LOCATION DECISIONS OF DOMESTIC AND FOREIGN FINANCIAL ADVISORS IN AUSTRALIA*

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Abstract

In Australia's $900 billion retail and wholesale investment market, approximately $340 billion is under the advice of the top 100 financial planning dealer groups. The Australian managed funds industry has seen a consolidation of financial services, in which advisory or personal financial planning services have become the major conduit through which retail investors access financial services firms and specialist fund managers. This paper analyses the determinants of the start-up location choices for 54,064 Australian Financial Services representatives, and examines these choices with respect to their foreign and institutional affiliations. The evidence presented suggests that advisors consider general socio-economic and financial demographics when first choosing the location to commence their careers. Advisors tend to locate in areas with high population, low unemployment, smaller households and more elderly persons. Competition does not deter planners from choosing a particular location. Furthermore, foreign originated start-ups ignore financial characteristics, and prefer to locate in regions in which general demographics indicate a large market size. Bank affiliated start-ups locate in more favourable locations than independent advisors, reflecting cost and informational advantages. Interestingly, independent advisors demonstrate 'learning' by replicating the location choices of institutionally linked advisors in the short term.

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1. Introduction

The importance of geographical location of economic activities has been supported by various studies including that of Carlton (1983), which attempts to model the link between location choice and economic variables specific to geographical regions. The study highlights that location choices are closely tied to energy costs and the available technical expertise in the region. More recently, Woodward (1992) applied a similar model to explain the location determinants of Japanese manufacturing start-ups in the US and found that Japanese investors prefer to locate in strong markets with low unionisation rates. The literature provides clear empirical and theoretical evidence that several geographical factors influence new business location choice. Carlton (1983) explains that understanding these factors provides a more improved measure of a region's future economic profits than employment at existing plants.

In relation to the financial services industry, the primary focus for location studies has been on the banking industry (see Gray and Grey, 1981; Sabi, 1988; Erramilli, 1990). Banks tend to follow their customers, as seen by a correlation between foreign direct investment and bilateral trade (see Grosse and Goldberg (1991), Brealey and Kaplanis (1996); Williams (1998); and Yamori (1998)). Furthermore, Focarelli and Pozzolo (2000) examine the determinants of cross border holdings of banks to find that banks prefer to invest in countries where expected profits are larger, owing to higher expected economic growth and the prospect of reducing local banks' inefficiency. Claessens and Van Horen (2007), Casson (1987), and Buckley and Casson (1991) argue that it is a banks familiarity

and technical, marketing and managerial experience that gives them a competitive advantage, and that this forms a benchmark to expand into a similar climate.

A rapidly growing amount of literature has begun to focus on the behaviour of mutual funds. Ruckman (2004) investigated how the level of fund-level and firm level characteristics of US mutual funds affect the channel used to enter the Canadian market. Coval and Moskowitz (1999), Hong et al. (2005) and Ivkovic and Weisbenner (2005) have all demonstrated that mutual funds are established with close consideration of factors specific to a particular location. Coval and Moskowitz (2001) found that U.S funds with a strong local bias in their holdings experience greater local performance due to informational advantages of their location. Fong, Gallagher and Lee (2007) examined information advantages for fund managers locating in close geographic proximity to stock headquarters, and found evidence inconsistent with such an advantage for Australian equity funds. Parwada (2007) found that there exists a home-bias in which start-ups tend to be based close to the origins of their founders, and in regions with more investment management firms, banking establishments, and large institutional money managers. Furthermore, a variety of social and economic attributes provide significant explanatory power to the location choice model applied.

This paper seeks to increase our understanding of the behaviour of financial advisors and their role in the distribution of products in the investment management industry. We trace all Australian Financial Services (AFS) representatives issued with licenses to provide financial advice and examine the determinants of where they commence their careers. To examine the link between the locations of firms and the broad characteristics of those geographic locations, we use well-established location choice models. We

hypothesise that three broad classes of variables have significant explanatory power in relation to location choice; financial demographics, general demographics, and competition demographics.

We then further the analysis by investigating closely the ownership structures of financial planning groups, with respect to the different business models adopted. Specifically, we use a hand-collected database of parent company and institutional alliance information to compare the location choices of those advisors with foreign affiliations to those without. The motivation was provided by Ihlanfeldt and Raper (1990), who found that independent office start ups have distinctly different location behaviours to branch offices. The differences among advisory structures may imply comparative advantages and could signal informational asymmetries.

The effect of foreign ownership has been well documented in the literature. Benvignati (1987) proposed several cost and informational advantages held by multinational firms, and regressed domestic profits against various industry and firm characteristics, including measures of multinationality. The results suggested that multinational companies exhibit higher profits when foreign activities are in a similar line of business. On the other hand, Chhibber and Majumdar (1999) attack the common assumption that firms in which there is a higher degree of foreign ownership will, on average, perform better than their domestic counterparts. They find that foreign ownership is indeed linked with superior performance, however this results only when property rights are transferred to foreign owners, and when ownership implies unambiguous foreign control.

The relationship between start-up location choice and foreign ownership was introduced by Agarwal and Ramaswami (1992), where location advantages, among others, were considered in the choice of a foreign firm's entry mode. Their findings suggested that foreign firms assess market potential and investment risk in search of location advantages. Klier, Ma and McMillen (2004) also studied foreign company location with the case of foreign and domestic auto supplier plants in the US. They found that plants regularly agglomerate by locating themselves both close to one another as well as their assembly plant customers. In comparison, they also find that foreign plants differ from domestic plants in location choice by preferring areas that are close to highways and other foreign plants.

We also compare the location choices of independent advisory practices with those of institutionally linked advisors. With particular attention paid to subsidiaries of banks, investment management and insurance companies, the study allows for an understanding of the way in which companies utilise the placement of financial advisors to distribute their products. We introduce variables to account for the level of competition in an area, to inspect whether planners agglomerate in a similar fashion to US supplier plants, or whether competition deters new start-ups. An interesting focus is the existence of banking organisations in an area, as many bank branches additionally operate as financial planning centres. From a modelling perspective, competition variables provide additional explanatory power to the more general census-level location characteristics. This focus allows the study to move toward specific explanations for differences in location choice, which may provide insight into territorial behaviour between planners as they compete for funds in particular regions.

Our study presents two main contributions to the literature. Firstly, we present a location choice model for the financial advisory industry, a largely ignored area in the literature despite its increasingly important role in the distribution of funds. This model also correctly specifies the location choice under varying ownership structures and other subsets of the industry. Secondly, we investigate the location behaviour of advisors as they interact with other players in the financial services industry.

The findings of this paper have the potential to influence two key parties. Firstly, entrants to the Australia financial advisory market, particularly foreign entrants, can consider this research during the planning process. Secondly, it may interest regulators concerned with the competition effects of agglomeration.

The study is organised as follows. Section 2 provides a background to the Australian financial advisory industry and motivates the study. Section 3 describes the hypothesis and the theoretical motivations of the determinants considered. The compilation of the dataset is summarised in Section 4. Section 5 presents the methods adopted. Section 6 includes results of the empirical analysis. Section 7 concludes.

2. Background & Motivation

Over the past decade, the Australian investment management industry has grown to become a primary component of the Australian financial services sector. Ranked fourth in the world by funds under management, the industry's natural growth has been fuelled largely by a rapidly expanding financial advisory industry, in addition to mandated superannuation contributions, strong equity markets, and innovations in product design.

Furthermore, in Australia's $900 billion retail and wholesale investment market, approximately $340 billion is under the advice of the top 100 financial planning dealer groups. However, the industry still faces a shortage of advisors, as more fund managers actively enter the savings markets. As a result, the market for financial advisory has witnessed a large influx of foreign participants, predominantly via joint ventures or alliances with local fund managers. Recent examples of foreign entry into the financial advisory market include a number of U.S. based companies including the likes of Fidelity, Franklin Templeton Investments, and Alliance. As increased competition places downward pressure on management fees and regulation becomes more comprehensive, the industry faces the challenge of retaining innovation whilst offering the best possible client service.

Financial advisors are licensed to offer professional financial advice to retail investors and are organised under the two main umbrella training bodies, the Financial Planning Association (FPA) and the Financial Services Institute of Australia (FINSIA), and the licensing authority, ASIC. The FPA describes financial planning services as general wealth creation advice and assistance across all financial markets, with some planners specialising in areas such as retirement planning, superannuation, taxation, estate planning, small business management, insurance, risk management, and managed investments. With particular importance to this study is the financial planner's role in providing an interface between investors and financial services firms and specialist fund managers on a commission basis.

Financial planning firms themselves can be divided into the licensees whom the responsible parties hold accountable to ASIC's stringent regulations for financial advice, and the authorised representatives which fall under a single license holder. In general, licensees represent larger companies and dealer groups (networks of financial planners), and are ultimately responsible for the advice given by the representatives they have placed.

The retail fund management industry can be organised into three broad categories; firstly, the clientele, secondly, advisory and investment management services, and, thirdly, the markets in which asset allocation strategies are implemented. Retail clients wishing to place their funds have a number of options. The most direct route is to place funds directly with fund managers. An indirect route is to employ the services of a financial planner. Advisory or personal financial planning services are the main conduit through which retail investors' access fund managers. The major value adding mechanism within the industry concerns the distribution of funds to investors resulting in the increasing popularity of software driven fund platforms referred to in market jargon as Investor Directed Portfolio Services (IDPS). Examples of these include master trusts or wrap funds, where all investments in managed funds, shares, and other investments can be combined into one package, often accessible from the Internet. Aside from the simplicity of one pool of investments, these platforms also have the advantage of consolidated reporting, as well as diversification benefits from investing in a wider range of fund managers and asset classes. Investment management firms utilise IDPS platforms as a means of accessing new markets, and this growth is further accelerated by heavy promotion from financial planners.

In recent times, the financial planning industry has witnessed a shift away from smaller boutique financial advisory practices towards large planning networks (or dealer groups), in most cases owned by banks, insurance companies, or fund managers. Table 1 lists the top 20 financial planning dealer groups ranked by the number of advisors. As evident from Table 1, the distribution of advisors is very heavily skewed towards the top 5 dealer groups. Furthermore, large banks and fund managers, who gain synergies via product distribution channels, dominate ownership of the dealer groups. Several of these parent companies make up the top 10 providers of retail and wholesale investment products in Australia, which are listed in Table 2.

The financial planning industry thus plays a crucial role in the distribution of products. In relation to this particular study, the location choice of those planners defines the geographic distribution of products, and presents large organisations the opportunity to accelerate their revenue growth. Hence it is of particular importance to understand the location choice of the financial planners in beginning to understanding the flow of funds in the industry, as well as effects of consolidation.

3. Developing the hypothesis

In this section, we form two key hypotheses for the analysis. The first concerns the determinants of the location choice of financial advisors. The second proposition is founded on the idea that ownership structures such as foreign and institutional affiliation affect the level of information available to advisors, leading to differences in location choice criteria.

3.1. Determinants of start-up location choice

Existing literature presents a number of studies on location choice, with each tailored to the particular industry in focus. In order to build our hypothesis, we begin with an analysis of established theories and relate the findings with this study in order to defend our choice of proposed determinants.

One of the pioneering location choice studies was conducted by Burgess (1925). The study constructed a theoretical model in which a monocentric city was developed to reflect US urban residential patterns in the 1920's. The model located all service and office activities in the central business district (CBD), and was later extended by Alonso (1964) to locate these activities in the downtown 'core' due to their reliance on both input and output markets. Vahaly (1970) further utilised census data to incorporate the accessibility of a location for customers and other firms, as well as site amenities that accounted for the relative quality of the location as perceived by its occupants. More recent research by Ihlanfeldt and Raper (1990) placed further importance on accessibility by including variables which targeted the economic and geographic proximity between start ups and both their suppliers and customers. They found that the location decisions of new office firms within metropolitan areas are a function of spatial variation in variables that affect profits. It is important to note that many previous studies of location choice begin with the notion that businesses will seek to locate in areas that maximise profit. However, as noted by Ihlanfeldt and Raper (1990), a common weakness of past research is the assumption that firms are at their long-run profit maximising locations, since it is not valid to ignore relocation costs for those firms not located optimally.

The location of businesses close to suppliers correlates closely with the idea proposed by Porter (1990) that firms benefit from collocating with each other via a spillover of knowledge between incumbent firms and the start up. Furthermore, the spillover of production enhancing resources such as manufacturing technologies can involuntarily spill over to geographically proximate firms (see Chung and Kalnins (2004), Almeida and Kogut (1999), Shaver and Flyer (2000)). With particular relevance to our study, Kolko (2007) finds that services are prominent among the most agglomerated industries, especially at the county level.

Labour costs have also been tied to the location of start ups. The generally accepted view is that high labour costs deter businesses from locating in an area (Bartik (1985)). However, an alternative hypothesis is that high labour costs act as a proxy for the quality of employees, and as a result encourage start ups. Parwada (2005) notes that high employment costs are regarded as necessary for attracting and retaining expertise.

Urbanisation is also widely considered as a factor attracting new businesses. Brandao and Mota (2006) compare the determinants of location choice of single-plant firms and multi-plant firms. They find that high urbanisation economies positively influence new investments, and lead to more favourable business locations. Finally, despite minimal literature on the area, we recognise that various unobservable factors could affect the decision to locate. A specific example is a firms branding and reputation in an area.

Given the set of past location choice literature, we now develop the first hypothesis for this study. We hypothesise that financial advisors consider socioeconomic location characteristics when choosing the location of a start up. The determinants have been chosen with the notion that advisors will choose to locate in areas in which they have a

greater chance of 'winning' additional funds under advice (FUA). There are two perspectives in relation to this. The first, which shall be referred to hereon as the source funds hypothesis, follows the prediction that a greater level of retail or wholesale funds available for investment increases the opportunity for advisors to increase their FUA and, with this, the attractiveness of a location. An alternative hypothesis is that the location decision is more closely related to the need and corresponding demand for advisory services in a particular area.

We divide the proposed determinants into three broad categories; general demographics, financial demographics, and competition demographics. The general demographics are included to account for advisor preference towards areas with favourable social characteristics. Such preference may include high population, area, and household size, all of which can be explained by the source funds hypothesis. Furthermore, a positive test of the hypothesis provides insight into the effects of urbanisation on location choice.

Financial demographics focus on monetary flows and financial characteristics. The proposed determinants income, rent and loan repayments directly test the source funds hypothesis, whilst unemployment and the proportion of fully owned dwellings are used as proxies to represent the financial stability of a particular area.

Finally, competition demographics present variables describing the congregation of related industries in particular areas. Specifically, these include the number of banking organisations, credit unions and building societies in an area. With reference to Kolko (2007), which found service industries to exhibit high levels of agglomeration, we

hypothesise that the existence of advisors and related industries in an area encourages the location decision of start ups.

3.2. Ownership structures and location choice

We hypothesise that information asymmetries between foreign affiliated and domestic advisory start-ups are reflected by their corresponding location choice behaviour. Domestic advisors have the advantage of prior knowledge and experience in the area. Furthermore, there is an increased likelihood that domestic start-ups have relationships with existing providers of financial products. We hypothesise that foreign originated start-ups suffer an initial disadvantage in this respect. The motivation is provided largely by earlier research that suggests foreign investors are often assumed to be at a disadvantage on location choice relative to locals. For example, Claessens, Demirgüç-Kunt and Huizinga (1998) note that the technical advantages foreign banks may have developed are not significant enough to overcome the informational disadvantages they face relative to domestic banks. In the context of this study, this disadvantage may be demonstrated via location choices that reflect a lack of specific market knowledge. This effect is likely to be more profound during the start-up period, which is the focus of this study. However, despite a possible information disadvantage, foreign affiliated start-ups will generally be provided a greater level of financial backing then domestics counterparts, particularly over those practices which are independent of any institutional affiliation.

Institutional ownership of an advisory practice is hypothesised to change the manner in which advisors choose to locate. The reasons for this difference can be explained upon examination of the nature of independent and institutionally linked advisory practices. Independent advisors, generally speaking, are smaller practices that provide advisory services to retail clients. They have limited branding power, and primary marketing operations are conducted on a local or regional scale. Furthermore, independent advisors are relatively specialised. As an example, a large number of independent advisory start-ups are formed solely to service the needs of elderly clients through their retirement funds. In comparison, advisors associated with larger institutions operate differently, largely due to advantages offered by the alliance. Firstly, they generally engage in a relatively diverse range of advisory roles, the extent of which depends on the industry of association. For example, advisors that are economically tied to investment management practices can offer a choice between numerous financial products. Hence they are better able to meet the needs of a wider market that includes both retail and wholesale clients. With particular relevance to this study, another advantage offered via such an alliance is the financial assistance provided by institutions during the period of starting up operations. The potential success of the start up is increased further through its association with the existing brand name and potentially strong geographic diversification of the parent institution. Aside from the several advantages discussed, perhaps the most significant advantage offered is the flow of knowledge and experience from the institution to the advisor.

The location choice behaviour between the two types of advisors may differ for several reasons. Firstly, institutionally linked advisors will likely place a considerable

bias on their role in the distribution of financial products on behalf of their owners. The specialty of the advisory and the type of product should affect the location demographics targeted. For example, in the case of retirement products offered by a bank, advisors can take the strategy of locating in areas with higher numbers of aged citizens. Secondly, independent advisory practices, which receive no financial or promotional backing, are likely to have a lower propensity than institutionally linked advisors to locate in areas with higher competition. This introduces the idea of collocation, and whether the two advisory structures approach agglomeration of financial services in the same way. Finally, institutionally linked advisors will account for existing business units of that organisation in a particular area. Furthermore, they may also consider the organisations current brand power in an area.

4. Constructing the dataset

The analysis of location choice introduces several data collection challenges. The first major challenge concerns the collection of community characteristics, which are difficult to obtain on geographic divisions that allow for analysis of community differentials. For example, data for state and metro level comparisons are readily available; however postcode level data can only be obtained via a nationwide census. Furthermore, it may not be possible to match the periods in which data is collected. Postcode analysis must be performed using statistics published from the nationwide census, which unfortunately takes place every 5 years. This is problematic from a modelling perspective, especially if the data is merged with advisor and other financial data obtainable on an annual or, often, quarterly basis. The second major challenge

concerns the collection of advisor location information. Since all published records of financial planning agencies focus on their initial registration date, the study is limited to the analysis of the entry decision of planners, and is not able to further examine their possible relocations for any persistence in location choice behaviour.

We use two main forms of data in this study. Firstly, the advisor level information detailing the location of the financial advisors under analysis, and secondly, the location data comprising location specific socio-economic characteristics.

4.1. Advisor-Level Information

These data comprise location data for 54,064 Australian Financial Services (AFS) representatives issued with licenses listed under the Australian Securities and Investments Commissions (ASIC) AFS Licensee Register as at 23rd October 2006. Formally, AFS representatives are defined as those authorised to provide financial services on behalf of the license holder. Despite the broad composition of the financial services industry, the majority of license holders operate traditional financial planning companies. More specifically, financial planning services include risk management, stockbroking operations, retirement planning, as well as tax, investment and superannuation advisory.

Aside from representatives, data have been obtained for the 1,502 licensees under which planners are placed in their respective locations. Locations are all represented on the 4-digit postcode level, which is a small enough level to account for differences in community characteristics. The use of the postcode also allows for analysis on the 3-digit level, which represents a regional perspective. In the case where representative locations

are classed as missing in the database, we have used the licensee locations as substitutes. This approach is reasonable since these cases are largely restricted to small independent licenses. Furthermore, areas which have been created to account for large mail volume receivers (e.g. Universities) have been replaced with the corresponding geographical postal area in which they are located. The same treatment has been applied to post office boxes. The database has the advantage that registration data of all planners can be divided into those commencing operations in each year from 2002 to 2006, providing the opportunity to witness the change in location choice of new start-ups over time.

The primary concern when using this database is that multiple AFS representatives may be listed under one license holder, on behalf of whom they provide financial services to retail or wholesale clients. In such a case the geographic dispersion of representatives may not be correctly represented. For this reason, location data for representatives and licensees have been included in the dataset. Descriptive statistics for AFS representatives and licensees are given in Table 3. Panel A presents the state level distribution of advisor locations, as well as the proportion of advisors in each state that are located in the corresponding financial centres. Panel B lists the top ten postcodes from a total of 1,682, ranked by the number of representatives and licensees respectively. Panel C provides a breakdown by year of registration.

In accordance with expectations and evident from Panel A, the majority of AFS representatives choose to locate in New South Wales, Victoria, and Queensland, the three highest populated states in Australia. Furthermore, a large proportion of those representatives choose to locate in the financial centres of those states with 16%, 12%, and 10% in Sydney, Melbourne and Brisbane respectively whilst several other centres

have higher levels. Also as expected, the highest ranked postcodes in Panel B are generally the financial centres, with the top ten 10 accounting for 17% of the total number of representatives. The importance of this is that the congregation in regions of increased financial activity may bias the results of analysis. For this reason we will introduce control variables, which are detailed in Section 5.

The geographic distribution of licensees is significantly different from that of representatives. Panel A indicates significant clustering, with 1,233, or 83% located in Queensland. Surprisingly, only 1% of the licensees in Queensland are located in the financial centre of Brisbane. However, upon investigation of the top 10 postcodes in Panel B we can see that 1,195 licensees are located in the Gold Coast region of Queensland, representing 97% of all licensees in the state.

The attraction of the Gold Coast as a destination for licensees may be a result of favourable social and economic characteristics of the region. The city has higher proportions of persons aged 60 and over (18.3%) than Queensland (15.9%) and Australia (16.8%). Historically, the proportion of persons aged 70 and over has increased from 10.4% of the population in 1991 to 11.0% in 2001. A major contributing factor to these figures are the natural progression of the 'baby boomers' (i.e. persons born between 1946 and 1965) into the older age groups. Furthermore, the region has declining fertility rates and increasing life expectancy rates. An ageing population and hence higher proportion of retirees provides planning services potential access to a large base of pension funds for advisory. From a financial perspective, the Gold Coast has lower income levels and higher unemployment rates then nationwide averages, which reduces the level of source funds available to planners. However, it is largely the case that many of the elderly rely

solely on pensions for their income, placing upon them greater financial restrictions and an increased requirement for specialist retirement advisory services.

On the issue of the licensee distribution, it is important to note that the start-up locations differ significantly to current location data published by ASIC, which suggests that New South Wales and Victoria have the highest proportion of licensees with 44.1% and 27.1% respectively. Hence it is clear that *start up* locations for licensees do not correctly represent their geographic dispersion.

For those advisors that are not independent (i.e. dealerships which are not advisor owned), identities and locations for the corresponding parent companies have been hand collected via the use of fund manager directories, Factiva and relevant news articles. Henceforth, we refer to these dealerships as 'institutionally linked' advisors. Parent companies have been classed into three main industry categories; banking, investment management, and insurance. Furthermore, we have divided the sample into domestic and foreign parents. As a note, banking organisation were categorised using the list of authorised deposit-taking institutions (ADI's) defined by the Australian Prudential Regulatory Authority (APRA). This classification includes Australian owned and foreign banks, which includes both Australian branches of foreign banks and subsidiaries of foreign banks. A summary of the advisor ownership is presented in Table 4, which shows a breakdown of advisors by independence (i.e. advisor owned) in panel A and parent companies by primary industry of operation in panel B.

Panel A of Table 4 reinforces the difference in characteristics between representatives and licensees, with 54% of representatives being independent, compared with 85% for licensees. There are a total of 143 different parent companies with

controlling interests in the non-independent advisors in Panel A. The majority of parent companies are involved in the banking and investment management industries with a total of 25 and 65 subsidiaries respectively.

Important to note is that the above table only observes direct ownership structures, which ignores two other possibilities. Firstly, it overlooks non-controlling stakes held by institutions in advisory dealerships. We recognise that these stakes give institutions some power over start up location choice, however we argue that their influence is minimal relative to those with controlling stakes. Secondly, observing ownership ignores the possible relationships and alliances that planners may have with organisations other than their direct parent. The structure of the financial planning industry can be described as a 'fund supermarket', in which many planners act on behalf of several interested parties in the process of 'placing' funds. This is especially the case in master trusts where, regardless of ownership structures, they are often involved in marketing funds for several funds management companies.

Furthermore, several large advisory networks operate in a similar fashion to franchising. Advisors includes in these networks generally place funds on behalf of a single vehicle, which itself maintains relationships with a range of fund managers. These advisors benefit via start-up capital assistance and access to a valuable brand name, whilst occasionally receiving an equity stake in these vehicles for their participation.

Hence ownership structures may not provide complete information as to advisors marketing and placement activities. Despite this, we argue that the location of a planning start-up is primarily determined by the parent company, and that other operations do not significantly affect location choice.

4.2. Location Characteristics Data

As discussed in Section 3, the determinants of location choice have been selected with the conception that planners will locate in areas in which they are better able to 'win' funds under advice or management. In accordance with the first hypothesis for this study, we propose that the markets for financial advisors are defined by the sources of funds from retail and wholesale sectors.

Location specific data has been obtained from the 2006 Australian Census as provided by the Australian Bureau of Statistics (ABS), which aims to accurately measure Australia's population on the census night in addition to socio-economic characteristics of the population and the dwellings in which they live. In accordance with the advisor level information, census data has been collected at the postcode level. In total, the ABS publishes data for 2,524 postcodes. Whilst merging the location data (which is provided for a single point in time) with the advisor location data (provided annually), we have assumed that the characteristics collected via the census are constant across the five years under consideration. Thus the resulting dataset includes 12,620 (2,524*5) observations. Of the 2,524 postal areas in Australia, 607 are located in New South Wales, followed by 655 in Victoria and 432 in Queensland. These three states represent 67% of the postcode distribution. Descriptive statistics for the postcode data are presented in Panel A of Table 5. Panel B provides a matrix of pair wise correlations of all independent variables considered in the analysis.

As seen in Panel A of Table 5, the census data is divided into three main classes, the motivation for which was described in Section 3. The first class includes the financial demographic variables of INCOME, RENT, loan repayment (LREPAY), the proportion

of dwellings which are fully owned (OWNDW), and the unemployment rate (UNEMP). Together, the financial demographics enter the model to represent the level of source funds available and the financial stability of an area. Income is defined as the median weekly individual income in each postcode. RENT is the median weekly rent collected for dwellings in each postcode, while loan repayment represents the median monthly housing loan expense, and is applicable to occupied private dwellings being purchased as well as dwellings being purchased under a rent/buy scheme. The proportion of dwellings fully owned represents the average tenure type in a given location, and is calculated after excluding those dwellings occupied under any type of rental agreement. The unemployment rate (UNEMP), as provided by the ABS, is calculated as the total number of persons unemployed expressed as a percentage of the labour force.

The second class of variables used are general demographic variables, and are included in the model to account for systematic differences in social characteristics of a location. These include the area's population (POP), the AREA (in square kilometres), the median AGE of all persons, and the average household size (HSIZE), which is defined as the number of persons usually resident in occupied private dwellings. The education level (EDUC) has also been estimated as the proportion of persons to have completed year 12 or equivalent as their highest year of education. Finally, a dummy variable (METRO) has been included classing postcodes as metro/non-metro, by adopting classifications published by Australia Post.

The third class of location specific information was obtained by merging the census data with point of presence (PoP) data obtained from APRA. The data provides the number of existing financial services organisations in Australia on the postcode level as

at 30 June 2006. Organisations of particular interest to this study are the number of building societies (NBDS), credit unions (NCRU), and banks (NBANKS). As a point of note, NBANKS includes all direct banking, commercial banking, services banking and bank advisory centres. Furthermore, annual PoP figures have been collected for years 2002-2006. The purpose of including these PoP data is to track the changing role of competition in the location choice of financial advisors over time. The resulting dataset is a panel, with the cross sectional unit being each individual postcode.

The financial demographics indicate an average median weekly income (on a postcode level) of $458 with a standard deviation of $148. The highest weekly income level of $725 is in the ACT and the lowest in Tasmania with $403. The average weekly median rent across all postcodes is $151 with a standard deviation of $82, with the ACT exhibiting significantly higher rates than other states with $246. Furthermore, the ACT also has the highest loan repayment level of $1415. The general demographics have similar results. The average population of postcodes is 7,867, with a standard deviation of 10,458. The highest level is in the ACT (12,924), followed by New South Wales (10,788) and Queensland (9,039). Important to note is that despite these somewhat alarming results for the ACT, the region account for 1% of all postcodes in Australia, and is not likely to significantly affect the analysis.

As expected, the average number of banks per postcode (6.2) is higher than the average number of building societies (0.26) and credit unions (0.86). Furthermore, the ACT, New South Wales and Victoria have higher levels of competition in all three industries. The level of competition in the ACT is likely to be overestimated however, since other states have a larger number of postcode regions and it is likely that companies

will serve customers from postcodes other than their own, increasing the level of competition.

4.2. Correlations and Caveats

Panel B of Table 5 presents the pair wise correlations among the explanatory variables in the sample. It is important to consider the dynamics between the proposed variables, in order to determine the correct form of the eventual model, as well as the issue of excluding or transforming variables. Firstly, we recognise that rent and loan repayment are significantly correlated with several other financial and general demographics. Furthermore, education is highly correlated with income and population.

These results may not be surprising, but they do indicate that these variables perhaps should not be included in the same regression. In addition to the correlation between the general and financial demographics, the number of banks is highly correlated with the number of credit unions (0.87). This is also not surprising, since it is likely that the key demographic features which may attract banks are likely to attract businesses of similar industries, particularly credit unions. The results suggest that the variables should be added separately during regression analysis.

In summary, there are two key limitations to the data. Firstly, it is recognised that some of the independent variables are endogenous and this is especially the case within the different classes proposed. Hence we apply caution when referring to the influence of a particular variable individually, and rather seek to interpret variables with respect to the particular class they belong to. The second main limitation is that data is not available on

an annual basis for census collected data, and so it should be made clear that the five years of advisor location data is merged with the financial and general demographics assuming the demographics are *unchanged* over the five year period. In contrast, the competition demographics change annually. This is a common occurrence in studies of this nature. we argue that the influence of this on subsequent analysis is minimal due to the relative 'stickiness' of location data. Furthermore, the variables that need to vary, advisor locations and competition demographics, *do* vary. Nevertheless, we do accept that caution should be taken when making conclusions about location choice over time.

5 Methods

5.1. Background to location choice models

The empirical approach applied in this study is based on the conditional logit framework proposed by McFadden (1974), in which a choice model was applied to determine how individuals will choose among finite alternatives in order to maximize their utility. The model, as applied in Woodward (1992) and Chin and Junjie (2006), is as follows:

Let i be the financial planner with set of choices j that denote the possible planner locations in different postcodes. The firm is assumed to locate their firm where expected profits are the highest. Thus a firm will choose to locate in location j if and only if

$$\pi_{ij} = \max\{\pi_{ij} | n = 1, \ldots, N\} \quad (1)$$

Where π_{ij} denotes the profit if firm i located at j.

Following the assumption made by Bartik (1985) and Chen (1996), we assume that profit is a linear function of the characteristics of the location and a disturbance term:

$$\pi_{ij} = c + X_{ij}B + \epsilon_{ij} \tag{2}$$

Where c is a constant, Xj are the explanatory variables given by the location characteristics, and ϵ_{ij} denotes the error term. B represents a matrix of linear coefficients. If εij are independently, identically distributed according to the Weibull density function, and the alternatives are assumed to satisfy the "independence of irrelevant alternatives (IIA)" property, the probability that firm i chooses location j can be described by the following formulations:

$$p_{ij} - \frac{\exp\left(X_j B\right)}{\Sigma_{n=1}^{N} \exp\left(X_n B\right)} \tag{3}$$

This logit approach treats the location decision problem as one of random profit maximisation (Carlton, 1983). As depicted in equation 3, the dependent variables are the mutually exclusive locations (proxied by postcodes) and the independent variables are the location characteristic variables described in Section 4.2. In summary, this model estimates the probability of a planner locating in a particular area, subject to the exogenous variables chosen. The results will indicate which of these variables significantly attract financial planners to specific locations.

5.2. Model specifications

We use three broad classes of models under the described framework; the Poisson regression model, the negative binomial regression, and the logistic regression. Each varies in the assumption made for the distribution and type of the dependent variable.

5.2.1 The Poisson Regression Model

The Poisson regression models count data by utilising the number of occurrences of an event of interest, or the rate of occurrence of an event of interest. Here the dependent variable is represented by the total count of advisors in each postcode, for each year of analysis. The independent variables are the postcode location characteristics given in Table 5. The model assigns a Poisson distribution to the dependent variable conditional on the independent variables, where the log of the expected count is expressed as a function of the predictor variables. The interpretation of the regression coefficients is as follows: for a one unit change in the predictor variable, the difference in the logs of expected counts is expected to change by the respective regression coefficient, given the other predictor variables in the model are held constant. A potential concern with the use of the Poisson model for count data is overdispersion, in which case the variance is greater than the mean, as opposed to the equality assumed by the distribution. In such a situation Poisson estimates are inefficient (despite being consistent) with standard errors biased downward yielding spuriously large z-statistics.

5.2.2. Negative Binomial Regression Model

The negative binomial regression is particularly useful for count data when Poisson estimation is inappropriate due to overdispersion (i.e. a dominance of zeroes in the dependent variable in our case). The mean of the negative binomial distribution is the same as that computed by the Poisson model. However, the variance includes a dispersion parameter to account for unobserved heterogeneity. The regression model can be motivated as a mixture of Poisson and Gamma distributions. The dependent and independent variables in this model are the same as specified in the Poisson regression model.

5.2.3. Logistic Regression Model

As discussed in Section 4.3, several independent variables exhibit strong pairwise correlations with each other. Furthermore, even though the correlations only indicate pairwise linear associations between variables, more complicated relations may exist. For example, the periodic sampling of data from repeat subjects (advisors) is in itself a probable cause of correlation due to clustering. Therefore, we supplement the standard discrete choice model with a logit model that accounts for the clustered nature of the data by incorporating the Generalised Estimation Equation (GEE) technique. GEE accounts for the clustered nature of correlated variables by including an additional term that increases the correlation among observations within a cluster relative to the correlation between clusters. The logistic regression model differs from the Poisson and Negative Binomial models in that the dependent variable is transformed from a count variable into a binary operator. Hence, the dependent variable takes the value of 1 *where at least one*

advisor is located in a postcode in any given year, and 0 otherwise. The interpretation is that the resulting coefficients represent the change in log odds of the response (ie. probability of locating in a particular postcode) per unit change in the predictor.

A possible disadvantage of the basic logistic regression is that it will ignore the presence of heavy clustering in particular postcode years. we argue that the GEE technique controls for this phenomenon. As well, the general and financial demographics act as control variables to counteract this bias as they reflect the relative attractiveness of an area.

6 Empirical Results

6.1. The determinants of the location choice of financial advisors

We commence the analysis with the use of a reduced form model which shall be referred to hereon as the baseline model. The model excludes particular variables after consideration of the correlation between explanatory variables. Furthermore, we initially ignore competition demographics, with the aim of identifying any differences in the results caused by their eventual inclusion. The excluded variables are rent, loan repayment, and education, all of which displayed high pairwise correlations. As aforementioned, their inclusion could potentially lead to inefficient regression coefficient estimates.

The base model covers most general and financial demographics. All analyses presented in this results section relate to AFS representatives, which are the main focus of this study. The results of the base model regressions are presented in Table 6. Included in

the table are the coefficient estimates of three classes of models described in Section 5. Regressions (1) – (4) apply both pooled and random effects[1] regressions using Poisson and Negative Binomial models for count data, in which case the dependent variable is a count of all representatives in a particular postcode in a given year. Regressions (5) – (7) use a logistic framework where a binary operator is regressed against the independent variables. The use of a variety of models is applied with the hope that results are consistent across various models, particularly the GEE logit models for which we have more robust theoretical defence. All reported standard errors are corrected for heteroskedasticity.

Table 6 presents several findings of note. The Poisson regressions (1) and (2) indicate a significant and positive relationship between start-up location choice and the population of the area and whether the area is in a metro region. These results support the hypothesis that advisors choose to locate in areas where 'source funds' are greater. Furthermore, there appears to be a tendency for advisors to locate in areas with smaller households, evidenced by a negative and significant coefficient for the household size variable. Upon investigation however, the mean and variance of the dependent variable, the count of the advisor locations, are 4.2 and 21.5 respectively. This difference indicates that the Poisson model is likely not stable in our context, despite the popularity of its use with count data. Furthermore, Pearson's chi-squared goodness of fit statistics for regressions (1) and (2) are 55,117 and 52,478 respectively, which lead us to reject the

[1] The choice of the random effects model was confirmed by the Hausman Test, which tests fixed versus random effects under the null hypothesis that the individual effects are uncorrelated with the other regressors in the model (Hausman (1978)). The resulting Chi-squared statistic of 33.67 and a corresponding p-value of 0.11 suggested that we could not reject the null of random effects.

null hypothesis that the dependent variable is Poisson distributed. Hence our main interpretations will only concentrate on the negative binomial and logistic regressions.

The negative binomial regression (3) presents somewhat similar results to the Poisson regressions. However, the advantage is that overdispersion is taken into account. Regression (3) displays significant explanatory power for variables representing the proportion of fully owned dwellings (OWNDW), population, area, household size and metro classed regions. These results differ, however, from results in regression (4), which exploits the dataset's panel structure. For instance, unemployment and age indicate significant relationships, while OWNDW and AREA now appear to have no explanatory power.

The logistic regressions (5) – (7) provide relatively consistent results, with unemployment, population, age, household size and metro classed regions all displaying significant relationships with advisor location choice. Initial interpretations suggest both general and financial demographics can explain location choice behaviour.

In order to make interpretations with reference to particular determinants, we determine a consensus by focusing on the results of regressions (4) to (7), which include both count and binary alternatives for the dependent variable. Furthermore, we place the most importance on the GEE logistic regression (7) because of its theoretical advantage over both the Poisson and negative binomial models as discussed in Section 5. Note that the GEE logistic model presents coefficients equal to the pooled logistic model (5), however with standard errors adjusted accordingly.

The consensus supports 5 key findings. Firstly, there is a negative relationship between location choice and the level of unemployment in an area. Secondly, advisors

tend to locate in highly populated areas. These results agree with the first hypotheses, since both of these variables proxy the level of source funds in an area. Thirdly, there is a positive and significant relationship between location choice and the median age in an area. This inclination to locate in areas with more elderly persons indicates the relative attractiveness of the market for retirement advisory services. It also goes some way in explaining the success of advisors in selecting locations to distribute superannuation and financial retirement products on behalf of investment management firms to this market segment. The fourth key finding is a negative relationship between location choice and household size, which indicates that advisors locate in areas with predominantly smaller households. Examples may include one or two person households, de facto relationships or single parent families. Important to note is that this phenomenon does not conform to the source funds hypothesis. Rather, a possible explanation is that larger families are more established, at least in the financial sense, and in a lower need of financial advisory services relative to smaller households. Hence, the alternative hypothesis proposed in Section 3 relating location choice to the demand for advisory services provides a more likely explanation here. Finally, there is a positive relationship between the metro dummy variable and location choice.

In our view, a surprising result is that income provides no significant explanatory power, despite its natural association with the source funds hypothesis. We propose two reasons for this unexpected outcome. First, the log transformation of the income variable may not correctly represent the non-linear relationship between income and location choice. For example, it may be that advisors disproportionately prefer high income earners over low income earners. Secondly, despite considering pairwise correlation

between income and other variables, we recognise that it is possible that other variables subsume the explanatory power of income. In particular, the variables representing unemployment, rent, loan repayment, and education are potential proxies for the level of income in an area.

To complement the analysis of Table 6, we run regression models after adding competition demographics to the base model. The results are shown in Table 7. The Poisson regressions of Table 6 have been excluded for brevity and overdispersion as explained earlier on, with the methodological focus on the GEE logistic approach outlined in regression (7). The introduction of competition variables provides three key results. First and foremost, the five main results of the baseline model still hold with a high level of significance. Secondly, all coefficients for competition demographics are positive and significant. This finding suggests that competition does not deter representatives from choosing particular locations and rather provides initial evidence supporting the hypothesis that advisors agglomerate. We make it clear that despite a positive relationship between location choice and competition, it does not suffice to deduce that advisors choose to locate in areas with more competition. Rather, we recognise that areas with favourable socio-economic characteristics attract more competition. As in the case of US manufacturing start-ups studied by Klier, Ma and McMillen (2004), the disadvantages in relation to market share must be offset by the advantages from collating with other firms. Hence we present this finding with the interpretation that advisors, in the least, consider general, financial *and* competition demographic classes.

Interestingly, the coefficient representing the number of banking organisations (0.154) is lower than that of credit unions (0.2466) and building societies (0.2996); suggesting advisors show a weaker inclination to collocate with banking organisations. This may reflect the large size and product diversification of the banking industry. Aside from generic lending and borrowing services, many banks offer competing financial advisory services, often as a means of distributing their own financial products. In comparison, credit unions and building societies perform relatively specialised roles, allowing advisors to capture larger market shares when collocating with them.

The results in Tables 6 and 7 provide clear empirical evidence that the three hypothesised classes of variables have significant explanatory power in relation to location behaviour. On the issue of robustness of the baseline findings, we revisit the initial location characteristics described in Section 4, and introduce those variables excluded from the baseline model due to collinearity concerns. The inclusion of these variables raises two important issues. Firstly, there is a possibility that these proposed determinants bring significant explanatory power to the baseline model. Secondly, there is a risk that the original findings of the baseline model will be compromised. The results of this additional analysis are not tabulated for brevity and available from the authors upon request. We find that the original five baseline findings continue to hold after the inclusion of variables representing the level of rent, loan repayment and education in a particular area. Furthermore, the coefficients of all three variables are positive and significant at the 1% level. As mentioned earlier, the variables rent, loan repayment and education represent possible proxies for the level of income and potentially subsume the significance of its coefficients. Hence the positive coefficients provide support for the

source funds hypothesis. However, these results also support the alternative hypothesis that higher living expenses increase the level of financial restriction and subsequent demand for advisory services.

In results not tabulated in interests of brevity, the analysis of this section was repeated on the 3-digit postcode level, aggregating the original dataset into fewer location divisions. The results were consistent with those presented in Table 6, indicated by strong significance of the five main baseline results.

6.2. The effect of foreign affiliation on advisor location

Following the analysis of the location choice determinants, we further investigate the behaviour of financial advisors with respect to ownership structures. The focus now changes to those advisors with affiliations with any foreign organisation, via the ownership of their associated licensee. Table 8 presents the regression results using the baseline model, with the dependent variable limited to the count of those representatives which have a foreign affiliation.

The results signal a different set of location choice criteria relative to the whole sample results. Only three of the eight variables in the base model have consistently significant results; Population, Area, and Household size. None of the financial demographics have consistently significant estimates. These results are robust when considering variables excluded from the baseline model, suggesting that foreign affiliated advisors tend to locate in areas with favourable general demographics. The implication here is that foreign entrants focus on social characteristics such as population and area as

an estimate of the potential size of a market. This agrees with the earlier hypothesis that foreign based start-ups have a limited understanding of the financial environment relative to domestic players with prior experience. This is especially the case with the small geographic divisions under analysis.

6.3. The effect of institutional affiliation on location choice

This section analyses the effect of institutional ownership on the start up location decision. Institutionally affiliated AFS representatives are those sponsored predominantly by licensees belonging to banking, investment management and insurance institutions. Formally, we compare the location decisions of independent advisors with those of institutionally affiliated advisors. Identified differences in location choice criteria may reflect differences between the nature of advisory networks and independent start ups. Table 9 provides regression results for the baseline model regressions. As in Table 7, only results for the GEE logit models are reported. Regression (1) restricts the dependent variable to the count of independent advisory companies in each postcode for each given year. Regression (2) restricts the dependent variable to the count of institutionally linked advisors in each postcode year. Regressions (3) to (5) divide the sample of institutionally-linked advisors into the industry of affiliation. For example, the dependent variable in regression (3) is the count of advisors linked to banking organisations in each postcode year.

Regressions (1) and (2) provide empirical evidence of several similarities between the location choice of independent and institutionally linked advisors. Relationships for unemployment, population, household size and metro classed regions are consistent with

baseline model results for both types of advisors. There are two key differences in location criteria. Firstly, age is only a significant explanatory variable for independent advisors. Though the relationship is weak, we deduce that independent advisors take greater advantage of areas with more elderly people, in which large bases of pension funds present profitable advisory roles. Secondly, institutionally linked advisors tend to locate in areas with a higher proportion of fully owned dwellings. As mentioned in the hypothesis, this variable was included to reflect the level of financial stability in a community.

Before analysing the extent to which these advisors receive information advantages, if any, from being part of a larger group, we first recognise that the sample of institutions spans a variety of industries. Furthermore, many advisory practices are owned by companies outside the financial services industry. As an example, some advisors in our sample are owned by hotel networks. In accordance with our focus on the role of advisors in the investment management industry, we feel that the natural progression from regressions (1) and (2) is to partition the parent companies into classes of financial services. Regressions (3), (4) and (5) alter the dependent variable to include the count of those advisors affiliated with banks, investment managers and insurance companies respectively.

The results presented in Table 9 indicate that the baseline findings generally hold across the different advisors affiliation groups. However, several interesting differences stand out. For example, the variable representing income is only significant for investment management affiliated advisors, with a positive coefficient of 1.7196. In addition, both banking affiliated and investment management affiliated advisors locate

with consideration to the proportion of owned dwellings. Interestingly, this variable is insignificant for insurance linked advisors. This finding may point to the fact that banking and investment management affiliated advisors consider opportunities to cross-sell products such as loans in their location decisions. Owner occupied residences are likely mortgage financed. Their occupants also represent potential future business opportunities in investment lending, for example.

Another difference is that sign of the unemployment variable reverses sign for investment management affiliated advisors. However, this is only at a 10 percent level of statistical significance.

As noted in our findings so far, income fails to show up as a significant determinant of location choice in tests based on the whole sample. However, when we segregate the findings on institutional affiliation, we see that advisors linked to investment management firms do regard income levels highly in locating. In this, they stand out as the only institutional affiliation to place importance on this variable. Considering that investment firm affiliated advisors apparently place little importance on Age, this finding may explain the positive and significant coefficient of unemployment in investment firm related advisors. Their reliance on high income areas also exposes them to population groups that are prone to relatively high levels of unemployment, even only intermittently.

Upon comparing the affiliation groups, we find that banking affiliated advisors exhibit greater significance with the proposed classes of determinants than those linked to investment management or insurance industries. Given that these determinants proxy, to a limited extent, the level of funds that advisors are able to ‘win’, the implication is that these advisors exhibit ‘superior’ location choice. This is perhaps not a surprising result.

Bank affiliated advisors benefit from several comparative advantages in both their operating and information costs, in addition to the scale advantages offered by large dealer groups.

6.3. Collocation

In this section we revisit the first of our two main hypotheses by investigating agglomeration effects on the location of representatives in particular regions. Table 7 showed that competition from related industries (banks, building societies and credit unions) does not deter advisors from locating in particular areas. The positive and significant coefficients of the competition demographics suggested that advisors tend to locate in areas with more competition. We also noted the likelihood that it was not the competition that attracted advisors, but rather that advisors tend to locate in areas which themselves attract increased competition. Nevertheless, the analysis provided the preliminary result that advisors are located in close proximity to firms in related industries. This close proximity however, does not prove that advisors *choose* to agglomerate with other firms.

We test for *intra-industry* agglomeration, where independent advisors collocate with institutionally linked advisors. This division is motivated by the findings of Section 6.3, where it was described that the latter are not only in a position to benefit from the network advantage, but also provided empirical evidence supporting that bank affiliated advisors have superior location choice. We now question the possibility that independent advisors 'learn' from these location choices and exhibit this by 'following the institutional leader'.

Methodologies for the formal testing of agglomeration were greatly advanced by Ellison and Glaeser (1997), who developed the dartboard index based on a method of moments approach. More recently Greenstein and Rysman (2004) specified a multinomial test for agglomeration and dispersion (MATD), based on likelihood. Kolko (2007) took a different approach by considering location patterns of pairs of industries instead of individual industries. Buch et al. (2005) use the number of competing establishments located in a given host area as a proxy for agglomeration effects. Our approach closely follows Buch et al. (2005). The nature of our dataset allows us to take advantage of yearly location choice trends. We directly test the existence of collocation by asking the question: do advisors consider the past location of other firms by replicating those choices in the present?

In order to test the intra-industry agglomeration hypothesis, we limit the dependent variable to the binary operator representing only independent advisors for each postcode year. We then include explanatory variables representing the number of institutionally linked advisors locating in a particular area for the previous two years. Additionally, we provide a breakdown by industry of affiliation.

Table 10 presents the analysis of intra-industry agglomeration. Regression (1) reports the baseline model with the inclusion of one and two-year lagged location data for institutionally affiliated advisors. Regressions (2) through (4) further divide the institutionally linked advisors by industry of affiliation.

The table present three key findings. Firstly, it is evident from regression (1) that there exists a significant and positive relationship between independent advisor location and the prior location of institutionally-linked advisors. This observation lends support to

the hypothesis that advisors collocate. Secondly, specifications (2) through (4) show that the learning effects in location choices are driven by all forms of institutional affiliation.

The third finding is that the relationship is stronger for all one year lag variables than the two year lag variables. This suggests that the response by independent advisors is more of an immediate effect, and that they adjust their preferences over time to lessen the potential comparative disadvantage.

7 Conclusion

This paper provides, for the first time, a model specification for the location choice of financial advisors. Through the inclusion of a variety of socioeconomic factors specific to certain geographical divisions, we find that financial advisors locate with close consideration to general, financial and competition demographics in an area. In particular, advisors tend to locate in areas with high populations, low unemployment, lower household size, and those located in metro regions. Furthermore, there is a movement towards those regions with higher numbers of elderly citizens, reflecting the targeting by advisors of the rapidly growing market for retirement financial products. These findings closely agree with our hypothesis that advisors locate themselves in areas with greater source funds, in which they can maximise their level of funds under advice. We also find that competition does not deter advisors from locating in particular regions.

We make a second contribution by relating the differences in ownership structures of financial advisors to the decision to locate. We find that those advisors affiliated with foreign institutions locate themselves differently to domestic advisors, with consideration

only given to those variables indicative of potential market size. This finding reflects an information asymmetry between foreign and local participants in the advisory market. Furthermore, we find that advisors linked to institutional companies locate differently to those which are independent. In particular, banking affiliated advisors exhibit closer conformity with reference to the proposed determinants of the specified model.

Our third contribution is an investigation of agglomeration effects on the location of advisors. We find that independent advisors 'follow' their institutionally linked competitors, especially those with links to the investment management arena.

The implication of this research is an increased understanding of the factors affecting the market for financial advisory. In addition, we add further explanation for the success witnessed by the financial advisory industry in the distribution of financial products. Given the current shortage of advisors, our findings present future entrants with an insight into the behaviour of those in the past. Future research should track financial advisors beyond the market entry stage of their life cycle. More needs to be understood about the persistence of the location factors motivated in this study. The long term impact of the original location factors on advisor performance and survival in the investment management industry are potentially fruitful avenues for research in this area.

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Table 1 - Ownership of Major Financial Planning Dealer Groups (31/12/06)

Rank	Dealer Group	Number of Advisors	Funds Under Advice (A$m)	Largest Shareholder (s) (%)	Main Business of Parent
1	Professional Investment Services	1,379	15,000	Aviva	Financial Planning
2	AMP Financial Planning	1,231	39,852	AMP Limited (100)	Banking / Funds Mgmt
3	Count Financial	913	12,410	The Lambert Family (46)	Financial Planning
4	Commonwealth Financial Planning	648	25,343	Commonwealth Bank (100)	Banking
5	Westpac Financial Planning	506	22,378	Westpac Banking Corporation (100)	Banking
6	Millennium3 Financial Services	485	3,500	ING Bank Australia (100)	Banking / Funds Mgmt
7	National Australia Financial Planning	463	10,878	National Australia Bank (100)	Banking
8	Financial Wisdom	417	9,395	Commonwealth Bank (100)	Banking
9	Securitor	414	nd	St George Bank (100)	Banking
10	Charter Financial Planning	405	nd	AXA Asia Pacific (100)	Insurance
11	ABN Amro Morgans	400	27,000	ABN Amro Morgans Holdings (100)	Funds Management
12	Genesys Wealth Advisers	398	9,000	Challenger Financial Services (100)	Funds Management
13	Axa Financial Planning	371	nd	AXA Asia Pacific (100)	Insurance
14	ANZ Financial Planning	363	11,093	ANZ Banking Group	Banking
15	MLC FP/Garvan FP	317	9,946	National Australia Bank (100)	Banking
16	Hillross Financial Services	290	11,100	AMP Limited (100)	Banking / Funds Mgmt
17	Lonsdale Financial Group	231	8,200	Zurich (71)	Funds Management
18	Suncorp Financial Planning	216	nd	Suncorp Metway (100)	Insurance
19	Bridges Financial Services	210	6,000	Australian Wealth Management (100)	Funds Management
20	RetireInvest	207	10,400	ING Australia (100)	Banking / Funds Mgmt

* nd = not disclosed

Table 2 - Australian Retail and Wholesale Investments Market (March 2007)

Rank	Entity	Funds under management (A$m)	% of total
1	Commonwealth Bank	97,018	10.80%
2	National Australia Bank	87,109	9.70%
3	AMP Limited	78,644	8.80%
4	BT (owned by Westpac Banking Corporation)	57,782	6.50%
5	Macquarie Bank	53,655	6.00%
6	ING Australia	51,842	5.80%
7	AXA Pacific Holdings	48,103	5.40%
8	Barclays	37,238	4.20%
9	St. George Bank	31,140	3.50%
10	Perpetual Trustees	28,054	3.10%
	Total Market	**895,145**	

Table 3 - Advisor location distributions

Panel A: Distribution of financial advisors by location

State	No. Representatives	No. Licensees	Financial Centre	Proportion of advisors in Financial Centre: Representatives	Proportion of advisors in Financial Centre: Licensees
NSW	17,486	130	Sydney	16%	44%
VIC	13,989	86	Melbourne	12%	28%
QLD	10,987	1,233	Brisbane	10%	1%
WA	5,306	34	Perth	10%	26%
SA	4,185	13	Adelaide	17%	23%
TAS	965	1	Hobart	27%	0%
ACT	867	5	Canberra	25%	40%
NT	374	0	Darwin	22%	0%
Total	**54,159**	**1,502**			

Panel B: Top ten postcodes by number of advisors

Representatives			Licensees		
Postcode	Region	Number	Postcode	Region	Number
2000	Sydney, NSW	2,878	4217	Gold Coast, QLD	1,195
3000	Melbourne, VIC	1,684	2000	Sydney, NSW	73
4000	Brisbane, QLD	1,066	3000	Melbourne, VIC	31
5000	Adelaide, SA	714	4000	Brisbane, QLD	12
4217	Gold Coast, QLD	622	3004	Melbourne, VIC	12
6000	Perth, WA	516	6000	Perth, WA	10
3004	Melbourne, VIC	486	6005	West Perth, WA	8
6005	West Perth, WA	461	2060	North Sydney, NSW	5
2150	Parramatta, NSW	436	3205	Sth Melbourne, VIC	5
4350	Gold Coast, QLD	417	6008	Subiaco, WA	5
	Total	**9,280**		**Total**	**1,356**
	% of all representatives	**17%**		**% of all licensees**	**90%**

Panel C: Distribution of financial advisors by year of registration

Year	Representatives	Licensees
2006	11,137	14
2005	11,116	19
2004	25,410	142
2003	5,508	1,310
2002	988	17
Total	**54,159**	**1,502**

Table 4 - Advisor Ownership Information

Panel A: The independence of financial advisors

	Representatives	Proportion	Licensees	Proportion
Independent Advisors	29,150	54%	1,272	85%
Non-Independent Advisors	25,009	46%	230	15%
Total	**54,159**		**1,502**	

Panel B: Distribution of parent companies by primary industry

	Domestic	Foreign	**Industry Total**	**Proportion**
Banking	11	15	**26**	**18%**
Investment Management / Financial Services	42	23	**65**	**45%**
Insurance	9	16	**25**	**17%**
Other	23	4	**27**	**19%**
Total	**85**	**58**	**143**	

Table 5 - Descriptive statistics of independent variables

Panel A: Descriptive Statistics

	Financial demographics					General demographics						Competition demographics		
	INCOME	RENT	LREPAY	OWNDW	UNEMP	POP	AREA	AGE	HSIZE	EDUC	METRO	NBDS	NCRU	NBANKS
N	12,620	12,620	12,620	12,620	12,620	12,620	12,620	12,620	12,620	12,620	12,620	12,620	12,620	12,620
Overall Mean	458	151	1,112	0.38	0.05	7,867	3,052	39	2.51	0.36	0.35	0.26	0.86	6.20
State Means (No. of Postcodes)														
NSW (607)	462	191	1,381	0.38	0.06	10,788	1,319	39	2.54	0.38	0.33	7.34	0.43	1.48
VIC (655)	442	147	1,085	0.41	0.05	7,533	349	40	2.53	0.37	0.41	5.35	0.06	0.39
QLD (432)	461	156	1,095	0.35	0.05	9,039	4,098	37	2.57	0.36	0.68	8.65	0.71	0.92
WA (339)	497	113	999	0.36	0.04	5,777	7,533	37	2.55	0.37	0.21	4.52	0.08	0.55
SA (325)	428	126	901	0.40	0.05	4,654	2,717	41	2.36	0.34	0.14	5.17	0.02	0.85
TAS (109)	403	123	801	0.41	0.07	4,371	623	40	2.38	0.29	0.06	3.45	0.14	0.53
ACT (25)	725	246	1,415	0.27	0.04	12,924	72	35	2.32	0.60	0.08	8.54	0.23	2.00
NT (28)	546	109	1,058	0.18	0.06	6,966	49,880	32	2.93	0.29	0.04	5.54	na	1.39
std. dev	148	82	532	0.13	0.04	10,458	22,313	6	0.60	0.14	0.48	0.88	2.01	7.98
min	0	0	0	0	0	0	0	0	0	0	0	0	0	0
max	1,667	538	9,999	1.00	1.00	99,482	655,332	79	6	1.00	1.00	11	41	114

Panel B: Correlation matrix of independent variables

	LOGINCOME	RENT	LREPAY	OWNDW	UNEMP	LOGPOP	LOGAREA	AGE	HSIZE	EDUC	METRO	NBDS	NCRU	NBANKS
LOGINCOME	1.00													
RENT	0.37	1.00												
LREPAY	0.38	0.71	1.00											
OWNDW	-0.10	-0.27	-0.19	1.00										
UNEMP	-0.22	-0.07	-0.16	-0.06	1.00									
LOGPOP	0.36	0.65	0.49	-0.26	0.04	1.00								
LOGAREA	-0.13	-0.56	-0.35	0.29	-0.10	-0.21	1.00							
AGE	0.05	-0.16	-0.15	0.70	0.03	-0.16	0.13	1.00						
HSIZE	0.23	0.16	0.21	-0.01	-0.13	0.19	0.11	-0.26	1.00					
EDUC	0.49	0.64	0.57	-0.29	-0.20	0.41	-0.48	-0.27	0.06	1.00				
METRO	0.14	0.53	0.44	-0.25	-0.04	0.35	-0.42	-0.23	0.09	0.50	1.00			
NBDS	-0.01	0.09	0.08	-0.02	0.09	0.18	-0.02	0.00	-0.02	-0.02	-0.09	1.00		
NCRU	-0.09	-0.36	-0.34	0.03	-0.10	-0.19	0.19	0.02	-0.05	-0.19	-0.11	-0.11	1.00	
NBANKS	-0.04	-0.22	-0.22	0.01	-0.10	-0.05	0.15	0.00	-0.04	-0.09	-0.03	0.03	0.87	1.00

** Note: Logarithms taken for Income, Population (POP) and Area variables*

The table reports descriptive statistics and pairwise correlations between the independent variables proposed. INCOME is defined as the median weekly individual income for a given postcode. RENT is the median weekly rent collected from dwellings in each postcode. LREPAY represents the median montly houseing loan expense in each postcode. OWNDW is the proportion of fully owned dwellings, as well as dwellings being purchased under a rent/buy scheme. UNEMP is the unemployment rate for a given postcode. POP is the population in a postcode area. AREA is the total geographic area of the postcode in square kilometres. AGE is estimated as the median age of the population each postcode. HSIZE refers to the the average household size in a postcode area. EDUC is the education level of an area, estimated as the proportion of persons to have completed Year 12 or equivalent as their highest year of educuation. METRO is dummy variable, taking the value of 1 for metro located postcodes, and 0 otherwise. NBDS, NCRU and NBANKS represent the number of building societies, credit unions and banks respectively in each postcode.

Table 6 - Factors Affecting the Location Decisions of AFS Representatives

Variable	Pooled Poisson	RE Poisson	Pooled Negative Binomial	RE Negative Binomial	Pooled Logistic	RE Logistic	GEE Logit
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	-6.0329***	-2.5795	-3.2612	-9.2028***	-8.9755***	-7.7077**	-8.9755***
	(2.3111)	(1.9227)	(2.649)	(2.1063)	(3.4859)	(3.3939)	(1.1449)
Income	0.5742**	-0.378	-0.2409	0.1288	-0.1545	-0.4741	-0.1545
	(0.2333)	(0.2374)	(0.3618)	(0.2826)	(0.493)	(0.4694)	(0.1577)
Owndw	0.7492	-2.6327**	-1.6206**	-0.1714	-0.0258	-0.6584	-0.0258
	(0.5553)	(1.2338)	(0.6946)	(0.3428)	(0.6543)	(0.8408)	(0.395)
Unemp	2.354	-3.7565	-5.4169	-5.0098*	-9.3942**	-11.4558*	-9.3942***
	(1.7475)	(4.5239)	(4.1024)	(2.584)	(4.3228)	(6.4797)	(1.4517)
Pop	1.0019***	1.1041***	1.1375***	0.8985***	1.3027***	1.4273***	1.3027***
	(0.0291)	(0.0808)	(0.0407)	(0.0218)	(0.0337)	(0.0653)	(0.0256)
Area	0.0136	-0.0473**	-0.0351**	-0.0014	0.0069	-0.0055	0.0069
	(0.0132)	(0.0198)	(0.0166)	(0.0108)	(0.018)	(0.0234)	(0.0121)
Age	-0.0872***	-0.0054	-0.0192	0.0226***	0.0211*	0.0266	0.0211**
	(0.027)	(0.0188)	(0.0134)	(0.0071)	(0.0117)	(0.0206)	(0.0086)
Hsize	-1.0136***	-0.9571***	-1.0563***	-0.4208***	-0.6913***	-0.7772***	-0.6913***
	(0.0928)	(0.2115)	(0.1028)	(0.0505)	(0.0636)	(0.106)	(0.0533)
Metro	0.3826***	0.3322***	0.3366***	0.2095***	0.3571***	0.4076***	0.3571***
	(0.0715)	(0.1009)	(0.0665)	(0.0464)	(0.0604)	(0.1107)	(0.0587)

The table reports regressions of advisor locations on proposed determinants of location choice. For variable definitions, see notes to Table 5. ***, **, and * denote statistical significance at the 1%, 5% and 10% level respectively, using a two tail test. Numbers in parentheses are robust standard errors adjusted for heteroskedasticity.

Table 7 - Factors affecting location choice (including competition demographics)

Variable	GEE Logit	GEE Logit	GEE Logit
	(1)	(2)	(2)
Constant	-8.838***	-8.7018***	-7.3692***
	(1.1407)	(1.1409)	(1.1153)
Income	-0.1266	-0.1369	-0.0236
	(0.1569)	(0.1569)	(0.1521)
Owndw	0.0024	0.0487	-0.1267
	(0.3939)	(0.3907)	(0.3811)
Unemp	-9.2598***	-10.6149***	-7.0673***
	(1.4496)	(1.4664)	(1.4053)
Pop	1.249***	1.1813***	0.7926***
	(0.0261)	(0.0269)	(0.0305)
Area	-0.0033	0.0003	-0.0795***
	(0.0122)	(0.0122)	(0.0128)
Age	0.0214**	0.0283***	0.0303***
	(0.0086)	(0.0086)	(0.0085)
Hsize	-0.6583***	-0.6121***	-0.3164***
	(0.0535)	(0.0539)	(0.0567)
Metro	0.3768***	0.4529***	0.3254***
	(0.0589)	(0.0596)	(0.0612)
NBDS	0.2996***		
	(0.0379)		
NCRU		0.2466***	
		(0.0211)	
NBANKS			0.154***
			(0.0067)

Table 8 - Factors Affecting the Location Decisions of Foreign Affiliated AFS Representatives

Variable	Pooled negative Binomial	Random effects Negative Binomial	Pooled Logistic	Random effects Logistic	GEE Logit
	(1)	(2)	(3)	(4)	(5)
Constant	-11.0874**	-12.9408***	-14.2241***	-14.6454***	-14.2241***
	(4.7825)	(2.6081)	(2.8265)	(4.7948)	(1.3631)
Income	0.5718	0.5032	0.6006	0.6133	0.6006***
	(0.6097)	(0.3496)	(0.3788)	(0.6473)	(0.1833)
Owndw	-2.188*	-0.2603	-0.1284	-0.2219	-0.1284
	(1.233)	(0.6488)	(0.5452)	(0.7537)	(0.499)
Unemp	2.5265	0.1362	0.361	0.488	0.361
	(3.3467)	(3.599)	(3.7582)	(5.9211)	(1.7434)
Pop	1.1799***	0.9908***	1.1433***	1.1821***	1.1433***
	(0.0697)	(0.0292)	(0.0341)	(0.047)	(0.0304)
Area	-0.0718***	-0.0403**	-0.0301*	-0.0341	-0.0301**
	(0.0236)	(0.0188)	(0.0177)	(0.0218)	(0.0149)
Age	-0.0078	0.0151	0.0151	0.0159	0.0151
	(0.0226)	(0.0121)	(0.0115)	(0.0172)	(0.0108)
Hsize	-0.9025***	-0.4502***	-0.5538***	-0.5714***	-0.5538***
	(0.1802)	(0.0798)	(0.07)	(0.0981)	(0.0609)
Metro	0.2389**	0.0542	0.0831	0.0887	0.0831
	(0.0979)	(0.0628)	(0.0653)	(0.084)	(0.0652)

The table reports regression of advisor locations on the proposed determinants of location choice. The dependent variable has been limited to include only those advisors with foreign affilications. For variable definitions, see notes to Table 5. ***, **, and * denote statistical significance at the 1%, 5% and 10% level respectively, using a two-tail test. Figures in parentheses are robust standard errors adjusted for heteroskedasticity.

Table 9 - Factors Affecting the Location Decisions of Independent and Institutionally linked AFS Re

Variable	Overall independent GEE Logit	Overall institutional GEE Logit	Banking affiliation GEE Logit	Investment Mgmt Affilia GEE Logit
	(1)	(2)	(3)	(4)
Constant	-14.1374***	-10.2128***	-7.3066***	-23.1115***
	(1.2532)	(1.1817)	(1.4863)	(1.8521)
Income	0.4372**	0.2537	-0.1636	1.7196***
	(0.1716)	(0.1616)	(0.2046)	(0.2376)
Owndw	0.0292	0.6997*	1.632***	1.8152**
	(0.437)	(0.4243)	(0.5735)	(0.743)
Unemp	-7.8984***	-3.0077**	-8.2004***	4.3691*
	(1.6071)	(1.5079)	(2.0748)	(2.2996)
Pop	1.3565***	1.0657***	1.1941***	1.2022***
	(0.0278)	(0.0251)	(0.0355)	(0.0474)
Area	-0.0107	0.0484***	0.0429***	0.0387*
	(0.0128)	(0.0126)	(0.0166)	(0.0224)
Age	0.0354***	-0.0032	-0.0592***	0.0008
	(0.0094)	(0.0092)	(0.0125)	(0.0163)
Hsize	-0.6625***	-0.6945***	-0.9419***	-0.8308***
	(0.056)	(0.0536)	(0.068)	(0.088)
Metro	0.3217***	0.2484***	0.3676***	0.3307***
	(0.06)	(0.0585)	(0.0734)	(0.0962)

The table reports regression of advisor locations on the proposed determinants of location choice. For variable definitions, see
statistical significance at the 1%, 5% and 10% level respectively, using a two-tail test. Figures in parentheses are robust standard e

Table 10 - Testing the existence of Intra-Industry collocation

Variable	GEE Logit	GEE Logit	GEE Logit	GEE Logit
	(1)	(2)	(3)	(4)
Constant	-8.5663***	-9.3709***	-9.1478***	-8.9571***
	(1.5647)	(1.5721)	(1.5844)	(1.5827)
Income	-0.3298	-0.2792	-0.3165	-0.2622
	(0.2136)	(0.2153)	(0.2176)	(0.2166)
Owndw	-0.9722*	-0.9461*	-0.8871*	-0.8114
	(0.5212)	(0.5232)	(0.5288)	(0.5265)
Unemp	-13.4115***	-13.254***	-13.4964***	-13.5617***
	(1.9882)	(1.9908)	(2.0041)	(2.0133)
Pop	1.3183***	1.3747***	1.4314***	1.3582***
	(0.0389)	(0.0381)	(0.0376)	(0.0386)
Area	-0.0694***	-0.0611***	-0.0558***	-0.0709***
	(0.0167)	(0.0166)	(0.0165)	(0.0167)
Age	0.0436***	0.0477***	0.0405***	0.0389***
	(0.0116)	(0.0116)	(0.0116)	(0.0116)
Hsize	-0.5199***	-0.5605***	-0.623***	-0.5877***
	(0.0763)	(0.0758)	(0.0749)	(0.0754)
Metro	0.4547***	0.4212***	0.4358***	0.4744***
	(0.0811)	(0.0814)	(0.0809)	(0.0808)
Inst. L1	0.1359***			
	(0.0156)			
Inst. L2	0.0317***			
	(0.0111)			
Bank Linked. L1		0.3067***		
		(0.0405)		
Bank Linked. L2		0.0711**		
		(0.028)		
Inv Mgmt Linked. L1			0.4866***	
			(0.0915)	
Inv Mgmt Linked. L2			0.1878**	
			(0.0784)	
Insurance Linked. L1				0.1541***
				(0.0204)
Insurance Linked. L2				0.0492***
				(0.016)

The table reports regression of advisor locations on the proposed determinants of location choice. For variable definitions, see notes to Table 5. New variables include Inst L1 and Inst L2, which represent the one and two year lagged count of institutionally linked advisors in a postcode. Similar variables have been constructed for bank affiliated, investment management affiliated and insurance company affiliated advisors. ***, **, and * denote statistical significance at the 1%, 5% and 10% level respectively, using a two-tail test. Figures in parentheses are robust standard errors adjusted for heteroskedasticity.