amount of additional saving identified in the regression analysis is used to estimate the impact on overall household saving if more Australians were to receive financial advice. The results of the regression analysis and the amount of additional saving for those who have a financial adviser over those who do not is, presented in Section 4.

In developing the structure of the model above, many different specifications were tested. These different model specifications were compared to test the robustness of each approach given the straightforward intention of the model. At the same time, diagnostic tests, such as those examining the goodness-of-fit and the error properties of the models, were also undertaken to determine the most appropriate model.

3.5 Economy-wide Modelling

Following the regression analysis, economy-wide modelling was undertaken to quantify the benefits of more Australians receiving financial advice. To perform this analysis, KPMG Econtech modelled the impact of an additional 5 per cent of Australian receiving financial advice. The earlier KPMG Econtech regression analysis was able to quantify the additional savings achieved by those individuals with financial advice above those who do not receive financial advice. This additional amount of savings was used as a basis to simulate the economy-wide impacts of a five per cent increase in Australians receiving financial advice. The simulation of a 5 (five) per cent increase in Australians receiving financial advice was undertaken to demonstrate the economy-wide implications of a relatively small increase in the prevalence of financial advice.

The economic impact of changes to Australia's national saving as a result of greater prevalence of financial advice on the economy was estimated using KPMG Econtech's MM2. MM2 is a fully integrated macro-industry model which can be used to fully capture both the direct and indirect impacts of increases in the level of national saving on the Australian economy over time. MM2 is designed for macroeconomic forecasting and policy analysis and it also contains broad industry detail.

3.5.1 Modelling Approach

The regression analysis indicates that those individuals who have a financial adviser save more than individuals with similar characteristics who do not have a financial adviser. Thus, the economy-wide impact of a greater prevalence of financial advice is modelled as a reduction in household consumption compared with the baseline scenario. The reduction in consumption reflects those additional individuals with advisers choosing defer consumption and save more. The magnitude of the reduction in consumption that is modelled is determined using the results of the regression analysis.

The results from this behavioural change provide some guide to the likely economy-wide effects of a policy that successfully lifts the prevalence of financial advice, but the precise effects will depend on the precise nature of the policy. This will be an important point when interpreting the results of the scenarios.

3.5.2 Scenarios

One baseline and one saving scenario are modelled for this report.

- The **baseline scenario** is based on the current prevalence of financial advice. The baseline forecasts provide a picture of the current and future demographic and economic conditions.

- The **saving scenario** has been modelled to estimate the effect of a 5 (five) per cent increase in the number of individuals with a financial adviser.

MM2 has the following important features that make it well suited for the analysis in this report.

- MM2 is a macro Computable General Equilibrium (CGE) model that fully recognises the interrelationships between the supply and demand sides of the economy. The model recognises that the demand side is important in influencing economic activity in the short term, but at the same time it converges to the long run of a CGE model.

- The MM2 has been developed to be consistent with Australian data. Equation dynamics were developed by applying the general to specific approach in an error correction framework. The equations were subjected to a battery of diagnostic testing.

- For consistency with economic theory, the MM2 has long-run properties of steady state growth, profit maximisation, external balance, fiscal balance, and equilibrium rates of inflation and unemployment. The theory-related dynamic properties of the MM2 include rational expectations in financial markets, and a hierarchical adjustment process featuring a Keynesian short run, a classical medium run, and a neoclassical long run.

- The supply side of the MM2 is just as important as its demand side. Thus, Gross Domestic Product (GDP) on the production side is modelled in some detail, as well as the expenditure side. In fact, the modelling of production complements, and fully integrates, with the modelling of expenditure. GDP on the production side is disaggregated into the 18 broad Australian and New Zealand Standard Industry Classifications (ANZSIC) industries, linked together through an input-output table.

MM2 is based on the common view that while demand shocks may affect economic activity in the short term, in the long term economic activity is supply driven. Specifically, in long-run equilibrium:

- the unemployment rate converges to a NAIRU (non-accelerating inflation rate of unemployment);

- economic growth is steady and balanced; and

- the exchange rate appreciates/depreciates at a steady rate, allowing domestic inflation to be permanently below/above foreign inflation.

More information about MM2 is presented in Appendix C.

4   The Contribution of Financial Advice

Section 3 outlined the methodology underpinning the analysis into quantifying the benefits of financial advice to individuals and the national economy. This section discusses the results for the descriptive statistical analysis, regression analysis and the economy-wide implications of an increase in the number of individuals receiving advice from financial advisers.

This section is structured as follows.

- Section 4.1 outlines the key findings of the descriptive statistical analysis for the difference in savings levels for those with a financial adviser and those without a financial adviser.

- Section 4.2 details the pertinent results of the regression analysis relating to savings behaviour.

- Section 4.3 presents the results of the economy-wide modelling of a greater prevalence of financial advice.

- Section 4.4 outlines the key findings of the descriptive statistical analysis for the difference in insurance coverage levels for those with a financial adviser and those without a financial adviser.

4.1   Saving Behaviour – Descriptive Statistics

To estimate the economy-wide impacts of the additional saving generated from the provision of financial advice to more Australians, KPMG Econtech began with a descriptive statistical analysis. This analysis was to check the data integrity and check the suitability of the data for regression analysis. In addition, this initial analysis included partitioning the data set to consider the descriptive statistics for broad groups. Most importantly, this analysis provided insights into the saving behaviour of those individuals with and without financial adviser.

Based on the initial descriptive statistical analysis, individuals with a financial adviser save more than individuals who do not have a financial adviser. For the period from 2005-06 to 2008-09, those with an adviser are estimated to save on average $11,200 more than those without an adviser.

4.2 Saving Behaviour – Regression Analysis

This section outlines the results of the regression analysis. The regression analysis controls for the other factors that can influence the saving behaviour of individuals. Detailed regression results are presented at Appendix D.

Based on the regression analysis, individuals with a financial adviser save more than individuals who do not have a financial adviser. For the period from 2005-06 to 2008-09, those with an adviser are estimated to save on average $6,900 more when compared to a similar individual without a financial adviser. This is equivalent to an additional $1,725 in saving each year for those with a financial adviser.

All of the variables except for one of the per capita income groups are found to be significant and all of the variables have the expected signs. This additional saving is lower than the average difference identified in the initial descriptive statistic analysis of $11,200. The lower amount estimated for those with a financial adviser in the regression analysis was expected, as the regression analysis is controlling for other factors, such as wage, which influence saving behaviour.

There are also costs associated with obtaining financial advice. As the analysis focuses on capturing the quantitative impact of financial advice on saving behaviour, it is appropriate to solely consider the costs associated with the development of a saving plan. According to the FSC, the one-off average cost of developing such a plan is approximately $530. Specifically, the cost covers the following types of advice services:

- initial and subsequent appointment with a client to determine their circumstances and needs;

- development of the strategy;

- researching product solutions;

- preparation of the Statement of Advice;

- presentation of the Statement of Advice and strategy to the client; and

- execution and implementation of the strategy.

This means that after allowing for the cost of obtaining advice, an individual with a financial adviser saved $6,370 over 2005-06 to 2008-09 or an additional $1,590 each year compared to a similar individual without a financial adviser.

This additional saving leads to additional wealth for an individual. Based on a real risk-free rate of return of three (3) per cent per annum[35] and capturing the savings behaviour of different age

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[35] This estimate involves using a nominal rate of return equivalent to the bond rate and an inflation rate at the mid point of the RBA's target band of 2-3 per cent.

groups, this additional saving accumulates to an average additional wealth at retirement (age 65 years) of:

- $91,000, if the additional savings commenced from age 30;

- $80,000, if the additional savings commenced from age 45; and

- $29,000, if the additional savings commenced from age 60.

The estimates above also allow for the one-off cost of developing a savings plan with a financial adviser. These may be conservative estimates should the additional savings be successfully invested in assets that attract a risk premium. The estimated wealth impacts indicate a potential for long term benefit from engaging a financial adviser throughout an individual's life such as when planning to start a family, paying off a mortgage, or planning to fund retirement.

The results from this regression analysis play an important role in the economy-wide modelling component of this report. As mentioned previously, the economy-wide impact of financial advice is modelled as a gain in household saving. The magnitude of the reduction in consumption (gain in household saving) that is modelled is determined using these results and the assumption that an additional five (5) per cent of Australians receive financial advice.

4.3   Insurance Coverage – Descriptive Statistics

As indicated earlier, for this report, the initial descriptive statistical analysis was extended to examine the level of insurance held by those with financial advisers compared to those without financial advisers.

The sample data was used to compare the level of insurance held by those with and without a financial adviser. The analysis of the level of insurance held by those with and without a financial adviser is based on data from two out of the three FANs. The insurance dataset gathered from the two FANs includes insurance information on approximately 2.3 million account holders. For this sample, the insurance coverage by adviser status is summarised in Table 4.1.

Table 4.1: Insurance Coverage by Adviser Status

	Adviser	Without Adviser
Life Insurance	47.3%	10.8%
TPD	16.2%	3.5%
Income Protection	6.6%	1.4%

Source: KPMG Econtech estimates.
Note (A): Total sample size for this analysis is 2.3 million account holders. Of this sample, 1.1 million account holders have a financial adviser and 1.2 million account holders do not have a financial adviser.

The subset data indicates that those with a financial adviser are more likely to hold insurance, by at least a multiple of four (4), for each type of insurance covered in this analysis compared to those without a financial adviser. For example, as shown in Table A, 47.3 per cent of

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individuals in the sample with a financial adviser hold Life Insurance. In contrast, only 10.8 per cent of those without a financial adviser hold Life Insurance. Similar observations can be made for both the TPD and income protection insurances.

For this sample of 2.3 million account holders, there are large segments of the sample that are identified as not holding insurance with the two FANs who provided data. That is, 71.6 per cent of the sample are listed as not holding Life Insurance; 96.1 per cent are listed as not holding income protection insurance; and 90.4 per cent are listed as not holding TPD insurance. Importantly, for an account holder to be listed as not holding insurance with either of the two FANs, this may indicate that these account holders do not hold insurance with any provider or this could indicate that these account holders have insurance with a provider other than the two FANs. To overcome this limitation, the analysis of the average level of insurance held for those with and without a financial adviser has been restricted to the account holders that are listed as holding insurance. As such, the analysis presented below errs on the conservative side. If we were able to identify and include those individuals who do not hold insurance with any provider in the analysis, then it is likely that the disparity between the levels of insurance held by those with an adviser and without an adviser would be greater. This is because, as discussed above, those individuals with an adviser are more likely to hold insurance.

As discussed in section 2.4, studies on insurance coverage suggest that, on average, Australian individuals are under insured. Underinsurance may be partially driven by a lack of information about the true costs and benefits associated with insurance among individuals. As such, by providing information on the true costs and benefits of insurance, financial advisers may encourage individuals to more adequately insure themselves. A boost to insurance levels has the potential to benefit the individual and the economy as a whole. For example, adequate insurance coverage may assist in reducing reliance on social security payments and improve the quality of life of individuals who claim against it.

To consider the adequacy of the insurance held by both those with and without a financial adviser, research conducted by Sweeney Research (2008) was used as a benchmark. This research considered a sample across nine superannuation funds in 2008 to determine the average level of insurance held and estimated the "required level" of insurance. This research found that:

- the average life insurance held was $189,000, whilst the average required level of life insurance was found to be $431,000;

- the average TPD insurance held was $162,000, whilst the average required level of TPD insurance was found to be $437,000; and

- the average income protection insurance held was $2,700, whilst the average required level of income protection insurance was found to be $3,750.

Table 4.2 outlines the level of insurance held, on average, by individuals in our sample according to their financial adviser status and type of insurance. The table also indicates the average level of insurance cover recommended by industry[36]

Table 4.2: Average Level of Insurance for Insured Persons by Adviser Status and Recommended Levels of Insurance

	Adviser	Without Adviser	Cover Required
Life Insurance	$142,000	$113,000	$431,000
TPD	$199,000	$194,000	$437,000
Income Protection	$4,000	$4,000	$3,750

Source: KPMG Econtech and Australian Institute of Superannuation Trustees (2008).

The statistical analysis indicated that those with a financial adviser held:

- $29,000 on average more life insurance than those without a financial adviser in 2008-09;

- $5,000 on average more TPD insurance than those without a financial adviser in 2008-09; and

- a similar level of income protection insurance than those without a financial adviser in 2008-09.

This statistical analysis of the insurance coverage held by those with and without a financial adviser indicates that there is an underinsurance problem in Australia. In addition, the data suggests that for life insurance coverage, those with a financial adviser are likely to be underinsured by a lower level when compared to those individuals holding a life insurance policy but do not have a financial adviser.

4.4   Saving Behaviour – Economy-wide Modelling

4.4.1   Baseline

As explained in Section 3, MM2 is used in this report to generate two scenarios. These are a **baseline scenario** and a **saving scenario**.

The baseline scenario is based on existing policy arrangements and the current prevalence of financial advice. The baseline forecast provides a picture of the current and future economic conditions of the Australian economy if there is no increase in the number of individuals with financial advisers. The baseline scenario serves as a point of reference for the saving scenario — the results of the saving scenario are expressed as deviations from the **baseline scenario**.

The results of the saving scenario are not forecasts of the future. The saving scenario estimates the impact of a greater prevalence of financial advisers. The magnitude of the results, expressed

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[36] AIST Media Release, *"Under-insured and most don't know it: Super fund Survey*", Australian Institute of Superannuation Trustees 2008

as deviations from "baseline", reflect the size of the policy shock and the coefficients of the model's equations.

To explain the findings of the baseline scenario, this section begins with an explanation of the state of the economy at the aggregate macro level.

4.4.2   Historical – State of the Economy

As the data in this analysis draws on the last five (5) years, it is important to understand the state of the economy and any major developments over that period.

The past five (5) years have presented an interesting set of economic circumstances. From 2004-05 to 2006-07 the Australian economy saw stable economic growth of between 2.8 per cent and 3.3 per cent. The solid growth was largely the result of strong domestic demand, particularly household consumption and investment within the Mining industry. The Australian Dollar (AUD) was strong over this period which, in spite of reasonable economic growth internationally, hindered export activity while encouraging imports.

In 2007-08 Australia's economic growth had picked up pace, nearing four (4) per cent as household consumption took off, business investment continued to grow and government spending increased. Employment and wage growth were both strong which drove household disposable income and thus consumption spending. However, increases to input costs in the form of wages and oil prices meant that inflation continued to rise and hence Australia saw continued tightening in monetary policy.

Against this backdrop, Australian households were improving their net asset position by increasing their saving. From 2005 to 2007, the household saving ratio had been improving following a consistent decline over the previous decade.

In 2008-09 the global financial crisis (GFC) hit and with credit markets frozen and international growth at a complete stand still, the Australian economy suffered. Average GDP growth in 2008-09 was a low 1.0 per cent as economic activity fell in the December quarter of 2008.

Over the year the labour market weakened and unemployment increased, peaking at 5.8 per cent in the September quarter of 2009. As a result, wage growth was weak throughout the year leading to an overall reduction in household disposable income. The dramatic deterioration of economic conditions resulted in very low (crisis level) interest rates as the RBA turned to an expansionary monetary policy stance. At the same time the federal government announced a series of stimulus spending packages including a direct cash stimulus payment.

Looking back on 2009-10 there has been a decided improvement in economic conditions. GDP growth has rebounded, unemployment has returned to pre-crisis lows and interest rates have, at least for the moment, stabilised. Exports have rebounded, particularly with demand for commodities from China, business investment has begun to recover, consumer sentiment is returning and housing investment is set to recover. As such household disposable incomes are returning to health, although it is yet to be seen how quickly savings will return.

4.4.3   Australian Economic Outlook

To gain a firm understanding of the impact of a greater prevalence of financial advisers, it is important to understand the current economic climate.

Global economic growth has outpaced expectations in the first half of 2010. As in previous periods, the recovery has been led by developing Asian economies, with the developed world lagging behind due to continued weakness in labour markets and consumer demand. Strong growth over the first half of the year has led the IMF to upgrade its growth forecast to 4.5 per cent for 2010, although the outlook over the latter half of the year is clouded by the looming possibility of a double dip recession in Europe. Growth prospects in other industrial economies remain weak. In the US, a full-blown recovery continues to be hampered by high unemployment. In the UK, a sharp withdrawal of government support, in a bid to restore fiscal balance, may derail an emerging resumption of growth.

The Australian economy remains on track to recover in 2010-11, with activity expected to expand by a strong 3.6 per cent, as shown in Chart 4.1 below. Australia will continue to benefit from the health of the domestic banking system, strong trade ties to rapid growth Asian economies and a solid labour market. Exports will be a key source of growth, lead by mining exports to developing Asia. Growth in employment and an appreciation of personal wealth should see also consumption growth pick up in late 2010. One of the other drivers of growth in 2010-11 will be the Construction industry; heavy dwelling investment in 2010-11 is expected to flow through to a solid rise in construction output.

Chart 4.1 Economic Growth (GDP) and Unemployment Rate (rolling years, per cent)
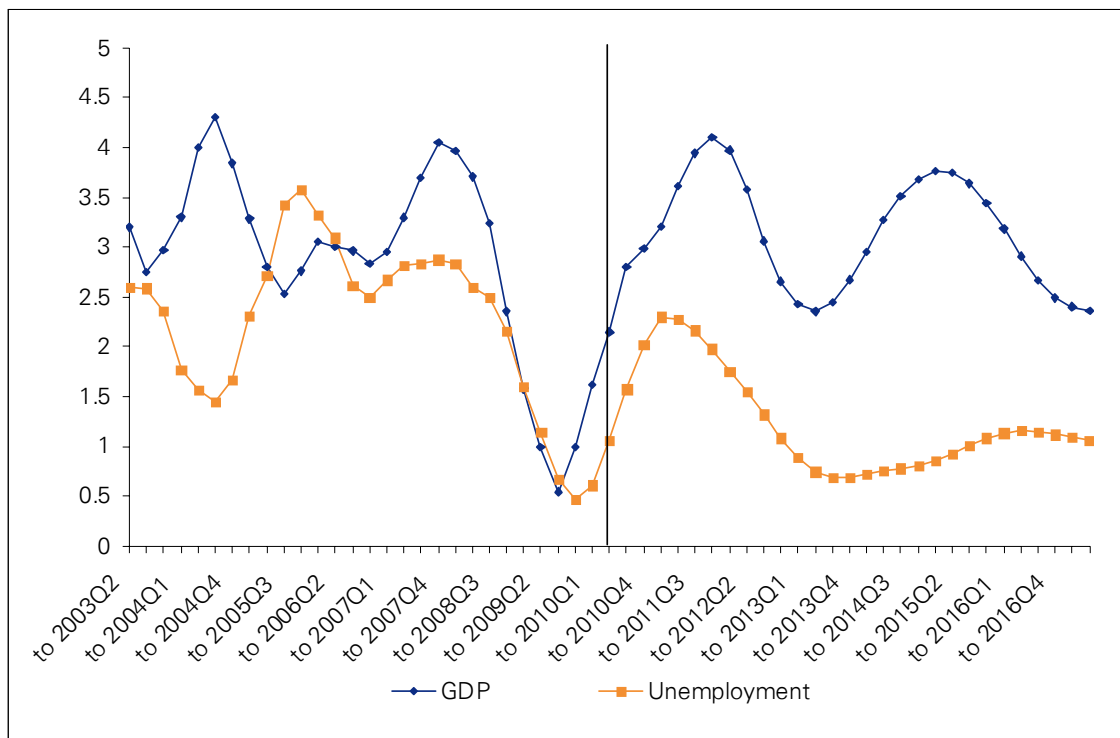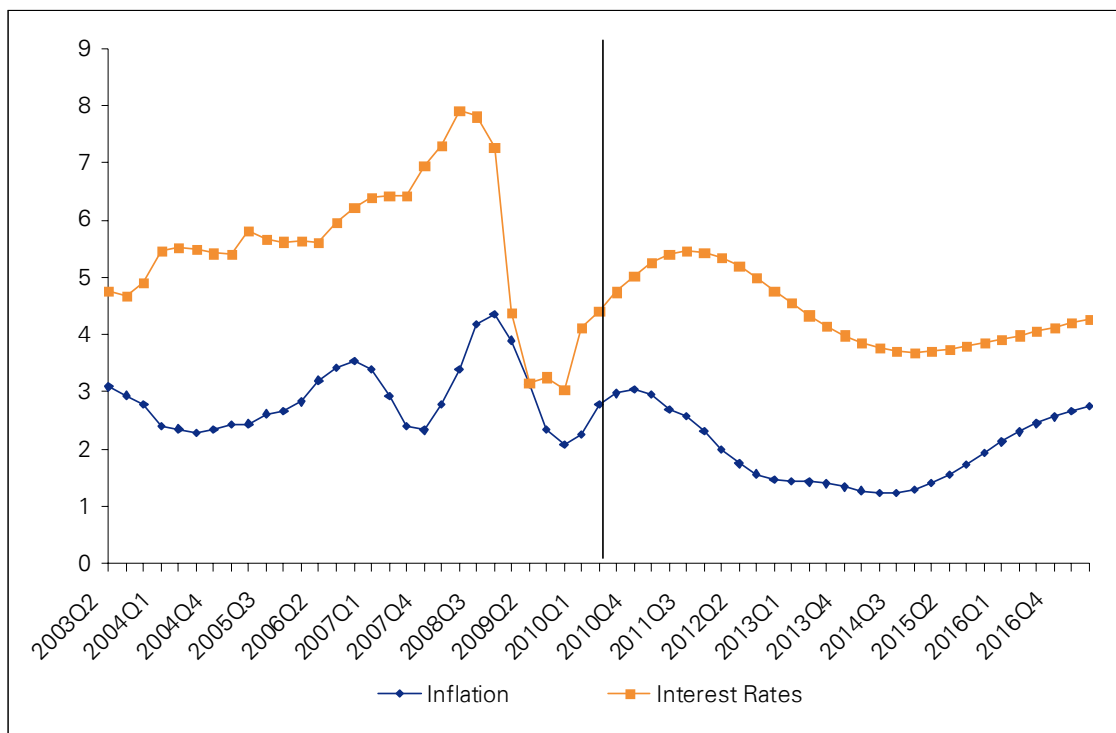

Source: KPMG Econtech MM2.

Driven by the ongoing economic recovery, the labour market has continued to improve over the last few months, albeit at a slower pace than was seen in late 2009. The rate of unemployment is currently at 5.2 per cent (November 2010), down from a high of 5.8 per cent in October 2009. This strong result can be attributed in part to fast paced growth in construction employment. Notably, growth over 2010 has been biased towards full time jobs, although growth in the aggregate number of hours worked has failed to keep pace. This may be an indication that employers are currently building labour capacity, in anticipation of stronger economic conditions later in the year. Unemployment is expected to continue on a downward trend over the next few years, remaining at around 5 per cent throughout 2010 and early 2011.

The RBA raised interest rates at a very fast pace over early 2010, lifting the cash rate by 0.75 percentage point between March and May. Following these increases, the RBA has left interest rates on hold over the majority of 2010, as a more uncertain global outlook, slow consumer spending and contained consumer price inflation have temporarily alleviated the need for a further tightening of monetary policy. The RBA has signalled that it will be watching CPI figures very closely. With solid growth expected in investment and consumption over late 2010, it is expected that domestic demand will again begin to stretch capacity in the Australian economy, leading to a resumption of price growth towards the end of the year. As such, it is likely that rates will begin to rise again in late 2010, moving towards 5 per cent by early 2011. In line with this expectation, the RBA lifted the cash rate to 4.75 per cent in November 2010. The profile of inflation and interest rates is shown in Chart 4.2 below.

**Chart 4.2 Inflation and Interest Rates (per cent)**

Source: KPMG Econtech MM2.

Typically, saving is one avenue through which individuals smooth out their consumption profile. During times of slow economic growth and lower income, individuals draw down their savings in order to dampen the impact of lower income on consumption. In contrast, during more prosperous economic times, individuals earn higher incomes and put aside more of their income as saving. However, as shown in Chart 4.3, around the time of the GFC, private saving increased and national saving decreased. In other words, the GFC pushed households to save, and forced the government to spend, to support the economy. This change in consumer behaviour will be slowly unwound over the next few years as households regain confidence, but there may be a lasting increase in savings ratio.

Overall, given the forecast economic conditions under the baseline scenario, national saving is expected to fall slightly from 21.8 per cent of GDP in 2009-10 to 21.5 per cent by 2016-17. The split between private saving and public saving is quite stable throughout the forecast period, with private saving making up approximately 80 per cent of national saving. The movement of national saving throughout the forecast period can be seen in Chart 4.3 below.

Chart 4.3 National Saving (per cent of GDP)
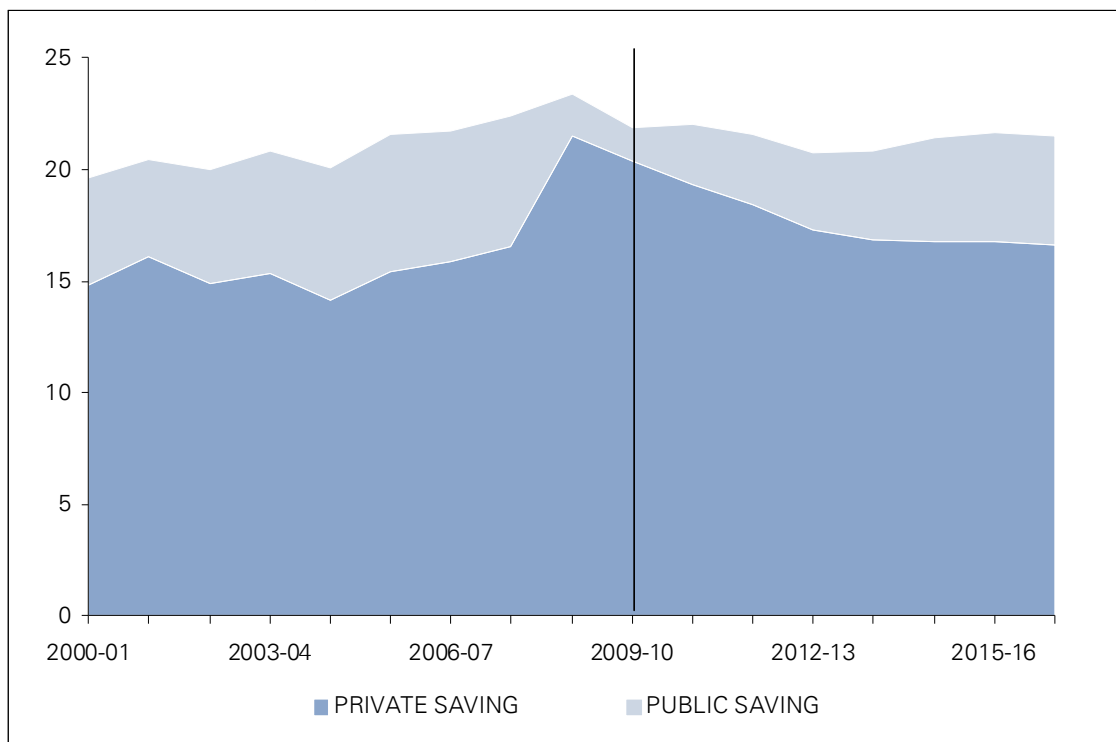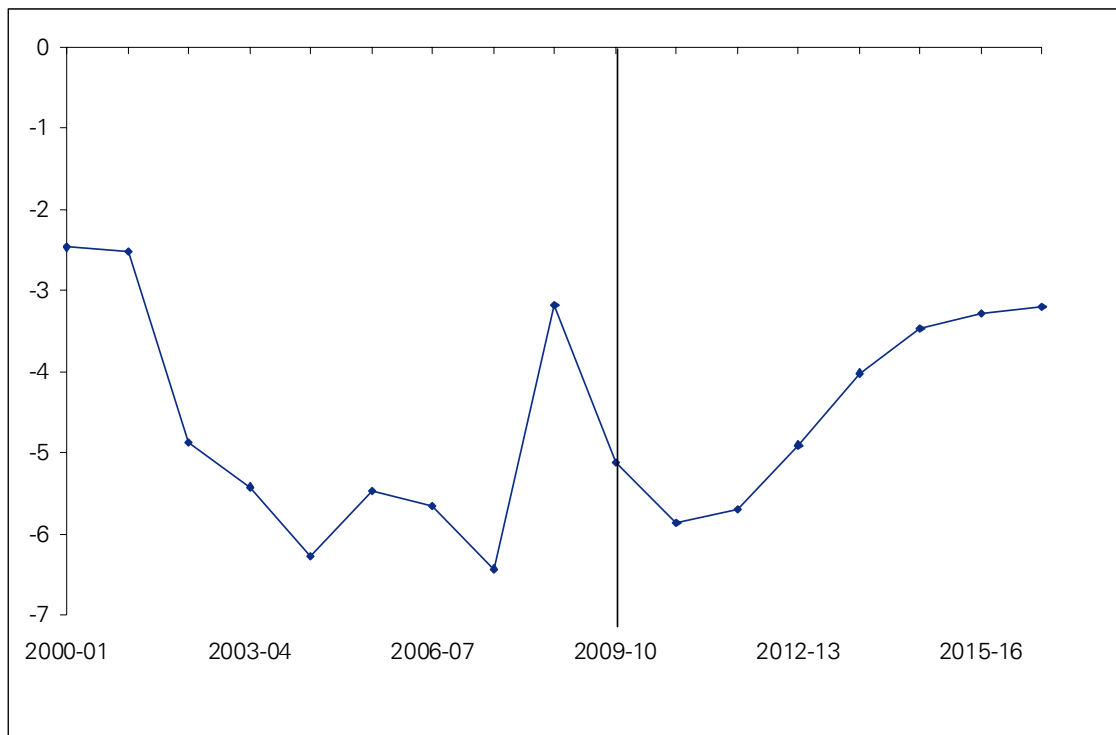

Source: KPMG Econtech MM2.

An increase in national saving will improve Australia's current account balance. The current account balance is comprised of the goods and services balance, the net income balance and the transfer balance.[37] Historically, the net income deficit is the largest component of Australia's current account deficit.

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[37] The goods and services balance is defined as the difference in the value of exports relative to the value of imports. The net income balance is defined as income earned by Australian residents on their overseas investments, such as

The capital and financial account balance is the sum of net capital transfers and net acquisition of both financial and non-financial assets. The current account balance can also be thought of as the negative of our capital and financial account balance. A current account deficit corresponds to a capital account surplus and a current account surplus corresponds to a capital account deficit.

Another way to interpret the current account deficit is as the shortfall between domestic saving and investment which must be met by funds from abroad flowing into Australia. The current account deficit is funded by borrowing from overseas. Foreign residents receive Australian assets in return for funding Australian domestic investment. Hence, when Australia's capital account is in surplus, the value of Australian assets held by foreigners is greater than the value of foreign assets held by Australians. An increase in saving will necessarily improve Australia's current account balance as the gap between domestic saving and investment tightens.

Chart 4.4 Current Account Balance (per cent of GDP)

Source: KPMG Econtech MM2.

Chart 4.4 above shows KPMG Econtech's forecast of the current account balance. Over 2010-11, the current account deficit is expected to widen, as rising domestic demand fuels import growth.

The following section discusses the impact of a greater prevalence of financial advisers on the economy.

dividends and interest less the income earned by overseas residents on their Australian investment. The transfer balance is a relatively small component, comprised of the counterparts to one sided transactions such as foreign aid

4.4.4 Economic Implications of a Greater Prevalence of Financial Advisers

As discussed earlier, the savings scenario looks at the impact on the economy if an additional five (5) per cent of Australians received financial advice and as a result, increased their rate of saving.

Chart 4.5: National Saving (per cent of GDP)
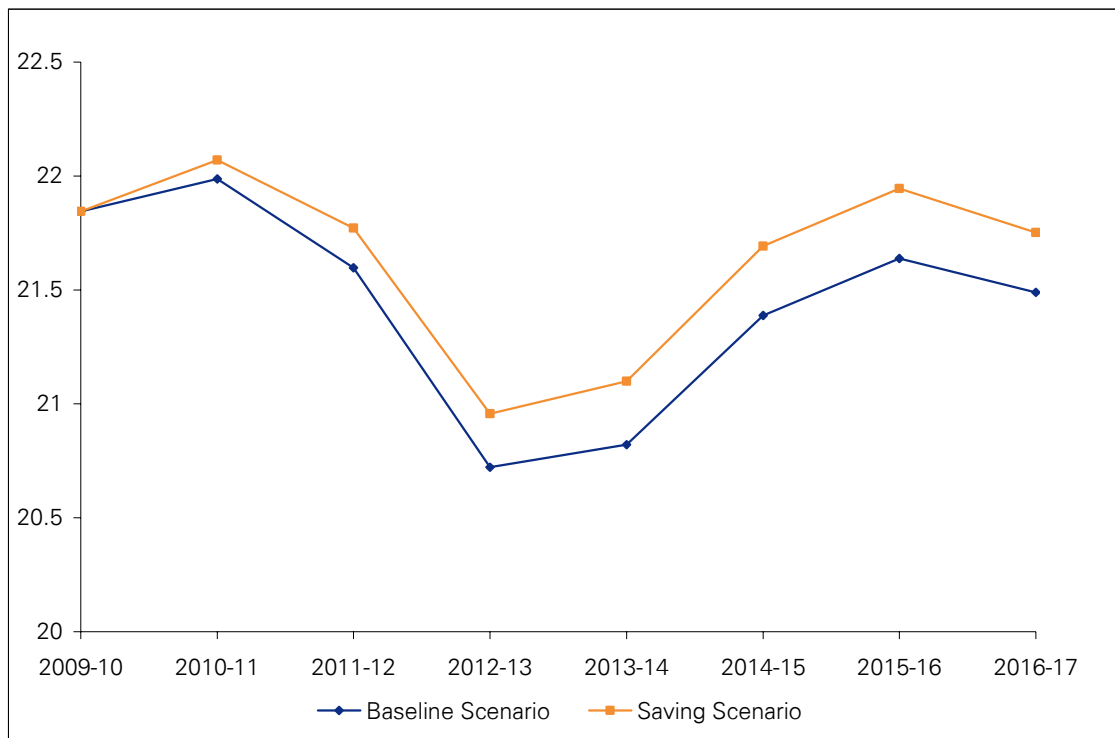
Source: KPMG Econtech MM2 simulation

Chart 4.5 above depicts the profile of national saving between 2009-10 and 2016-17. By 2016-17 there is a 0.3 per cent of GDP or approximately $4.2 billion (in 2009/10 dollars) gain in national saving as a result of more Australians receiving financial advice than would otherwise be the case.

Consumption

The results of our modelling show that the main economic argument for lifting the number of Australians with financial advisers and hence increasing national saving, continues to be from an intergenerational equity perspective. An increase in the current level of national saving allows for higher living standards during retirement, where living standards are measured from consumption levels. Saving is a way for individuals to defer consumption from the present to the future.

The key driver of the pick-up in consumption is an increase in wealth. Saving can also be thought of as the change in the wealth level or the change in assets held by individuals less the change in liabilities. As saving rates increase, so does the stock of wealth. This increase in the

stock of wealth means that individuals are able to finance a higher level of consumption in the future.

This shifting of consumption from the present into the future is seen in the modelling results. Chart 4.6 below shows the path of consumption under the baseline scenario and the saving scenario. Consumption, while still growing, is clearly below the baseline trajectory as households accumulate additional wealth. In the long term this additional wealth allows them to then finance a higher level of consumption. Individuals are then able to enjoy a higher standard of living in their retirement without placing an undue burden on later generations.

Chart 4.6 Consumption ($06/07 billion)
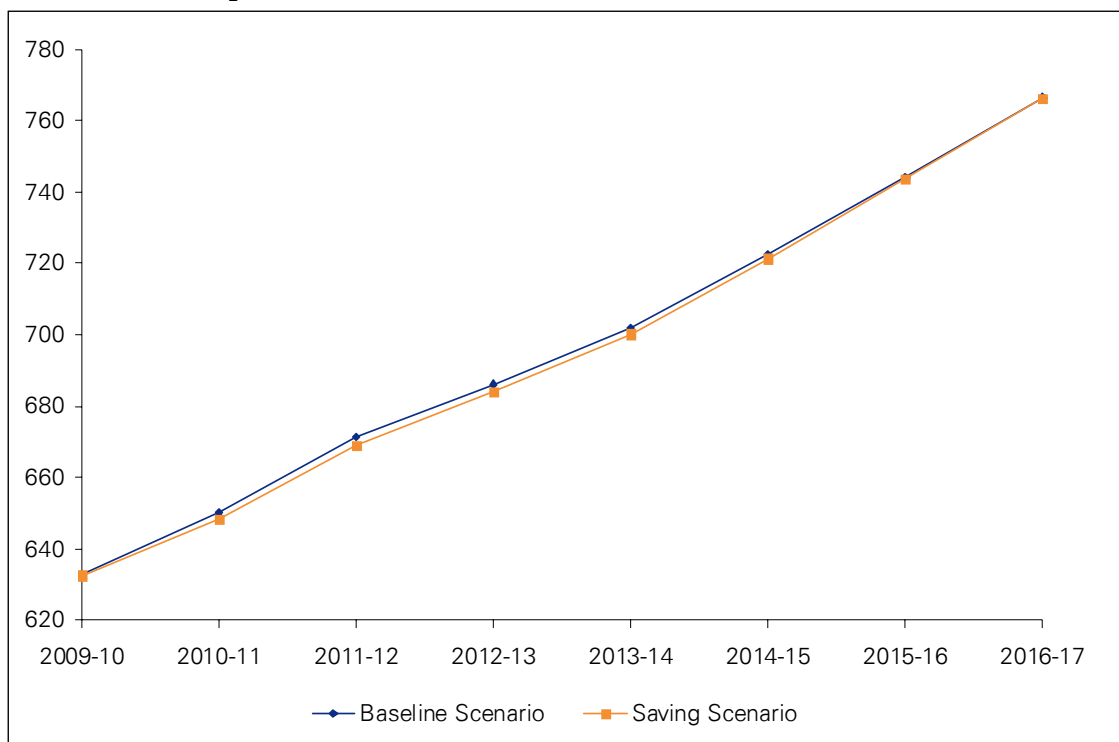
Source: KPMG Econtech MM2 simulation.

Foreign Debt

The higher wealth of Australians, as a result of the increase in national saving rates, leads to less dependence on foreign financing of domestic capital. In the long run foreign liabilities are approximately 1.3 per cent of GDP lower under the saving scenario than in the baseline scenario. Chart 4.7 below shows the foreign debt deviation from baseline between 2009-10 and 2016-17.

**Chart 4.7 Foreign Debt (deviations from baseline, per cent of GDP)**
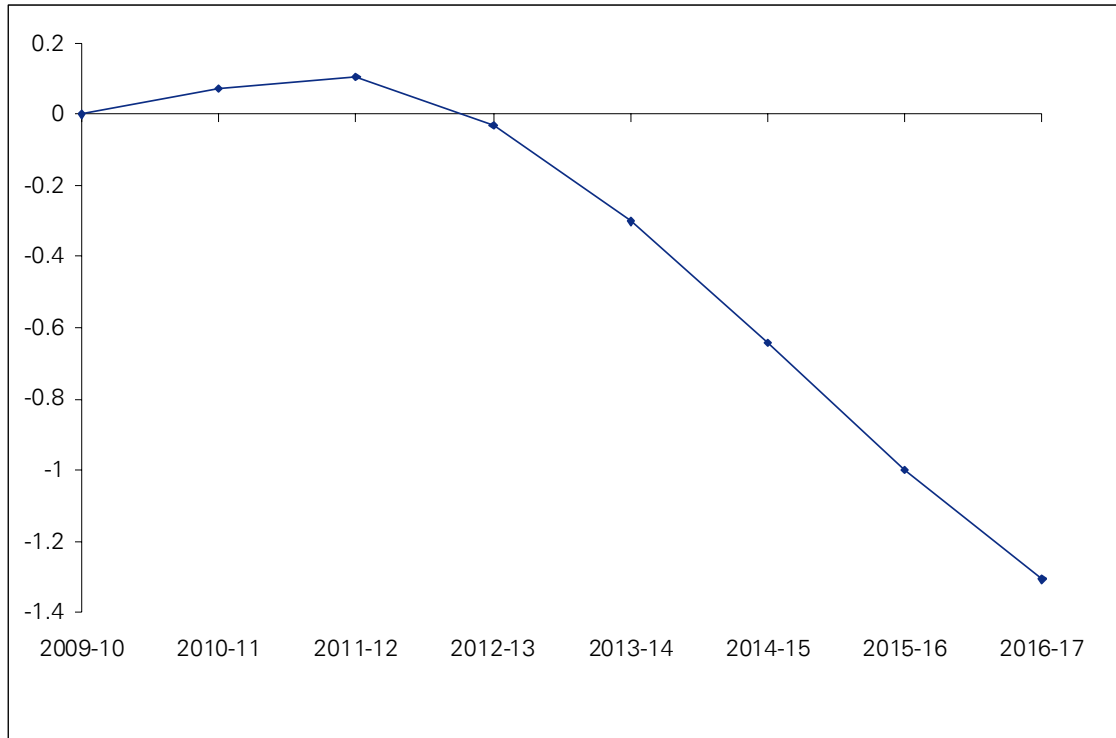
Source: KPMG Econtech MM2 simulation.

Transition Phase

During the transition phase towards this higher domestic asset position there are important economic consequences. Under the savings scenario, the gain in national saving relative to the baseline scenario averages around 0.2 per cent of GDP in the medium term.

An increase in national saving closes the gap between domestic saving and investment and this leads to an improvement in the current account balance. A higher level of domestic saving allows for a higher level of Australian investment to be financed domestically, rather than from overseas. The ongoing reduction in the current account deficit leads to the mounting reduction in foreign liabilities discussed above.

Chart 4.8 Saving, Investment and Current Account Balance (deviations from baseline, per cent of GDP)
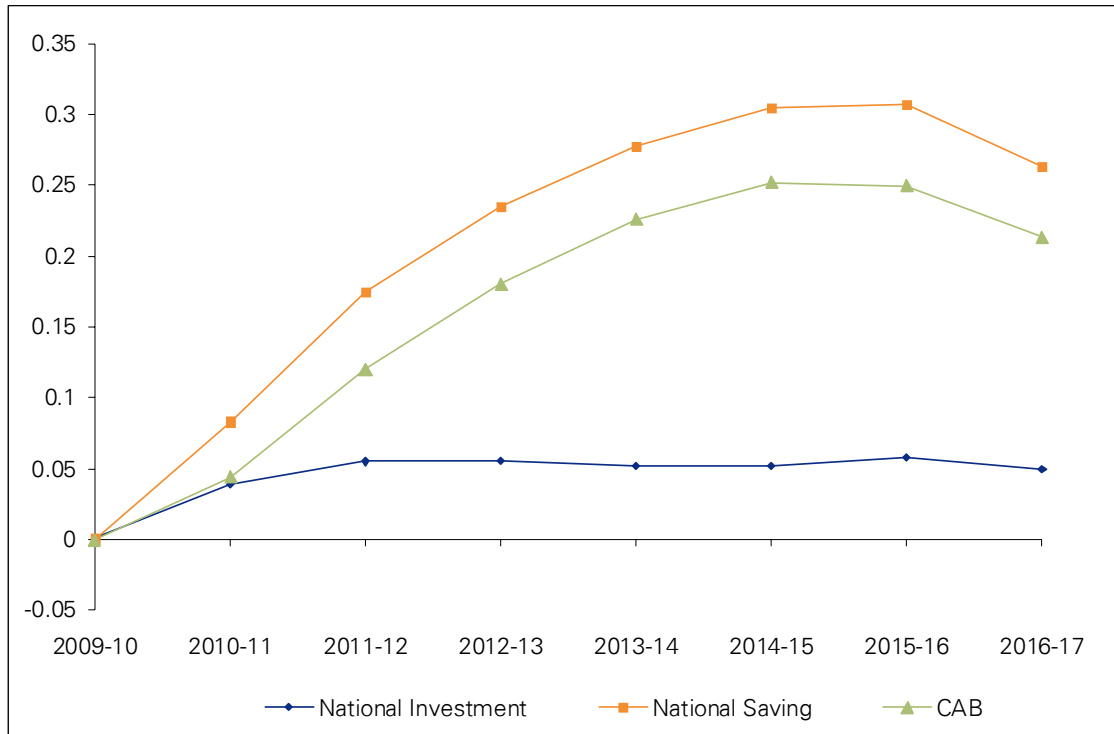
Source: KPMG Econtech MM2 simulation.

Notably, a current account deficit is not necessarily a cause for alarm. A gap between national saving and investment can reflect strong investment opportunities in an economy, which has largely been the case in Australia over the recent past. Thus, Australia's dependence on overseas borrowing is not a pressing issue during times when financial markets are stable and there is positive sentiment towards Australian investments. Historically, the risk premium levied on Australia's borrowing costs has been quite modest. That said, consistently running large current account deficits leads to escalating foreign debt levels. This increases the sensitivity of the Australian economy to international economic shocks which have the potential to affect foreign investor sentiment towards investing in Australia, such as the sub-prime crisis. A higher level of national saving would help insulate Australia against adverse global financial shocks by reducing Australia's level of foreign debt.

The gain in national investment under the saving scenario extends to increases in capital stocks over time. These gains in capital stocks across different industries support gains in GDP. The increase in the capital stock expands the economy's productive capacity over the medium term. However, in the first few years of the saving scenario, GDP is below baseline as individuals moderate their consumption growth. The increase in output acts as a stimulus on employment, increasing employment above baseline. The pattern in employment generally follows the pattern in output with a lag. This is shown in Chart 4.9 below.

Under the saving scenario, GDP is 0.32 per cent above baseline in 2016-17, supported by gains in business capital and employment of 0.3 per cent and 0.2 per cent respectively. The gains in GDP are not maintained over the longer term. Over time, GDP returns to baseline levels in dampened oscillations. This is because the gain in capital stock, which is driving the gain in

GDP, is not maintained over the longer term. In the long term, with full employment, the level of capital is determined by the required rate of return on investment and the depreciation rate of the capital stock. The assumption that Australia is a small open economy with no impediments to international capital flow means that the required rate of return is set exogenously, outside of Australia's control, on a global basis. Since there is also no reason to believe that the depreciation rate has altered, an increase in national saving does not change the economy's long run level of capital.

The assumption that Australia is not able to change the required rate of return applied to domestic investment reflects the conservative nature of the modelling. As previously mentioned, an increase in national saving reduces the level of Australia's foreign liabilities. This could potentially lower the risk premium applied by international investors to investment in Australia. It is possible that by lowering the risk premium, and hence the required rate of return, the gains in business capital are sustained in the longer term. Under this assumption the increase in productive capacity stimulated by the increase in national saving would be maintained over the long term.

Chart 4.9 GDP, Employment and Business Capital Stock (deviations from baseline, per cent)
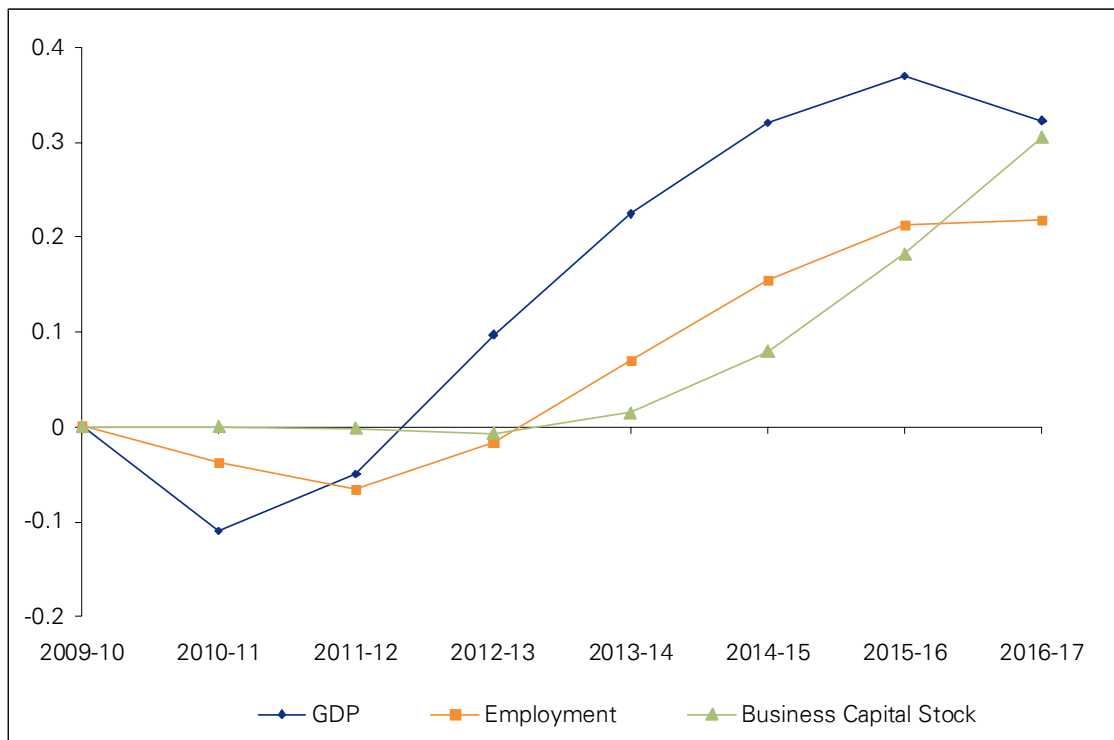
Source: KPMG Econtech MM2 simulation.

To gain a broader perspective, it is useful to compare this medium-term lift in GDP from a greater prevalence of financial advice with other major policy changes. For example, KPMG Econtech estimates that successfully achieving the Government's reform agenda in relation to secondary school attainment[38] will lead to an average boost to GDP of 0.4 percent over the

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[38] This reform involves increasing Year 12 completion rates to 90 per cent by 2015.

period 2010-2024[39]. In the long run, achieving this reform will lead to a boost of 0.9 per cent of GDP.

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[39] KPMG Econtech, "Measuring the Impact of the Productivity Agenda", Report prepared for the Department of Education, Employment and Workplace Relations, February 2010.

Appendix A – Data Request

The following data, over the last five (5) years from 2008-09, was requested for customers in the accumulation phase with Funds Under Management (FUM) greater than $1,000.

- DOB: Date of Birth

- G: Gender

- INC: Income in each financial year

- Postcode

- FUM_S: Funds Under Management within Superannuation Account ($ closing balance at the end of each financial year)

- SC_M: Member (including Spouse) contributions to the Superannuation Account during the financial year ($)

- SC_E: Employer contributions to the Superannuation Account during the financial year ($)

- FUM_I: Funds Under Management within Investment Account ($ closing balance at the end of each financial year)

- I_C: Member contributions to Investment Account during the financial year ($)

- FUM_O: Funds Under Management within Other Accounts in the financial year ($ closing balance)

- O_C: Member contributions to Other Accounts in the financial year ($)

- Life: Life Insurance cover (1=yes, 0=no)

- Life_SI: Life Insurance sum insured ($)

- TPD: TPD cover (1=yes, 0=no)

- TPD_SI: TPD sum insured ($)

- SalC: Income Protection cover (1=yes, 0=no)

- SalC_SI: Income Protection amount ($)

- Emp: Employment Status (1= employed, 0=otherwise)

- S_Emp: Self-Employed Status (1= self employed, 0=otherwise)

- Plan? (1=yes, 0=no) (When determining the financial adviser status of each client, please document the rules employed to determine the client adviser status. These rules will be documented in the report.)

- Corp: Corporate/Retail client (0=corporate, 1=retail)

Appendix B – Demographic Analysis

This Appendix B provides descriptive and comparative statistics of key demographic characteristics relevant to this study.

Prior to any analysis being undertaken, the initial dataset was subjected to a battery of tests to check data integrity and suitability for further analysis. As part of this process, analysis was also undertaken to consider the demographic profile of the sample. Using postcode data on each of the approximate 3.4 million account holders included in the sample, a demographic profile in terms of income per capita, age, gender and employment status was developed.

This demographic profile was then compared to the national demographic profile and comparisons were drawn.

Income Per capita

Using income per capita from the ABS (2007), the sample data and population data was classified into to ten per capita income groups. Chart B.1 details the percentage of the sample and the population in each of the income groups under consideration. The largest difference is in the lowest income group. However, this difference as a proportion of the entire sample amounts to approximately only two (2) percentage points, which is negligible.

Overall, Chart B.1 shows that the per capita income distribution of the sample closely resembles the per capita income distribution at the population level. The similarity of the income distribution of the sample and the population suggests that the sample is representative and suitable for further analysis.

Chart B.1: Per Capita Income Distribution (per cent)
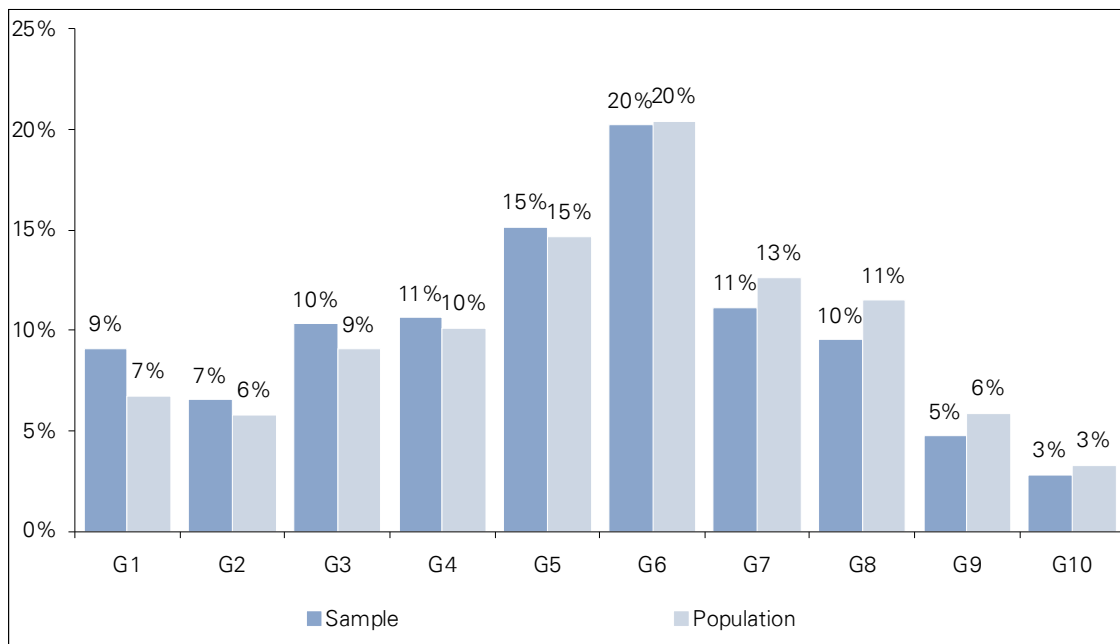
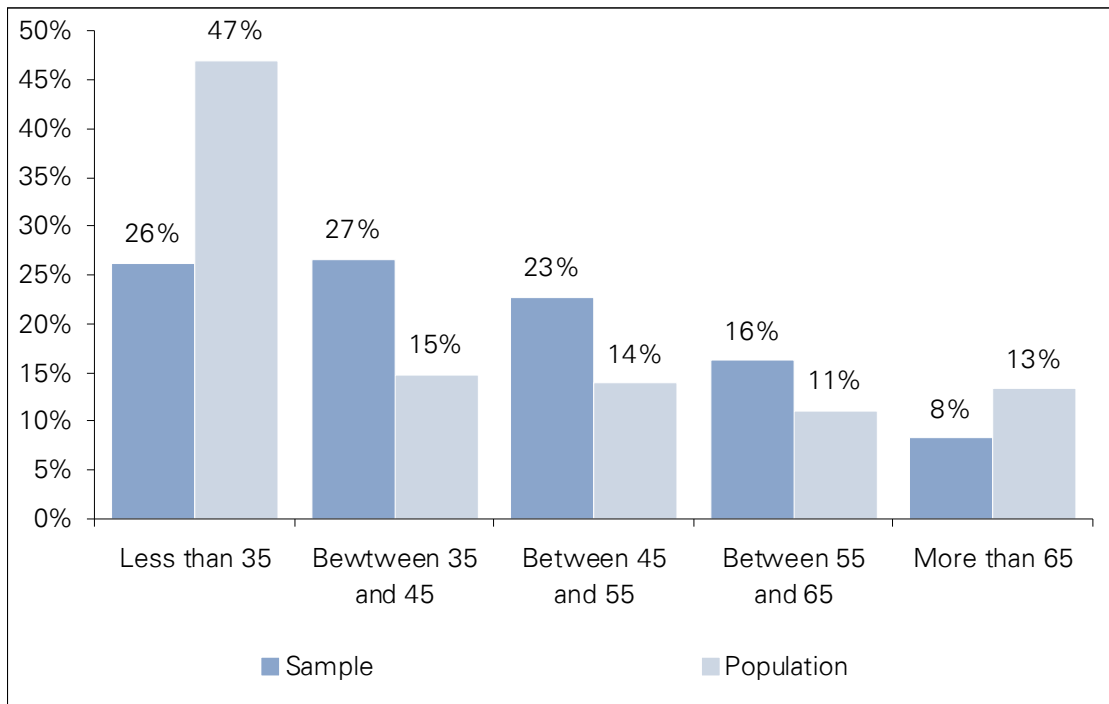Source: ABS Census Tables Cat. No. 2068.0 (Age by Sex) (2007) and KPMG estimates.

Age

Using ABS Census data on age distribution, the sample data and population level data was classified into to five age groups. Chart B.2 details the percentage of the sample and the population in each of the age groups under consideration.

Comparing the age distribution of the sample and the population does highlight a significant difference for the first age group, less than 35 years. However, this difference can be attributed to the sample having a lower proportion of below working age (children) individuals than the population in this age group. This difference is expected because individuals under working age are less likely to have a financial adviser.

This large difference in the less than 35 years group has implications for the remaining age groups. Since the proportions of the sample made up by the less than 35 years group is expected to be lower than in the population as a whole, the proportion of the sample in the older age groups must therefore be higher than the population as a whole.

While Chart B.2 shows that the age distribution of the sample and the population do differ, these differences are expected and do not impact on the legitimacy of further analysis with this sample.

**Chart B.2: Age Distribution (per cent)**

Source: ABS Census Tables Cat. No. 2068.0 (Age by Sex) (2007) and KPMG estimates.

Gender

Chart B.3 details the gender distribution of the sample and the population. Chart B.3 shows that the gender distribution of the sample does differ from the population. This difference can be at least partly explained by the sample's lack of information on the gender of four (4) per cent of account holders. In addition, females make up a lower proportion of the labour force, 46 per cent based on the 2006 ABS Census. This implies that females are less likely to be employed and therefore less likely to use financial advisers.

While Chart B.3 shows that the gender distribution of the sample and the population do differ, these differences are at least partly explainable and do not impact on the legitimacy of further analysis with this sample.

Chart B.3: Gender Distribution (per cent)
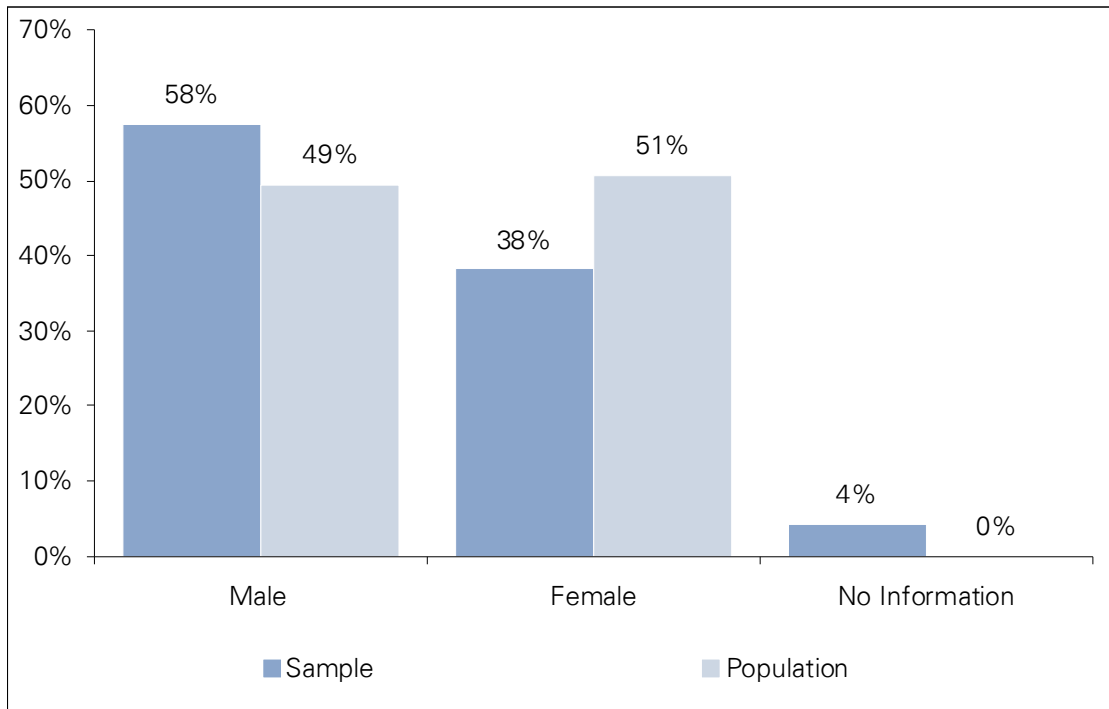
Source: ABS Census Tables Cat. No. 2068.0 (Labour Force Status by Sex) (2007) and KPMG estimates.

Employment Status

For the data included in the sample, it is only possible to identify an individual as being employed or other, where other refers to self-employed, unemployed, or not in the labour force. In addition, for the sample, the receipt of employer superannuation contributions by an individual account holder most often determined the employment status. Therefore, it is possible that some account holders may be incorrectly classified as 'other'. This could occur if an individual holds multiple superannuation accounts and receives contributions by their employer into an account not included in this sample.

Chart B.4 details the distribution for the sample and the population of employed and other. Chart B.4 shows that 43 per cent of the sample is employed and 57 per cent of the population is employed. In addition to the data limitations outlined above, the 57 per cent of the population that are employed does include all employment types (such as, employee and self-employed). On the other hand, the sample only includes those individuals who are employees.

While Chart B.4 shows that the employment status distribution of the sample and the population do differ, these differences are at least partly explainable and do not impact on the legitimacy of further analysis with this sample.

Chart B.4: Employment Status Distribution (per cent)
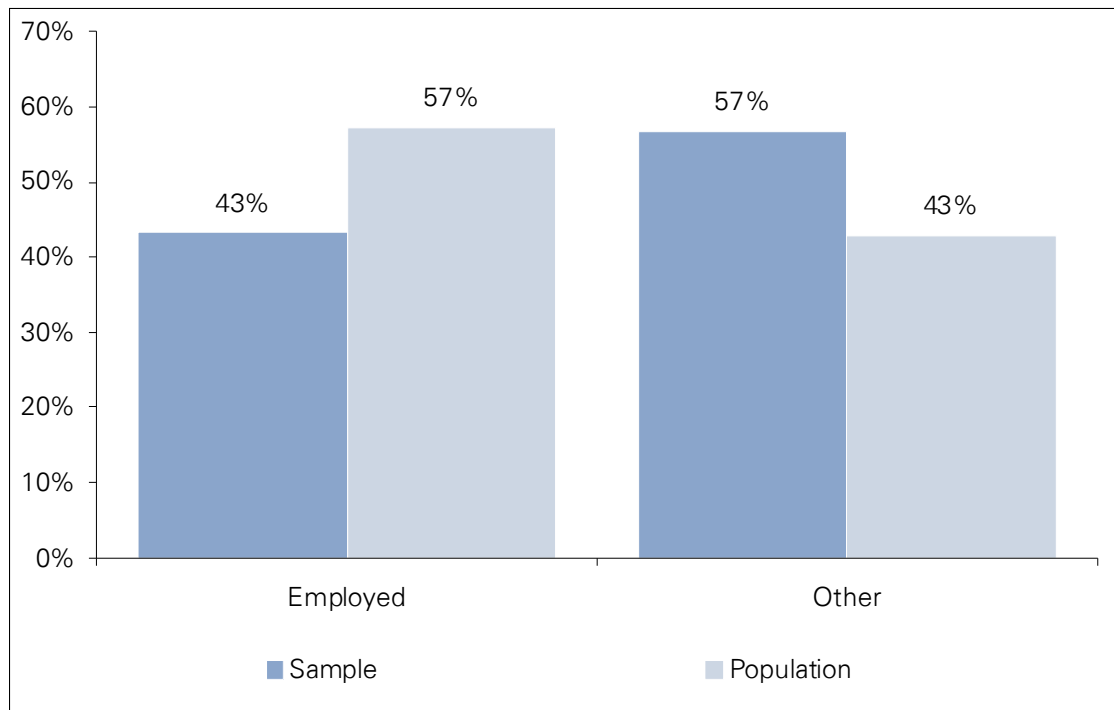
Source: ABS Census Tables Cat. No. 2068.0 (Labour Force Status by Sex) (2007) and KPMG estimates.

Overall, this demographic analysis is not exhaustive but it does provide useful insights into the demographic profile of the sample. Overall, the data set covers a wide demographic and is considered to be suitable for further analysis.

Appendix C – MM2

KPMG Econtech's forecasting tool, Murphy Model 2 (MM2), is Australia's leading national, industry and state forecasting model. It has a highly respected forecasting track record and is used by Federal and State Governments, industry associations, financial institutions and major companies. Subscriptions to forecasting reports and Windows-based forecasting software are available.

The original Murphy Model was developed by Chris Murphy, after ten years of experience in macroeconometric modelling at the Australian Treasury, Economic Planning Advisory Council, and the Australian National University. In 1988, Chris published the first version of the Murphy Model in Australian Economic Papers, and it was soon recognised as Australia's leading macro model.

In 1994, the first major redevelopment of the model was undertaken to distinguish 12 industry sectors. This marked the introduction of the MM2, a fully integrated macro and industry model.

In 1995, under contract to two state treasuries, the MM2-States was developed as an extension to MM2. The MM2-States allocates a number of MM2's key outputs across the eight Australian States and Territories.

In the same year, the current version of MM2-Demographic was developed under contract to the Australian Bureau of Immigration Research. Using assumptions for fertility, mortality, overseas and interstate migration, it generates consistent state and national population scenarios.

In 1996, the MM2 was further developed to expand the sectoral detail from 12 sectors to the 18 sectors corresponding to the Australian and New Zealand Standard Industrial Classification (ANZSIC) industry divisions. The linkages between the three models are illustrated below.
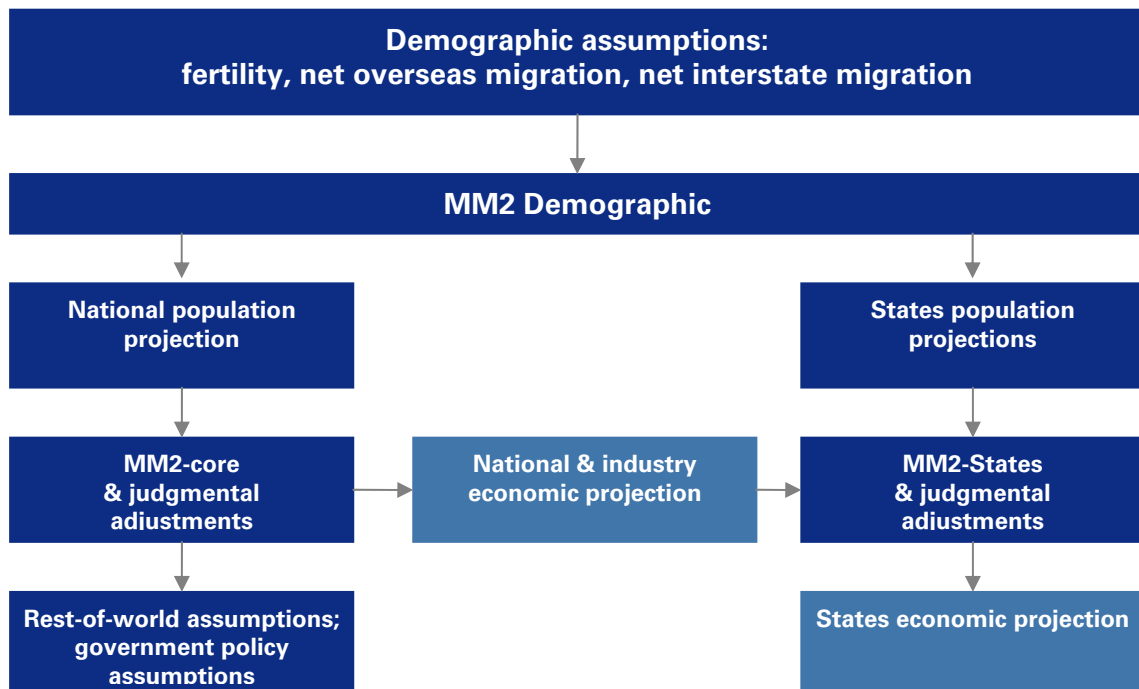
Features

MM2 is a state-of-the-art, fully-integrated macro-industry model with the following features:

- produces quarter-by-quarter nine-year-ahead forecasts;

- forward-looking financial sector for realism;

- Keynesian short-run for forecasting; and

- neoclassical long-run for policy analysis.

Documentation

Powell, A.A. and Murphy, C.W. (1997), *Inside a Modern Macroeconometric Model - A Guide to the Murphy Model, Springer*, Berlin, 2nd ed., 455pp.

Appendix D – Regression Results

The basic model used to calculate estimate the level of savings is expressed as:

Model A

$$Sav_t = a_0 + a_1 PLA + a_2 FUM + a_3 EMP + a_4 Gender + a_5 Age_{1to5} + a_6 POA_{1to10} + \varepsilon$$

where:

- Sav = Captures the saving of each individual for the period FY05-06 to FY08-09 financial years.

- PLA = A dummy variable to indicate if an individual has a financial adviser or not.

- FUM = Details the total Funds Under Management (FUM) at the beginning of the period.

- EMP = A dummy variable to identify if the individual is employed or not.

- Gender = A dummy variable to identify if the individual is male or female.

- Age = A dummy variable to identify the age group classification the individual account holder falls in. The five (5) groups include: less than 35 years; between 35 and 45 years; between 45 and 55 years; between 55 and 65 years; and more than 65 years.

- POA = Dummy variables to identify the per capita income group the individual account holder falls in.

The regression results:

Method: Least Squares
Date: 27/08/10   Time: 11:37
Sample: 1 3389096 IF FUM_T09<=5000000
Included observations: 3389048

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10527.2	273.8749	-38.43814	0.0000
PLAN	6347.61	104.2171	60.90756	0.0000
FUM_T05	0.279194	0.000679	411.2936	0.0000
EMP	9516.684	99.13916	95.99319	0.0000
GENDERM	3074.498	96.84533	31.74648	0.0000
AGE2	1369.91	131.9375	10.38303	0.0000
AGE3	1613.836	138.057	11.68964	0.0000
AGE4	16998.69	154.6187	109.9394	0.0000
AGE5	22562.98	200.7709	112.3817	0.0000
POA1	5333.054	292.6462	18.22355	0.0000
POA2	4972.081	309.387	16.07075	0.0000
POA3	4281.464	287.1821	14.90853	0.0000
POA4	3363.017	285.9995	11.75882	0.0000
POA5	2663.909	274.1246	9.717879	0.0000
POA6	1584.209	266.93	5.934923	0.0000
POA7	791.6554	284.2974	2.784603	0.0054
POA8	569.9381	290.5904	1.961311	0.0498
POA9	-49.0686	330.9607	-0.148261	0.8821
POA10	-901.276	380.1558	-2.370808	0.0177

R-squared	0.071574	Mean dependent var		13720.13
Adjusted R-squared	0.071569	S.D. dependent var		91093.97
S.E. of regression	87773.71	Akaike info criterion		25.60292
Sum squared resid	2.61E+16	Schwarz criterion		25.60299
Log likelihood	-4.3E+07	Hannan-Quinn criter.		25.60294
F-statistic	14514.74	Durbin-Watson stat		1.918102
Prob(F-statistic)	0			

Note: The above results were adjusted for inflationary impacts prior to being used in the economy-wide modelling.