

## UNDERSTANDING THE RELATIONSHIP BETWEEN FUND FLOWS AND PAST PERFORMANCE IN AUSTRALIAN MANAGED FUNDS

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### ABSTRACT

This study aims to understand the prevailing literature which examined the effect of past performance of funds, risk of the funds, choice of fund legislation and the global financial crisis on the fund flows among the different asset classes in Australia. The empirical findings of previous studies document that retail funds are more sensitive to the past performance of funds than those of wholesale segment. These studies further argue that risk of the funds seems to be ineffective in explaining the fund flows. Findings also report that the choice of fund legislation has resulted in attracting more funds into the managed funds. Finally, in the post global financial crisis period, there is a significant inflow of funds into the managed and equity funds.

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## Introduction

In 2007, Australian Finance Group (AFG) Global Funds Management Index reported that on average Australians had the highest per capita investment in managed funds i.e. AU\$ 63,794 as compared to the second highest of AU\$ 43,458 of the US. The Australian managed funds industry is one of the largest in the world. Managed funds allow investors to pool their money together and invest into a variety of asset classes. The managed fund industry belongs to the investment sector, and includes superannuation funds, the statutory funds of life insurers, public unit trusts, and managed investment schemes. There are two main contributors for the growth of managed funds industry in Australia: the deregulation of financial markets in the 1980s and the successful story of 23 years old compulsory superannuation guarantee contribution scheme. The compulsory superannuation contributions started in 1992 with a modest rate of 3% of ordinary earnings paid by their employers. Superannuation contributions are currently at 9.5% and are expected to increase to 12% by July, 2025.

At the end of March 2013 quarter, the total managed fund assets were valued at AU\$2,094 billion, of which AU\$1,526 billion was comprised of superannuation funds (ABS, March 2013). The superannuation assets have been significantly increasing in the recent past. For instance, at the end of June 2015 quarter, superannuation assets become AU\$ 2.02 trillion (ASFA, June 2015). Despite substantial growth in superannuation funds in Australia, there are not many empirical studies, which examined the asset allocation and flow of funds into these managed funds. Therefore, in this study we aim to focus on the existing literature in relation to the superannuation funds investment into the managed funds. Particularly, we aim to summarise the empirical findings of Gupta and Jithendranathan (2012 and 2015) whose studies mainly focused on investigating the fund flows and past performance of managed funds in Australia and also addressing the issue of superannuation fund choice legislation and global financial crisis (GFC) on fund flows.

Superannuation is simply a mean of saving and investing to accumulate wealth which will be used in the retirement period. In Australia, superannuation funds are broadly classified into four categories such as; corporate funds, industry funds, public sector employee funds and lastly retail funds. Among these funds, retail funds are the largest of the Australian managed funds, with an estimated value of over AU\$ 1,129 billion as of March, 2013. These funds are established by the banks, insurance companies and investment firms. This sector further classified into wholesale and retail segments, with about AU\$529 billion and AU\$574 billion, respectively as of March, 2013. Again among these two sub-funds, retail funds cover the superannuation funds, retirement investment funds and discretionary investment funds. On the other hand, wholesale funds mainly comprises of other funds (Gupta and Jithendranathan, 2015).

Australian superannuation scheme is one of the largest in the world, and an important instrument in social planning for supporting Australia's aging population (Ali *et al.* 2015). For the past two decades, significant reforms have been taken place in the superannuation sector. Traditionally, many Australian employers offered the defined benefit (DB) plan to their employees.

Under DB plan, the employees' future benefit is determined by a specific formula; therefore, employees have no active control over their retirement fund. Since 1998, participants were given option to switch from DB plan to Defined Contribution (DC) Plan. The assets under DC plan are controlled by the worker. Therefore, the employees bear investment risks. With the rapid growth of superannuation investment choices, individuals have more options to allocate their retirement fund. However, lacking of the superannuation knowledge, the evidence shows that majority of individuals prefer to maintain the default option (Fear and Pace, 2009). The studies of Australian superannuation confirm this finding by showing fewer than 10% of participants actively choose their asset allocation (Senate Select Committee on Superannuation and Financial Services (SSCSFS)).

In general, investment decisions by the investors are made based on the past performance of superannuation funds. The funds that have performed well in the past can attract more investments, whereas the funds that are underperformed in the past can experience significant cash outflows. A number of studies have empirically examined the relationship between the fund flows and past performance of mutual funds in the US. For example, Ippolito (1992) documents that the mutual fund investments are primarily determined by the recent performance of the funds. The similar findings also reported by Sirri and Tufano (1998). Further, Goetzmann and Peles (1997) suggest that there is a significant association between fund flows and past returns. However, authors argue that fund flows are highly connected to the top quartile of past returns.

Similar argument is also empirically tested in Australian context. For instance, Sawicki (2001) examined the relationship between fund flows and past performance of wholesale balanced pooled Australian superannuation funds. The results of this study confirm the positive and significant relationship between fund flows and performance. Using a sample of 398 Australian managed growth and stable funds, Frino *et al.* (2005) document a significant positive association between current net cash flows and past performance of the funds.

In 2005, the Australian Government introduced superannuation funds legislation choice to enable employees to move their superannuation savings from one fund to another fund of their choice. With this introduction, managed funds became more flexible and accessible for the members, thereby encouraging members to save more for their retirement; however that is not always the case. For instance, the empirical findings of Fear and Pace (2009) reveal that there is no evidence of significant fund switching after the introduction of choice legislation. The potential reason for lack of funds switching can be attributed towards the cost of switching. This argument is supported with the empirical findings of Sy (2011). Author reveals that the choice of fund legislation had the opposite effect on superannuation investors as most of the members chose the default strategy for asset allocation rather than choosing their own choice. The empirical findings of Gerrans (2012) show that fund members did not make any changes in their investment strategies during the recent GFC.

Overall, empirical findings of previous studies document the mixed results in regards to the determinants of fund switching. For instance, one group of studies document that past performance of funds has significant and positive influence on flow of the funds (Ippolito, 1992; Goetzmann and Peles, 1997; Sirri and Tufano, 1998; Sawicki, 2001; Drew *et al.* 2002; Lynch and Musto, 2003; Bilson *et al.* 2005; and Frino *et al.* 2005).

Another group of studies establish that the flow of funds are influenced by other factors such as, equities and fixed interest rate assets (Benson *et al.* 2007; and Gharghori *et al.* 2008). Finally, few other studies report that the flow of funds are determined by the behavioral biases (Guercio and Tkac, 2002; Speelman *et al.* 2007; Fry *et al.* 2007; Bailey *et al.* 2011). This study will summarise the prevailing empirical studies who examined the fund flow and past performance of managed funds in Australia, and the impacts of superannuation fund choice legislation and GFC on fund flows.

The rest of this paper is organised as follows: Section-2 describes the empirical findings of previous studies which were focused on the fund flows and past performance. The final section highlights the major findings of previous studies in the context of Australia.

## Existing evidence on fund flows and past performance

The prevailing literature on the relationship between fund flows and past performance of managed funds is very limited in Australia. For instance, a recent study by Gupta and Jithendranathan (2015) empirically investigated to what extent cash flows into funds are affected by the past performance of funds, risk factor of the funds, the choice of superannuation fund legislation and recent GFC. This study uses quarterly data from 1991 to 2013. The empirical results of this study documents an interesting findings. For instance, in the case of retail funds, the effect of high excess returns is tested, and the result show that Australian equity funds and managed stable funds are positively affected while Australian fixed interest funds and Australian property security funds are negatively affected. Fund size has negative effect on all categories of assets while past net flows, as measured by the lagged net flows, show statistically positive effect. For the total retail fund, the effect of superannuation and legislation choice was tested, and the result show that some part of the managed funds were influenced positively by the choice of legislation. However, the choice variable has negative effect on alternative investments, Australian equity, Australian fixed interest, mortgage, and Australian property. This disparity could be triggered by the fact that the investors divert their investment to less risky investments rather than more risky investments. Similarly, the effect of global financial crisis was tested for total retail fund and the results show that only two categories of funds indicate negative signs to the crisis variable which are the low risk assets such as, cash and mortgage. On the other hand, Australian equity, managed funds and various overseas funds had positive signs for the crisis variable.

For superannuation funds, the excess return variable has a significant positive sign for Australian equities, mortgage, managed stable, overseas fixed interest, currencies and also global equity funds. The size of the fund has considerable negative effect on net fund flows of cash, diversified fixed interest, Australian equity, Australia small companies, managed balanced, overseas fixed income, and the Australia property securities. The effect of choice of fund legislation is tested for the case of superannuation funds and the result display that managed balanced, managed growth, managed stable, overseas fixed interest and currency, and mixed portfolio funds all had significant positive affect. While the choice of fund legislation is negatively affecting equity funds of both domestic and overseas. It is important notice that the choice of legislation has resulted in moving the superannuation investments more into the managed funds.

Furthermore, the effect of global financial crisis is tested and the result show that the crisis has a positive effect on the Australian equities, Australian fixed interest and managed growth funds. On the other hand, the crisis has negative effect on cash, mortgage, overseas property funds, Australian property and mixed portfolio. This is triggered by the fact that investor reduce their investment in the property sector.

In the case of non-superannuation funds, the results suggest that active returns have a considerable positive influence on the fund flows of only Australian equity and managed stable funds. While size has a significant negative effect on most categories of the funds. Likewise, the effect of the choice of fund legislation is tested for non-superannuation funds and findings indicate that mixed portfolio funds are positively affected by the choice of legislation, whereas most of other categories of funds are negatively affected. This may be caused by the fact that many superannuation investors have discretionary investments. For the same funds, the effect of global financial crisis was tested, and the result show that only mortgage and mixed portfolio funds are affected negatively, whereas other categories of funds are not affected.

For the wholesale fund, the effect of excess past returns was tested, and the result show that only managed balanced and managed stable funds are positively affected, while it is negatively affected the net flow of overseas fixed income funds. Further, findings suggest that the size of the fund has a negative impact on most of the categories. For the same funds, the effect of choice of legislation was tested, and the result reveal that the net fund flows of managed growth fund is positively affected, while Australia property security funds are negatively affected. Furthermore, the effect of global financial crisis was tested, and the result shows a positive effect on the net flow of equity fund and negative effect on the property and mortgage funds. These could be traced to the fluctuation in the housing market that led to financial crisis.

Another study by Gupta and Jithendranathan (2012) empirically examined to identify whether the investors base their investment decisions up on the past performance of the funds using various asset categories of managed funds in Australia. Authors utilised quarterly data from 1991 to 2008. The major findings of the study are described as follows. For retail fund, the effect of past excess returns was tested, and the results show a positive effect on 14 categories of funds out 15 categories, whereas only one category favor the fact that net cash flows show a negative effect on past excess returns. On the other hand, fund size negatively affects net cash flows. Furthermore, the coefficient of risk variable is only significant on cash funds and overseas funds, and negatively effects on net flow of funds. Similarly, for wholesale fund, the effect of past excess returns was tested on 13 categories of investments, and the results disclose that only 9 categories of investments show that net flows have positive effect due to the past excess returns and only when the average past excess returns are in two to three quarters. This may be caused by the fact that wholesale funds have a higher investment and may attract informed investor whose investment decisions will not be solely depends on the past performance of funds.

For the case of superannuation fund, the effect of past excess returns was tested and the results display that out of 10 categories of funds, only 6 categories of funds show that the relationship between past excess returns and net flows of funds are positive.

This may be caused by the fact that superannuation investors are at disadvantage because their investment choices are based on the employment contract. On the other hand, risk sign is positive on the net flow of funds and overseas funds avert the risk. Similarly, the effect of past excess returns was tested for the non-superannuation fund and result shows that the past excess returns for two or three quarters positively affect the net flow of funds. However, risk measures have negative effect on the net flow of funds. Finally, for the retirement retail funds, the effect of past excess returns was tested, and the result shows that risk coefficient does not have any significant negative effect on any of the categories. In the case of cash fund the risk variable has a strong positive effect on net flows, which is an indication of risk taking behavior. These results suggest that the findings are not consistent across different funds.

## Conclusion

The purpose of this study is to review evidence from the empirical studies, which aimed to examine the effect of past performance of funds, risk factor of the funds, the choice of fund legislation, and the global financial crisis on the asset allocation. The empirical findings of Gupta and Jithendranathan (2012) documented that the retail investors base their investment decisions more rigorously based on the past performance of funds as compared to the wholesale segment. Further, authors reported that the retail investors prefer less risky assets as compared to the wholesale investors and also showed significant lower interest for overseas investments. These findings indicate that the retail investors prefer the assets, which performed well in the past. Similarly, the empirical results of Gupta and Jithendranathan (2015) reported that both retail and wholesale investors base their investment decisions based on the past performance of the funds. Authors suggest that the riskiness of the funds has very little impact on the flow of funds. In addition, findings revealed that the choice of fund legislation has significant influence in terms of moving more funds into the managed funds. Finally, authors documented that after the global financial crisis both managed funds and equity funds have witnessed more inflows. Evidence from these studies indicates that investors do not consider risk in their asset allocation decisions; this may be because investors do possess sophisticated understanding of the markets and they are reluctant to seek expert financial planning advice. Recent evidence suggests no more than 20% investors have an ongoing relationship with a financial adviser.

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