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14/6: HOUSING EQUITY WITHDRAWAL IN MID-TO-LATE LIFE: PATTERNS AND MOTIVATIONS AMONGST AUSTRALIAN HOME OWNERS

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HOUSING EQUITY WITHDRAWAL IN MID-TO-LATE LIFE: PATTERNS AND MOTIVATIONS AMONGST AUSTRALIAN HOME OWNERS

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ABSTRACT

In an era of population ageing, the primary home is increasingly viewed as a personal resource that can perform a pension role in retirement. This paper assesses the extent to which Australians aged over 45 utilise housing equity withdrawal (HEW) through the three methods of in situ mortgage equity withdrawal, downsizing and selling up. We find that the incidence of HEW has increased over the last decade despite a global financial crisis. Mortgage equity withdrawal is the dominant form of equity release among those under pension age, while downsizing or selling up is relatively more frequent among those above pension age. Different motivations are associated with the decision to invoke alternative styles of equity withdrawal. Mortgage equity withdrawal is linked with financial and employment factors while downsizing and selling up seems to be prompted by adverse life events. Selling up to access equity is typically an option of last resort. Our findings offer insights into important debates around home ownership societies and the welfare role performed by owner-occupied housing in mid-to-late life.

Keywords: housing equity withdrawal, mortgage equity withdrawal, downsizing, selling up, mid-to-late life

JEL classification: E21, J14

1. Introduction

Population ageing is a demographic phenomenon that is creating global shifts in the age structure of populations worldwide. The decline in fertility rates and a lengthening of life expectancies have combined to accelerate the rate of population ageing. The cost of providing age-related payments and services are escalating, threatening fiscal sustainability in coming years (Ong, 2009). It is therefore unsurprising that the primary home has come under some scrutiny from governments as a personal wealth resource that can potentially perform a

pension role in retirement. The primary home represents the most significant asset in the financial portfolios of most homeowners (see, for example, Chiuri and Jappelli, 2010), and baby boomers have reaped huge windfall gains from the decade-long house price boom that took place prior to the global financial crisis (GFC).

The mounting pressure on older homeowners to increasingly provide for themselves in retirement by tapping into their housing wealth, henceforth called housing equity withdrawal (HEW), is evidenced by new policy recommendations that have dominated discussions surrounding the funding of aged care in countries such as Australia and the United Kingdom (UK). In Australia, a recent inquiry conducted by the Productivity Commission into the aged care sector argues that "many older Australians with low income have substantial wealth, which gives them the capacity to meet their lifetime accommodation costs and to make a modest contribution to the costs of their care" (Productivity Commission, 2011: xxvi). In the UK, the Dilnot et al. (2011) report emphasised the notion of personal responsibility in meeting the aged care costs from income, savings, housing assets or financial products that allow HEW[1].

Traditionally HEW required either sale of the home, or if a move was undesirable, refinancing which meant taking out a new or larger mortgage. Both channels are costly and time consuming methods of equity extraction. Compared to the traditional sale model, in situ mortgage equity withdrawal (MEW) is a relatively new style of HEW that allows homeowners to draw down on their housing wealth by adding to their mortgage debt after initial purchase of the home without having to move.

This paper uncovers the prevalence, patterns and motivations driving HEW behaviour in later life in Australia. We focus on Australian home owners aged 45 years and over in our analysis. The Australian Bureau of Statistics (1995) notes that the peak of life cycle earnings typically occurs when one reaches the mid-forties. Asset accumulation and divestment decisions therefore play a much more critical role in retirement planning as earnings capacity starts to diminish past this peak. Furthermore, the primary home dominates the asset portfolio of Australians in later life, most of whom would have benefited from the house price boom of the 1990s and 2000s. Home owners are also more vulnerable to adverse life shocks as they grow older. Ill health, frailty, divorce and bereavement are but some examples of undesirable life crises that are more likely to occur in later life, that may precipitate the need for major financial decisions during a stage in the life course when one's earnings capacity is diminished.

We are mindful that there exists alternative styles of HEW in later life, and that the motivations behind each might differ. Some forms of HEW might be used to release housing equity to satisfy lifestyle preferences, while others might be driven by the need to release large amounts of fund to meet some dire financial need. We therefore examine the equity extraction behaviour via three key HEW channels, through a direct comparison of the expenditure patterns, socio-demographic characteristics and financial experiences of home owners. Indeed, comparative evaluations of alternative HEW mechanisms using nationally representative data – in terms of their relative uses in later life – are not currently available in the existing literature. This paper therefore offers a comprehensive overview and deeper understanding of the different roles that alternative HEW mechanisms perform in later life.

[1] However, means-tested funding would still be available for those with insufficient resources to fund their own aged care.

HEW is an umbrella concept that can encompass a variety of channels through which equity stored in the owner-occupied home is converted from its illiquid form into cash (Klyuev and Mills 2010; Ong et al. 2013b). Traditionally equity withdrawal required the sale of the primary home. A home owner may simply *sell up*, by cashing in on the primary home and moving into the rental sector. If the home owner moves into a lower value owner-occupied home following the sale, then equity has been released through *downsizing*. However, financial deregulation and rising house prices in the 1980s and 1990s was accompanied by new innovations that allow in situ MEW. The homeowner can now use flexible mortgage products that allow the release of housing equity by simply adding to existing mortgage balances using the home as collateral (Smith and Searle 2008). There is no costly application process; these products turn housing wealth into an 'ATM' with borrowers drawing down or adding to their housing equity as and when they choose without having to move.

The paper is structured as follows. The next section describes the key data features and sample design, and explains how we have gone about measuring alternative forms of HEW given the data available to us. We then report key findings on the prevalence, patterns and motivators driving alternative forms of HEW in turn. A final section concludes with highlights of key findings and some policy recommendations.

2. Data, Measurement and Sample Design

Data

We generate our key findings from the 2001-2010 Household, Income and Labour Dynamics (HILDA) Survey. The HILDA Survey is a nationally representative longitudinal survey that began in 2001 by interviewing 7,682 households comprising almost 14,000 adult responding household members. These adult members were then re-interviewed annually, enabling data users to track changes in their life circumstances and personal characteristics over time.[2] The HILDA Survey contains a comprehensive range of variables on the socio-demographic characteristics, labour market, income and family dynamics, housing outcomes, and subjective wellbeing of a nationally representative panel of Australians. Of particular importance to our HEW study is the myriad of variables that allow us to observe changes in self-assessed house values and outstanding mortgage debt secured against primary homes and whether people have moved between waves, allowing us to observe whether and what type of HEW mechanism a home owner uses from one year to the next.

Measurement of HEW

Firstly, in situ MEW or equity borrowing entails increasing one's mortgage debt against one's primary home without moving. Data application wise, we identify home owners engaged in in situ MEW as those home owners in wave t-1 who do not move between t-1 and t, but whose mortgage debt increases between these two adjacent time periods. Changes in house values between the two periods are ignored as home owners cannot typically tap into the financial benefits of capital gains for consumption without selling the home.

HEW via the sale of one's home can involve an intra-tenure move within the owner-occupied sector or an inter-tenure move to the rental sector. When a home is sold, the equity stored in

[2] For more details, refer to the HILDA Survey website <http://www.melbourneinstitute.com/hilda/>

the home, defined as the sale price of the home less the debt owed against it, is released. Consider a sale of one's home followed by an intra-tenure move. In the data, we calculate changes in equity between *t*-1 and *t* to determine whether an intra-tenure move has resulted in a withdrawal of housing equity. Firstly, a home owner may trade 'down' into a less expensive dwelling and choose to hold less equity in the new home. A move to a less expensive dwelling is also called downsizing. A more complicated scenario ensues when the sale of the old home is followed by the purchase of a more expensive dwelling, that is, a home owner trading 'up'. HEW could still occur if over-mortgaging takes place, that is, the home owner takes out a larger loan on the more expensive home such that the home owner holds less housing equity after the move.

As mentioned above, the sale of one's primary home can also be followed by an inter-tenure move into the rental sector. This last form of HEW entails a 'sell and move' transaction that results in an exit from owner-occupation into the rental sector, the equity withdrawn being equal to the amount of housing equity held at sale.

Sample design

We begin by restricting our sample to persons who are home owners aged 45 years and over in wave 1 of the HILDA Survey. The wave 1 data on these older home owners are then matched with their housing data in the adjacent wave 2, to identify whether or not each home owner has engaged in in situ MEW, downsized, traded up while over-mortgaging (hence withdrawing housing equity), or sold up and moved into the rental sector between these two waves. This sample-defining exercise is repeated for home owners aged 45 years and over in every wave and observing their subsequent housing circumstances in the next wave, up to wave 10 of the HILDA Survey.[3]

If a home owner couple was married or in a de facto relationship in wave *t*-1, but had separated or divorced by wave *t*, this can result in the departure of one partner while the other remains in the matrimonial home. As sale of the primary home has clearly not occurred, we assume that equity has not been withdrawn by the partner leaving the primary home. However, the outstanding mortgage debt reported by the couple before marital breakdown in wave *t*-1 is compared with that reported by the in situ partner in *t* to determine whether or not in situ MEW has occurred. If both partners leave the primary home between waves *t*-1 and *t* as a result of a relationship breakdown, we exclude them from our HEW sample as it is impossible to determine the amount of property division between the partners.[4]

Another complication arises in relation to the third form of HEW, which is selling up. It is not uncommon for those who own a primary home in a location to temporarily move into a rental property at another location for various reasons, for example, temporary job relocation, home renovation etc. The significance of such moves in the context of our study is that a sale has in fact not occurred, and therefore no equity has been withdrawn even though a person is observed to have exited home ownership and moved into the rental sector. We identify those who report that their move out of home ownership into the rental sector is a temporary one and assume that they have not sold their home and therefore have not withdrawn housing equity (following Ong et al. 2013c). In addition, those whose move out of the home

[3] If a home owner turned 45 years old in wave 5, that home owner would be added to the sample from wave 5 onwards.

[4] However, the number of person-period cases that fall under this scenario is very small at 51 or 0.2% of the person-period cases. Hence, the exclusion of these cases from any HEW group is statistically inconsequential.

ownership sector coincides with receipt of rental income are assumed to have retained their primary home and rented it out (rather than selling it).

The remaining observations are then pooled together, forming a dataset of person-period episodes that allows us to identify older home owners in wave *t*-1, who by *t*, have either engaged in some form of HEW or not withdrawn housing equity at all. We are mindful that in many instances, it is not appropriate to conduct our analysis based on person-periods. For example, when measuring the incidence and prevalence of HEW in the population, we would be over-estimating the scale of HEW if we were to count couple households twice by virtue of there being two persons represented in each couple household. Hence, in these sorts of exercises, we use household-period episodes rather than person-period episodes by selecting a household reference person from each couple household when computing prevalence measures. We conduct this household reference person selection by choosing the partner with the highest gross income to represent the couple household. Where both partners have the same income, the older of the two members of the couple is selected to represent households.[5]

However, in other instances, it is more appropriate to base our analysis on person-periods. For example, when we wish to investigate the personal characteristics and experiences of home owners who have engaged in alternative forms of HEW, it would be more suitable to take into account the characteristics and experiences of all adult members of all households. Adopting a 'household head' approach to represent a household might mask diversity in the characteristics and experiences of the household head and his/her partner. For example, while one partner from a household that uses MEW might feel reasonably prosperous, the other partner might have divergent views on the state of the household's finances. At the beginning of each exercise within each chapter, we note clearly which sample design we are relying on.

3. Prevalence of Housing Equity Withdrawal in Later Life

We begin by giving a bird's eye view of the prevalence of HEW among different age groups in the last decade, using household-period data pooled over the years 2001 to 2010. Population weighted estimates from Table 1 below indicate that, overall, the incidence of HEW in later life peaked in 2006-07, at the height of the house price boom, then fell during the GFC. However, the frequency of HEW begins to rise again in 2009-10. Despite a dip in the proportion of home owners aged 45+ cashing out some or all of their housing equity following the GFC, the incidence rate of 18 per cent was still higher at the end of the decade than at the start of the decade (13% in 2001-02). In 2009-10, 678,200 home owners aged 45+ engaged in HEW, over 1.5 times the number releasing housing equity at the beginning of the decade.

Some age-related patterns and trends are evident in Table 1. Engagement in HEW falls as age increases. The incidence of HEW among those aged 45-54 years is more than five times those aged 65 years or over. Over the decade, the sharpest rise (9.8 percentage points) in the incidence of HEW has occurred among those aged 55-64 years, which was equivalent to a 161% increase in the number engaged in HEW. This is followed by a 5.8 percentage point rise in the incidence of HEW among those aged 45-54 years. Rates of withdrawal in age bands 65-74 years and 75+ years remain relatively low. Evidently, home owners under

[5] For under 2 per cent of couple households, both partners have the same income and are of the same age. In such cases, one partner is randomly selected to represent the household.

pension age (i.e. 45-64 years) are more likely to have increased their usage of HEW than those above pension age (i.e. 65 years and over).

Table 1: Number and percentage of home owner households who use HEW in later life, by age band, 2001-2010[a]

Year		Age groups				45+
		45–54	55–64	65–74	75+	
2001–02	Pop ('000)	271.5	91.2	27	37.9	427.5
	% within age band	23.0%	10.6%	4.1%	7.1%	13.2%
2002–03	Pop ('000)	376.8	120.6	51.1	19.6	568.1
	% within age band	30.5%	13.3%	7.6%	3.6%	16.9%
2003–04	Pop ('000)	313.8	139.6	26	20.8	500.2
	% within age band	26.5%	14.5%	3.9%	3.7%	14.8%
2004–05	Pop ('000)	357.9	176.7	29.4	28.5	592.6
	% within age band	30.1%	17.7%	4.3%	4.9%	17.2%
2005–06	Pop ('000)	324.5	141.3	58.2	27.6	551.6
	% within age band	26.6%	14.7%	8.4%	4.7%	15.9%
2006–07	Pop ('000)	402.1	182.6	33.1	30	647.8
	% within age band	32.8%	17.0%	4.9%	5.0%	18.1%
2007–08	Pop ('000)	329.3	186.8	49.1	29.2	594.4
	% within age band	25.7%	16.9%	7.0%	4.8%	16.1%
2008–09	Pop ('000)	308.6	193.1	55.1	34.1	590.9
	% within age band	24.8%	17.0%	7.8%	5.6%	16.0%
2009–10	Pop ('000)	355.8	238.1	54.4	30	678.2
	% within age band	28.8%	20.4%	7.5%	4.7%	18.0%
All	Pop ('000)	3,040.40	1,470.00	383.3	257.5	5,151.30
	% within age band	27.2%	15.6%	6.0%	5.1%	16.0%

Source: Authors' own calculations from the 2001-2010 HILDA Survey
Note:
a. Estimates are weighted using population weights from every wave of the HILDA Survey.

Table 2 reports estimates of the real amounts of equity withdrawn by older home owners who engaged in HEW during the last decade. Comparisons over the decade offer further confirmation of a burgeoning appetite for HEW, which has not abated despite the GFC. The mean amount of housing equity withdrawn is higher than the median, indicating that the distribution of equity withdrawn is skewed towards the upper end. Furthermore, the mean and median amounts of housing equity withdrawn are highest among those in the highest age group (even though the incidence of HEW is lowest among this group). This is likely associated with variances in the style of HEW chosen by different age groups, which we explore in further detail in the next section.

Table 2: Mean and median amounts of housing equity withdrawn by home owner households who use HEW, by age band, 2001-2010, $'000 at 2010 price levels[ab]

Year		Age groups				45+
		45–54	55–64	65–74	75+	
2001–02	Mean	93.1	87.1	59.2	191.2	98.4
	Median	38.7	25.8	22.4	228.3	40
2002–03	Mean	109	113	97.3	172.2	111
	Median	37.5	42.5	72.5	37.5	42.5
2003–04	Mean	123.8	114.9	112.7	154.1	122
	Median	43.9	40.3	108.6	122	46.4
2004–05	Mean	105.9	144.5	63.5	153.7	117.6
	Median	45.2	71.4	28.6	125	55.9
2005–06	Mean	112.5	174.9	160.2	126.6	134.2

	Median	46.4	34.8	148.5	46.4	46.4
2006–07	Mean	104.4	125.2	224.3	206.4	121.1
	Median	44.8	56	61.6	123.2	50.4
2007–08	Mean	121.4	152.2	233.3	222.7	145.3
	Median	39.2	54.5	98	119.9	54.5
2008–09	Mean	118.9	164.6	127.6	176.7	138
	Median	50.9	52.5	52.5	157	52.5
2009–10	Mean	113.9	125.6	131.5	202.3	123.3
	Median	30.9	61.8	61.8	103	42.2
All	Mean	111.5	136.6	140.2	180.4	124.2
	Median	42	54.5	61.8	119.9	49.1

Source: Authors' own calculations from the 2001-2010 HILDA Survey

Notes:

a. Estimates are population weighted using cross-section population weights from every wave of the HILDA Survey.

b. There are less than 30 cases in each cell under the 65–74 years group and 75+ years group. Hence, estimates for these groups should be interpreted with caution.

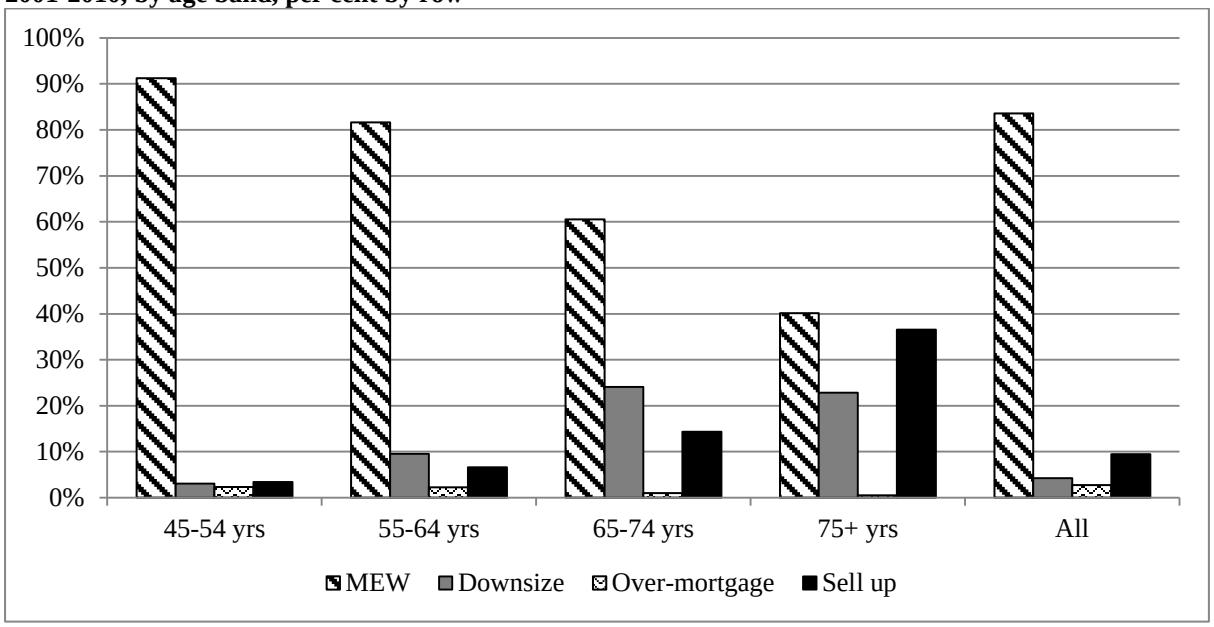
4. Patterns of Housing Equity Withdrawal in Later Life

Figure 1 below provides an overview of the distribution of HEW mechanisms over the years 2001-2010. Across the episodes of HEW by all older home owners, in situ MEW was the dominant form, while over-mortgaging appears to have been the least popular. However, there are some noticeable age-related differences in styles of HEW.

Those in pre-retirement age bands seem to view their housing wealth as a resource that can be regularly dipped into by simply adding to their mortgage without moving. Among those withdrawing housing equity, the incidence of in situ MEW falls from over 90 per cent among those aged 45-54 years to 42 per cent among those aged 75+. It is likely that as remaining years in the workforce shrink home owners become more reluctant to add to their mortgages because they become less certain of their future ability to service mortgage debt.

On the other hand, downsizing and selling up are much more popular among those above pension age. Indeed, the propensity to sell up increases to almost 40 per cent among the oldest age group. However, the reader should be cautioned that the number of HEW episodes decreases steeply as age increases, and so the results for those aged 75 years are less reliable. Over-mortgaging is clearly uncommon, but again small sample sizes preclude further meaningful analysis. Reflecting this, the focus in the remainder of this paper will be on MEW, downsizing and selling up.

Figure 1: Distribution of HEW type among home owner households aged 45+ who used HEW during 2001-2010, by age band, per cent by row[a]

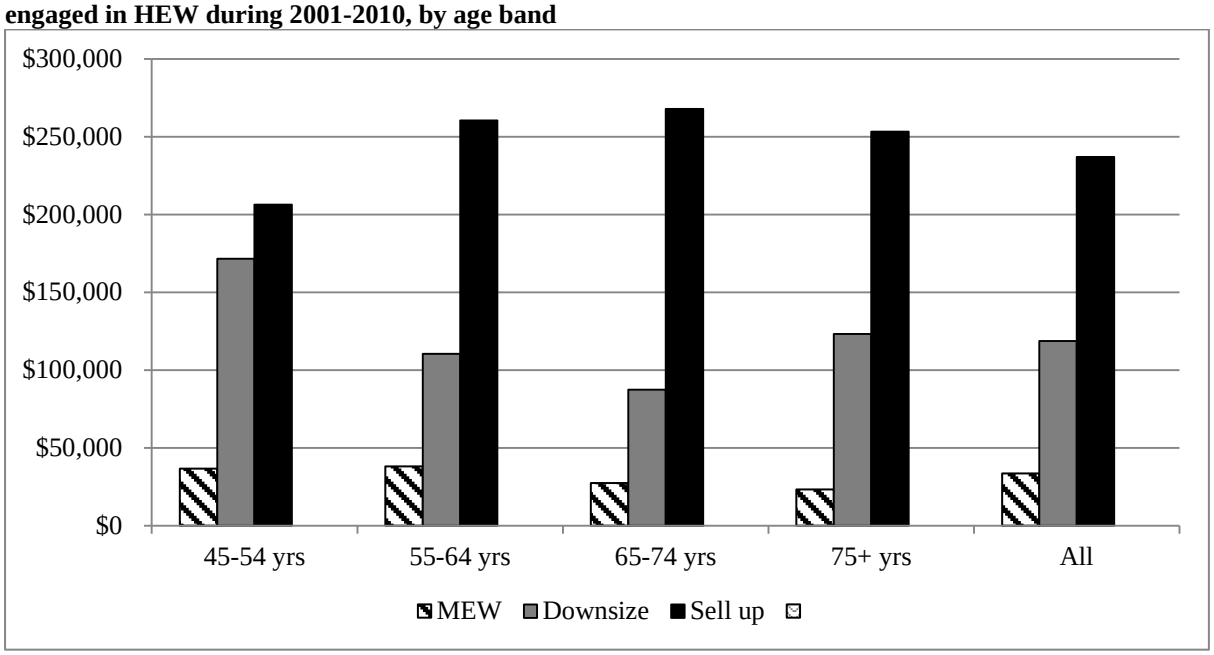


Source: Authors' own calculations from the 2001-2010 HILDA Survey
Note:
a. The percentages are calculated from 2561 episodes of 45-54 year olds, 1105 episodes of 55-64 year olds, 323 episodes of 65-74 year olds, and 221 episodes of 75+ year olds.

Figure 2 below explores whether the typical amounts of housing equity that are cashed in differ across alternative styles of HEW. While in situ MEW is the most dominant form of HEW, it is the mechanism through which the smallest amount of equity is released. On average, $92 200 was withdrawn by those involved in MEW during 2001-2010. Selling up releases more than three times the amount released via MEW, as the former option is arguably the most drastic form of HEW, requiring a move from home ownership. Downsizing is a more modest option; trading down into a home of a lower value home while remaining in the owner-occupied sector. Downsizing releases a smaller amount of funds than selling up as some equity has to be folded back into the new owner-occupied home. This pattern is consistent across age bands, indicating that any age-based differences observed in HEW are mainly associated with the use of different types of HEW across age groups.

These trends are explained by the fact that MEW increases recurrent housing costs, but in contrast trading down and selling up will invariably lower recurrent housing costs, and are not therefore a constraint on the amount released. Moreover, selling up is an all or nothing mechanism – there are few (Australian) financial instruments that allow you to sell a part of your home (home reversion or equity loans), and shared ownership programs are scarce. Hence selling up invariably unlocks the largest amount of housing equity in these age groups.

Figure 2: Mean and median amounts of housing equity withdrawn by older home owner households who engaged in HEW during 2001-2010, by age band



Source: Authors' own calculations from the 2001-2010 HILDA Survey

5. What motivates housing equity withdrawal in later life?

The likely uses of HEW in later life are uncovered via an analysis of expenditure patterns following HEW. We also compare and contrast the characteristics and financial experiences of older home owners that dip into their housing wealth using alternative channels, with the aim of detecting the factors motivating HEW. For example, are older Australians who withdraw housing equity via MEW in more economically sound positions than those who cash out their housing equity by selling up? If so, this could indicate that the traditional sale approach to HEW is more likely to be motivated by financially precarious circumstances?

Expenditure patterns

In this section, we exploit expenditure data from the 2006-2010 HILDA Survey to analyse the spending strategies that home owners choose when unlocking some or all of their housing wealth in later life. It is not possible to undertake this analysis over the entire decade as detailed expenditure items are only available in HILDA from 2006 onwards. We conduct the quantitative analysis of spending and expenditure strategies by pooling waves 6 to 10 of the HILDA Survey into household-period episodes, and then dividing those episodes into four categories: in situ MEW, downsizing, selling up, and no HEW. Hence, if a particular home owner was interviewed in all the waves between 2006 and 2010, then the home owner would appear in four episodes in the dataset, that is, episodes 2006-07, 2007-08, 2008-09 and 2009-10. Some of these episodes may fall under the MEW category, others under the downsizing, selling up or 'no HEW' categories, depending on the mode of housing wealth management in each episode. For each of the four categories, we then estimate the proportion of person-period episodes in which spending on a particular expenditure item increased. Episodes in which older home owners refrained from withdrawing housing equity are used as the benchmark or control category. Simple t-test statistics are applied to gauge whether or not the expenditure trends observed in each of the three HEW categories are significantly different from the benchmark group.

In order to ensure that expenditure patterns observed from the limited number of waves from the HILDA Survey and relatively small sample numbers are statistically robust, we divide home owners into two broad age groups that are either below or above 65 years of age, which is broadly speaking the minimum age for age pension eligibility in Australia. Those above pension age are likely to be eligible for age-specific HEW products such as reverse mortgages, while those aged under 65 years are typically ineligible. Age pension asset and income test rules provoke particular financial considerations and motivations that will help shape HEW strategies.

The expenditure items that we examine in the quantitative analysis are those measured in the HILDA Survey, namely

- Home repairs, renovations and maintenance;
- Education fees;
- Medical expenses (health practitioner fees, medicines, prescriptions and pharmaceuticals);
- Private health insurance;
- Other insurance;
- Motor vehicle expenses (including repairs, maintenance and upgrades) ;
- Transport costs;
- Telephone and internet charges;
- Computer and related devices;
- Audiovisual equipment;
- White goods;
- Furniture;
- Holidays;
- Groceries;
- Meals eaten out;
- Utilities (electricity, gas and other heating fuel) ;
- Clothing and footwear;
- Alcohol, cigarettes and tobacco.

It is interesting to note that some of the items on this list relate to expenditure on services that the government commonly takes some responsibility for, such as medical expenses, health insurance and education fees. Furthermore, items such as transport, vehicles, computers and telephone and internet services are vital to 'connectivity' with the wider community (social inclusion). By examining this data we can, therefore, offer some insights to important debates around home ownership societies and the welfare role of owner-occupied housing in later life.

Where possible, the quantitative estimates are triangulated by qualitative findings from semi-structured interviews conducted with older home owners who have engaged in HEW or have thought about doing so. A primary motivation for exploring the uses of HEW through qualitative interview data was to gain insights into the causal processes and decision-making contexts described by home owners aged 45 years and over. Indeed, analysis of semi-structured interview data confirm that HEW decisions or intentions are motivated by perceived needs to increase expenditure on particular items. That is, the qualitative data suggests a causal link where consumption needs motivate HEW decisions rather than increased consumption being an 'unintended' outcome of greater access to equity (with the possible exception of downsizing, as explained below). The qualitative analysis also allows

us to 'dig down' into the motivations behind spending one's housing equity and is a more reliable source of information on whether particular spending types are discretionary or essential from households' perspectives.

Table 3 below shows expenditure patterns observed in the HILDA data. In the paragraphs that follow, the data in this table is discussed together with the findings of the analysis of the interview data.

Table 3: Incidence of an increase in household expenditure, by age band, HEW mechanism and expenditure type, household-period data 2006-2010

Expenditure item	45-64 years				65+ years			
	MEW	Down size	Sell up	No HEW	MEW	Down size	Sell up	No HEW
Home repairs, renovations and maintenance	41.1	48.0	21.1***	39.4	37.1	54.4***	23.8**	36.6
Education fees	24.0***	16.0	12.3	17.9	3.0	8.8	6.3	3.2
Medical expenses	50.8	45.3	47.4	50.0	50.0	40.4	52.4	49.7
Private health insurance	42.5***	32.0	31.6	37.7	28.0	31.6	22.2**	34.1
Other insurance	48.5	45.3	38.6	48.8	50.8	36.8**	34.9**	50.6
Motor vehicle repairs or upgrades	56.5***	58.7	47.4	52.5	46.2	40.4	31.7**	45.0
Transport costs	44.1	36.0	40.4	45.4	43.2	28.1**	28.6**	41.9
Telephone and internet charges	46.9	45.3	40.4	46.6	35.6***	50.9	34.9**	46.9
Computer and related devices	38.6***	30.7	26.3	34.6	25.0*	24.6	12.7	18.6
Audiovisual equipment	30.1	40.0*	21.1	29.5	25.0	36.8*	38.1**	25.2
Whitegoods	27.3	37.3**	19.3	25.8	18.2	49.1***	23.8	22.9
Furniture	26.6**	46.7***	24.6	23.9	16.7	52.6***	27.0*	17.2
Holidays	41.6	38.7	28.1**	41.4	38.6*	36.8	20.6**	30.8
Groceries	42.5	38.7	43.9	41.3	34.8**	29.8**	46.0	44.2
Meals eaten out	41.0	44.0	35.1	41.5	34.1	38.6	34.9	34.7
Utilities	51.6	42.7	49.1	51.2	43.2**	47.4	50.8	52.0
Clothing and footwear	43.8	40.0	33.3*	44.0	34.1*	47.4	54.0**	41.3
Alcohol, cigarettes and tobacco	40.3**	36.0	43.9	37.0	34.1	42.1**	25.4	28.2
Sample	1,418	75	57	5,382	134	57	63	3,939

Source: Authors' own calculations from the 2006-2010 HILDA Survey
*** Significantly different from 'No HEW' at the 1 per cent level.
** Significantly different from 'No HEW' at the 5 per cent level.
* Significantly different from 'No HEW' at the 10 per cent level.
Where no asterisks reported, the results are insignificant.

The data in Table 3 above indicate that home owners under pension age increased their spending on a broad range of items during MEW episodes. The incidence of increased private health insurance payments was higher during episodes of MEW than when home owners refrain from MEW. This finding is both interesting and significant because it suggests that housing equity is playing an insurance role with respect to potentially unexpected (in this case health) expenditures. Participants of our semi-structured interviews also mentioned that they may engage in HEW in order to access medical or care services in older age:

> *… so what it means is you'll end up drawing down on your equity in your houses or other investments – you'd draw those down to live. And then it's really going to come down to how long you live and the other cost is health – we're finding the health costs are substantial, and we've experienced it in the last two years just ourselves, my wife*

> *and I – quite substantial amounts of money on some health issues…* (Sam, Sydney home owner, 55-64)
>
> *But the role of the home would be if I needed to go into a nursing home or some kind of residential care and it had to provide, you know, capital had to be provided for that.* (Olivia, Sydney home owner, 45-54)

Also noteworthy in the data in Table 3 is the association between increases in education expenditure and MEW episodes in this age band. This finding complements Parkinson et al's (2009) conclusion that MEW in Australia (and the UK) is associated with spending related to children's needs. Health and education expenditures are both core areas of welfare systems. Hence, these findings suggest that MEW is increasingly being exploited as a mechanism via which housing wealth can be drawn upon to perform a welfare role.

The data in Table 3 suggests that MEW by home owners under age pension age may also have been used to purchase goods or services that promote one's ability to connect with the wider community, such as computers and motor vehicles. Supporting estimates from the 2009-2010 Household Expenditure Survey confirm that, of loans secured against one's property that are not being used to directly finance the said property, 21 per cent are being used to finance the purchase of motor vehicles. Furthermore, car repairs or upgrades were larger expenses that were commonly mentioned by interview participants in the qualitative segment of the project who had used MEW or were considering using MEW as a future option:

> *But just at the moment we've had an incredibly bad run of bills and we had repairs to the car and then our cat got sick and it was just good to have it [housing equity] there so that we could draw the money from it.* (James, Adelaide home owner, 55-64)

The HILDA data shows that the incidence of increased spending on home repairs, renovations and maintenance during MEW episodes by home owners under age pension age is higher than episodes during which home owners refrained from HEW, though this difference is not statistically significant. The 2007-08 Survey of Income and Housing (SIH), which contains information on the reasons behind mortgage refinancing decisions, does show that among home owners aged 45-64 years who have refinanced their mortgage over the last two years, one in five did so to finance home renovations.

Turning to the data on downsizing, Table 3 above indicates that episodes of this type of HEW (in this age group) are accompanied by a rise in spending on durable goods for their homes. It is reasonable to conclude that in the case of downsizing, these home-related expenditures have been motivated by a move into a new owner-occupied home, rather than being the motivation behind the decision to downsize. Indeed, older home owners interviewed in the qualitative stage of the project who had downsized, discussed a range of expenses associated with moving to their new premises. Purchases included curtains, blinds, air-conditioning, garage doors and new furniture. These purchases appeared largely motivated by the need to upgrade existing fittings to an appropriate standard, or to meet the requirements of moving to smaller premises that could not accommodate the furniture that was suitable to a previous larger house. The direction of causation was relatively clear in interviews as the furniture sales and purchases associated with downsizing were not discussed with particular pleasure by those involved.

While insignificant in our quantitative analysis, several participants interviewed in the qualitative stage of the project mentioned travel expenses as a possible use of funds they had released through HEW or future motivation for HEW. The types of travel discussed by participants generally related to their wish to visit children or grandchildren who live at an interstate or international location. The single participant who laughingly suggested that she sell her house and travel on a 'world trip or something' also mentioned that the costs of health insurance associated with international travel would preclude her from taking this option. In short, travel plans discussed by home owners could not be characterised as 'champagne moments' but were instead prompted by plans to maintain close contact with distant family members:

> *And we live simply, we're vegetarian, we don't drink, we very rarely go out to entertainment things, so we could live on a small amount of money we think. The only problem is we've got a son in Europe, so that involves travelling to see him.* (Kerry, Adelaide, 55-64)

It is significant that those selling up are less inclined to increase spending on almost all the items listed in Table 3 than all other comparison groups. This finding may well reflect the serious adverse circumstances that precipitate a move out of home ownership. HEW via the sale of one's home (particularly selling up) may be precipitated by financial distress and, thus, used to reduce expenditures on upkeep and/or reduce the extent of material deprivation associated with an inability to keep up with mortgage repayments or utility payments. Indeed, Wood et al. (2010) have found that adverse life events such as marital separation can precipitate the loss of home ownership among older Australians aged 50 years and over. These hypotheses are all tested in Section 3.3, where the socio-demographic characteristics and material deprivation experiences of older home owners who use HEW via different channels are compared and contrasted.

A contrasting pattern in the relationship between HEW and household expenditures is evident when we turn to home owners 65 years and over. Here we find that there are few significant differences in expenditures (as measured in the HILDA data) between those who use MEW and those who do not engage in any form of HEW. More importantly, the majority of statistically significant differences in expenditures are associated with episodes of downsizing or selling, but in these cases the effect of HEW on expenditure appears to be negative (see Table 3 above). An important reason for this pattern in the HILDA data seems to be the relatively low level of resources of the HEW group. For example, households dipping into their housing wealth during 2001-2010 are twice as likely as those not engaging in HEW to report being unable to raise funds in the event of emergencies. Twenty-seven per cent of the former are unable to save, compared to 19 per cent of the latter. Moreover, in comparison to those who do not use HEW, the mean household incomes of those engaging in downsizing and selling up are 15 per cent and 25% lower respectively. As elaborated on in the next section, home owners who sell up are also much more likely to be exposed to adverse life events such as ill health or marital breakdown than those who do not use HEW.

Our qualitative analysis supports the hypotheses that HEW is used by many elderly Australians to maintain (rather than increase) spending; and that it is most commonly used when levels of other economic resources are not sufficient to finance needs in times of adversity. Health and physical frailty considerations are clearly increasingly important in decision-making surrounding the use of housing equity beyond pension age. For example, accessing care and meeting health insurance expenses were mentioned by over-65s as

possible reasons for engaging in HEW, once again highlighting the insurance role that housing equity performs in later life:

> *I had thought that if I had to go in to some form of care that I've got that equity here.* (Carol, regional centre outside Perth, 75+)
>
> *I'm concerned, however that, as we get older with health and whatever, we may have to consume our assets.* (Martin, Sydney, 75+)

The types of home maintenance identified as motivating factors for HEW by interview participants were also linked to concerns about health or physical frailty. The first was to purchase services that would make ageing in place a more viable option. That is, housing equity would be used to purchase regular gardening or other routine services that may be beyond the physical capacities of an older home owner. A second type of 'maintenance' was associated with modifications to a home such as the fitting of solar panels, to reduce costs and make the home more comfortable.

> *I put solar panels on my roof which is a great help, I'm thinking because they're a lot cheaper now I might add a few more, I'm thinking of getting a quote 'cause that would probably eliminate it all and help me pay the gas bills 'cause I need to get [that] particularly… And the gopher plugs into the solar power so that's carbon neutral.* (Carol, regional centre outside of Perth, 75+)

Socio-demographic characteristics

In this section we identify the type of older home owners that dip into their housing equity. We also explore the use of different HEW mechanisms and describe the kinds of older home owner that are apt to MEW rather than cash in housing equity by trading on or even selling up. Examination of personal characteristics that include demographics as well as socio-economic metrics helps to paint a more detailed picture of the circumstances that motivate equity withdrawal. We are particularly interested in whether all or some HEW instruments are used as coping mechanisms to buffer financial hardship or other adverse life events.

The analysis is based on person-period episodes pooled from the 2001-2010 HILDA dataset. Characteristics of older home owners who use HEW are measured at the beginning of each HEW episode that takes place between *t*-1 and *t*, that is, the characteristics are measured at wave *t*-1, ensuring that we correlate prior characteristics and experiences with subsequent HEW. There is a total sample of 25,366 (13,191) person-periods belonging to home owners aged 45-64 years (65 years and over).

Table 4 below suggests that management styles with respect to housing wealth differ as owners progress through to later stages of the life course. From the socio-economic metrics there is a clear sense that those engaging in the three forms of HEW (in situ MEW, downsizing and selling up) are distinctly different groups. Younger owners are more inclined to use in situ MEW and indeed they are younger than those owners conserving or accumulating housing wealth (equity savers). The typical in situ mortgage equity borrower is male and partnered with children. He enjoys better health than all other groups, including those who do not draw down their housing equity. He is also likely to possess a tertiary qualification and is in full-time, permanent employment. Downsizing and selling up, on the other hand, are options taken up by older women with no children; they are also liable to have no tertiary qualifications and be disengaged from the labour market or, if in work, employed in precarious jobs as evidenced by casual contracts.

The correlation between adverse life events and both downsizing and selling up is an important finding in both age bands, which supports evidence in the existing literature regarding negative shocks as being typical triggers for moves in later life (see, for example, Judd et al. 2012). Among those under pension age, 29 per cent of downsizing episodes, and 15 per cent of selling up episodes, occur when separated or divorced as compared to 9 per cent of MEW episodes. Moreover, one in three downsizing and selling up episodes occur during periods of ill-health, as compared to one in five MEW episodes; above pension age, over 25 per cent of selling up episodes, and 40 per cent of downsizing episodes, are associated with bereavement compared with 14 per cent of equity borrowing episodes. Furthermore, the incidence of ill-health is acute among those who sell up; two out of every three selling up episodes occur during periods of ill-health, compared to under half of equity borrowing and downsizing episodes.

We once again get confirmation that MEW is typically backed by a relatively strong economic position. Indeed in situ equity borrowers have higher average incomes than their in situ counterparts who are conserving or adding to their housing equity. On the other hand, older home owners who downsize or sell up have much lower incomes than the rest, with those selling up being especially ‘income poor’. These findings add to a growing set of evidence that suggests that when older owners downsize or sell up it is due to tightening constraints rather than preferred choices.

Table 4: Socio-demographic characteristics of older home owners, by HEW mechanism, person-period data 2001-2010, per cent by column unless stated otherwise

Characteristic		45-64 years				65+ years[a]			
		MEW	Downsize	Sell up	No HEW	MEW	Downsize	Sell up	No HEW
Average age (years)		51.5	55.3	53.6	54.3	71.1	72.8	76.5	73.4
Sex	Men	51.4	44.8	47.3	46.7	54.1	42.5	43.7	46.0
	Women	48.6	55.2	52.7	53.3	45.9	57.5	56.3	54.0
Marital status	Legally married	76.9	63.5	52.2	74.4	68.3	63.5	39.4	64.3
	De facto	9.1	12.8	10.7	7.0	4.6	1.8	4.2	1.4
	Separated or divorced	9.5	15.2	28.6	10.2	8.9	7.2	9.8	6.7
	Widow	1.6	4.5	4.0	3.5	14.0	26.9	40.1	24.4
	Single never married	2.9	3.8	4.5	4.9	4.3	0.6	6.3	3.2
Dependent children	None	53.1	83.7	72.8	70.6	98.5	98.2	98.6	99.3
	At least one	46.9	16.3	27.2	29.4	1.5	1.8	1.4	0.7
Long-term health or	Yes	20.8	35.1	30.8	25.5	49.0	45.5	62.0	48.6
Disability	No	79.2	64.9	69.2	74.5	51.0	54.5	38.0	51.4
Highest qualification	Tertiary	26.8	24.0	20.5	23.3	16.5	7.8	7.7	10.8
	Other post-secondary	35.5	38.9	37.9	32.9	30.2	28.7	25.4	28.2
	Secondary	37.6	37.2	41.5	43.8	53.3	63.5	66.9	61.0
Labour force status	Employed full-time	63.3	40.6	44.6	47.7	12.4	2.4	2.8	3.7
	Employed part-time	21.3	22.2	17.4	21.4	11.9	6.0	4.2	6.3
	Unemployed	1.7	0.7	5.4	1.5	0.5		0.7	0.1
	Not in the labour force	13.7	36.5	32.6	29.4	75.1	91.6	92.3	89.9
Real equivalised gross household income, at 2010 price level level, $'000		59.4	54.1	46.9	56.4	40.3	25.7	24.5	30.8
Primary home wealth, at 2010 price level level, $'000		490.9	713.4	408.0	482.6	646.7	533.7	262.6	421.2
Primary home debt, at 2010 price level level, $'000		105.0	79.4	60.7	55.0	33.0	6.5	1.8	2.6
Number of person-period cases		4,910	288	224	19,805	394	167	142	12,483

Source: Authors' own calculations from the 2001-2010 HILDA Survey

Note:

a. Job contract estimates are not presented for those aged 65 years or over because most home owners in this age band are not employed.

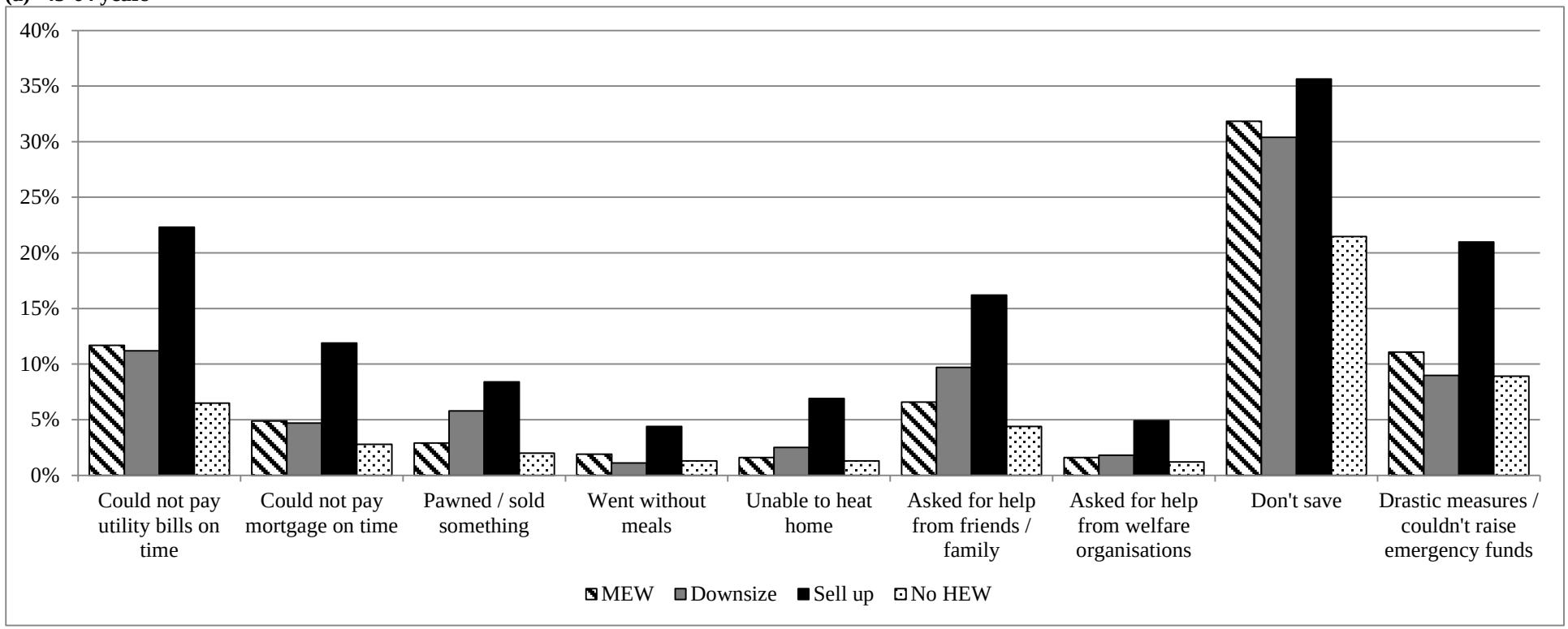
The hypothesis that those who withdraw housing equity by selling up are precariously perched on the edges of home ownership is investigated more thoroughly in this section. We exploit financial stress indicators in the HILDA Survey that capture experiences of material deprivation, ability to save and the difficulty one would face raising funds if faced with an emergency. The indicators are once again measured at the beginning of each wave (*t*-1) of each HEW episode that occurs between *t*-1 and *t*, hence ensuring that the patterns being observed are not due to HEW contributing to or alleviating material hardship.

Overall, it is clear that older equity extractors tend to be in a more stressed financial position than those who do not engage in HEW. Regardless of age group, those who withdraw housing equity through any of the three channels are associated a weaker ability to save or raise emergency funds than those who abstain from HEW. The picture that is emerging, therefore, is one in which older home owners who are financially vulnerable rely on their housing equity to sustain their economic positions or to act as a buffer against adverse life events, and this is glaringly evident in the case of selling up.

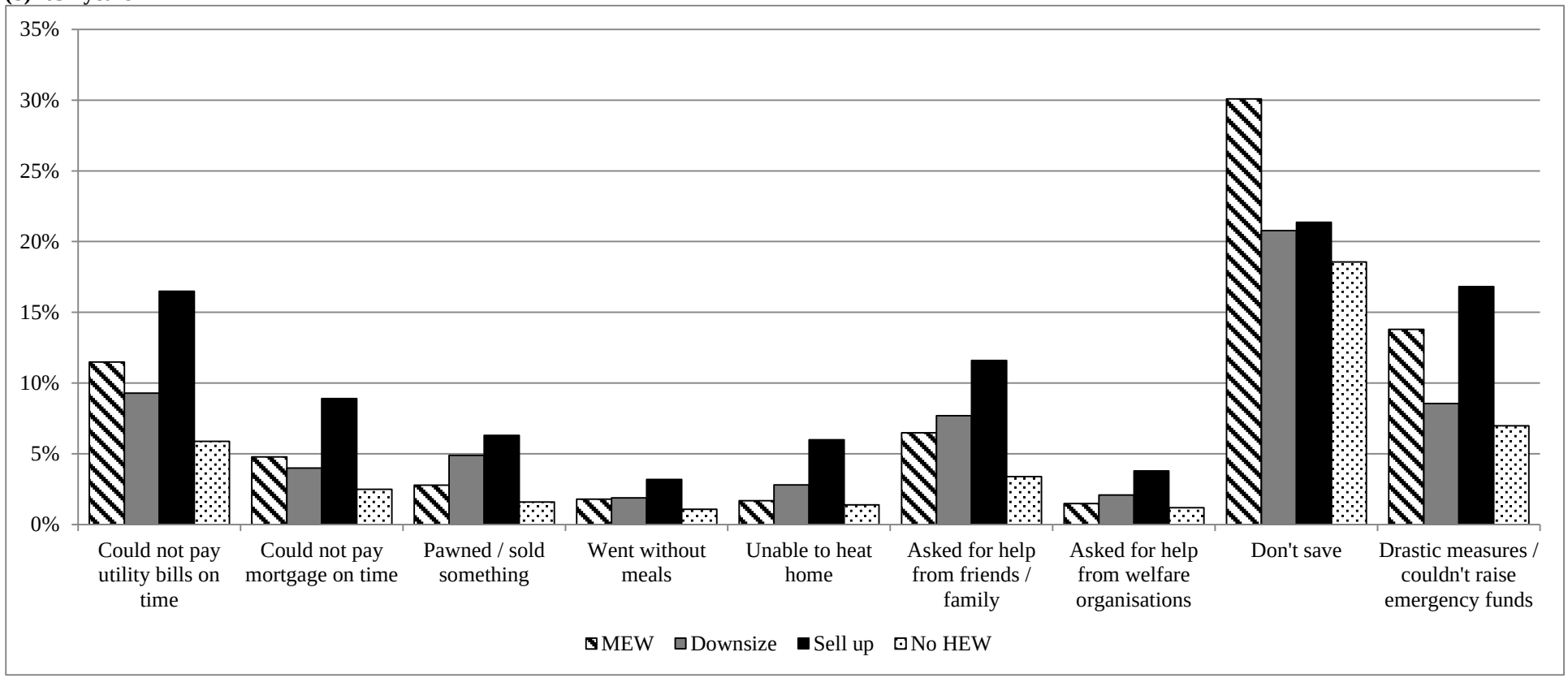
The material deprivation indicators offer further confirmation of the acute financial stress that often precedes selling up. In fact, among those under pension age, selling up episodes are generally at least twice as likely to be preceded by material deprivation as other groups, indicated by all the deprivation measures in Figure 3. Among owners under pension age, those who sell up are the very ones who have the least resources at their disposal when faced with emergency events; they are less likely to save regularly and more likely to have to do something drastic to raise emergency funds than other groups. Among those above pension age, home owners who sell up once again stand out as the most financially vulnerable group; they are least able to raise funds during emergencies. Hence, it is no surprise that these home owners would resort to selling up when hit with adverse life events such as bereavement or ill-health.

Figure 3: Self-assessed financial prosperity of older home owners, by HEW mechanism, person-period data 2001-2010, per cent

(a) 45-64 years



(b) 65+ years



Source: Authors' own calculations from the 2001-2010 HILDA Survey

Note:

a. Variables on savings habits are not available in waves 5, 7 and 9. Responses on savings habits from the closest previous wave are used as proxies in these instances.

Table 4 and Figure 3 show the incidence of episodes of HEW among home owners with different characteristics. They represent the extent to which HEW through a particular channel is disproportionately associated with particular personal characteristics and financial experiences. Next, we implement a multivariate modelling exercise to offer further insights into the relative importance of each of these characteristics and experiences to alternative styles of HEW in later life.

We estimate a multinomial logistic regression model because the dependent variable comprises four alternatives: no HEW, in situ MEW, downsize, and sell up. The multinomial logit is an extension of binary logistic regression that allows for more than two categories of the dependent or outcome variable. Like the binary logit, multinomial logits are based on maximum likelihood estimation to predict the probability of each outcome occurring relative to a selected base outcome, which in this case, refers to an outcome where no HEW occurs. Given the panel nature of the data, we implement a random effects multinomial logit. The model findings are reported in table 5(a) and 5(b) for those aged 45-64 years and 65+ years respectively. The relative risk ratios (RRRs), obtained by exponentiating the logit coefficients, provide an estimate of the odds of engaging in a particular form of HEW relative to the base outcome of not engaging in HEW.

Among baby boomers aged 45-64 years, key socio-demographic factors associated with decisions to use in situ MEW include the presence of dependent children, which raises the odds of engaging in MEW (relative to not using HEW) by 19 percentage points. The findings also confirm the sound economic circumstances that underlie decisions to use MEW, in particular full-time employment status. It is notable that the higher one's primary home debt, the higher are the odds of engaging in MEW, confirming the preliminary estimates reported in table 4. The odds of engaging in MEW has been higher not using HEW throughout the decade, reflecting the sustained use of MEW through mortgage products in a deregulated era in financial markets, a trend that has not waned despite the advent of the GFC. The model estimates confirm the importance of adverse like events in motivating decisions to engage in downsizing and selling up, including separation and divorce. In fact, separation and divorce can raise the odds of selling up by over 3 times the odds of not engaging in HEW. Ill-health raises the odds of downsizing by 39 percentage points, and a decline in income or difficult raising emergency funds can precipitate decisions to sell up. The use of all forms of HEW are driven strongly by material deprivation, and indeed the importance of material deprivation as a motivator is strongest in the case of selling up. Those experiencing material deprivation faces 2.5 times the odds of selling up as those who do not. And indeed, these odds are also almost as high in the case of downsizing. Dissaving behaviour is associated with all forms of HEW, though this is insignificant in the case of selling up.

Turning to the group aged 65+, we find that as one ages there is declining propensity to engage in MEW and downsize, but the likelihood of selling up rises. Employment, especially in full-time work, raises the odds of in situ MEW, as does an increase in income and primary home wealth. Once again, in situ MEW is marked by higher levels of mortgage indebtedness; every $100,000 increase in primary home debt raises the relative odds of engaging in MEW by 55 percentage points. Dissaving behaviour is once again strongly associated with MEW, raising its relative odds by 74 percentage points. There is more evidence of adverse life events motivating decisions to engage in MEW among this older age group, with ill-health and difficulty raising emergency funds raising the relative odds of engaging in MEW significantly. Amongst those aged 65+, there appear to be few factors that independently influence decisions to downsize. However, what stands out is the income-poor and (housing) asset-rich status of those who choose to downsize. A decline in income and an increase in primary home wealth are the primary factors motivating decisions to engage in downsizing among those aged 65+ years. The model findings confirm once again that circumstances motivating decisions to sell up are more dire; among the group aged 65+, high mortgage indebtedness and difficulty to raise emergency funds are the primary factors precipitating decisions to sell up.

Table 5: Predictors of alternative styles of HEW in later life, relative risk ratios (RRR), 2001-2010[a]

(a) 45-64 years[b]

	In situ MEW		Downsize		Sell up	
	RRR	Sig.	RRR	Sig.	RRR	Sig.
Age in years	0.919	0.000	0.998	0.875	0.966	0.035
De facto	1.157	0.099	1.880	0.002	2.214	0.001
Separated or divorced	0.866	0.090	1.530	0.019	3.259	0.000
Widowed	0.667	0.021	1.266	0.461	1.451	0.359
Single never married	0.526	0.000	0.796	0.479	1.047	0.899
Has dependent children	1.186	0.003	0.446	0.000	0.729	0.103
Has disability or long-term health condition	1.019	0.734	1.393	0.017	0.908	0.575
University degree	1.021	0.756	1.330	0.098	1.073	0.732
Other post-school qualification	1.085	0.168	1.485	0.006	1.257	0.169
Employed full-time	1.982	0.000	0.896	0.504	0.797	0.233
Employed part-time	1.664	0.000	1.056	0.755	0.751	0.192
Real equivalised gross household income, at 2010 price level level, $'00,000	1.022	0.668	0.828	0.198	0.662	0.026
Primary home wealth, at 2010 price level level, $'00,000	1.002	0.729	1.055	0.000	1.020	0.268
Primary home debt, at 2010 price level level, $'00,000	1.024	0.201	0.993	0.889	1.067	0.277
At least one material deprivation indicator	1.300	0.000	2.114	0.000	2.407	0.000
Does not save	1.529	0.000	1.334	0.053	1.138	0.453
Has to do something drastic or cannot raise emergency funds	1.084	0.304	0.589	0.027	1.269	0.265
2002	1.523	0.000	0.859	0.553	1.882	0.044
2003	1.380	0.000	0.653	0.115	1.282	0.465
2004	1.588	0.000	0.976	0.921	2.014	0.026
2005	1.337	0.001	1.012	0.963	1.760	0.085
2006	1.835	0.000	0.812	0.421	1.712	0.105
2007	1.459	0.000	0.724	0.226	1.606	0.159
2008	1.575	0.000	0.928	0.768	1.444	0.291
2009	1.667	0.000	0.917	0.732	1.976	0.037
Constant		0.000		0.000		0.000

(b) 65+ years[c]

	In situ MEW		Downsize		Sell up	
	RRR	Sig.	RRR	Sig.	RRR	Sig.
Age in years	0.956	0.005	0.972	0.077	1.052	0.003
De facto	2.345	0.047	1.542	0.471	3.613	0.020
Separated or divorced	0.773	0.416	1.184	0.605	1.337	0.465
Widowed	0.716	0.155	1.325	0.188	1.550	0.071
Single never married	1.095	0.846	0.262	0.184	1.898	0.191
Has dependent children	1.467	0.566	2.988	0.072	1.961	0.516
Has disability or long-term health condition	1.392	0.022	0.877	0.450	1.107	0.621
University degree	1.312	0.275	0.749	0.377	0.728	0.457
Other post-school qualification	1.058	0.770	0.985	0.938	1.076	0.752
Employed full-time	3.710	0.000	0.648	0.418	1.322	0.656
Employed part-time	1.908	0.009	1.092	0.798	1.089	0.860
Real equivalised gross household income, at 2010 price level level, $'00,000	1.280	0.098	0.368	0.025	0.476	0.203
Primary home wealth , at 2010 price level level, $'00,000	1.029	0.008	1.028	0.000	0.941	0.159
Primary home debt, at 2010 price level level, $'00,000	1.551	0.000	1.295	0.222	1.651	0.002
At least one material deprivation indicator	1.096	0.697	1.025	0.939	0.951	0.884
Does not save	1.744	0.001	1.050	0.818	1.021	0.937
Has to do something drastic or cannot raise emergency funds	2.400	0.000	1.002	0.995	2.364	0.004
2002	1.813	0.028	1.082	0.810	0.837	0.705
2003	0.717	0.289	0.598	0.178	1.204	0.662
2004	0.835	0.557	0.913	0.788	0.617	0.348
2005	1.483	0.159	0.571	0.154	1.417	0.405
2006	1.142	0.647	1.303	0.395	1.361	0.463
2007	1.549	0.114	0.773	0.471	1.378	0.448
2008	1.380	0.264	0.812	0.559	1.151	0.754
2009	1.524	0.134	0.760	0.444	1.895	0.108
Constant		0.028		0.107		0.000

Source: Authors' own calculations from the 2001-2010 HILDA Survey

Notes:

a. The model has been estimated using the *gsem* command, with the *mlogit* option, in Stata version 13. The base outcome is 'No HEW'. Among the categorical variables, the reference categories are married, no post-school qualification, not employed and 2001.

b. In the 45-64 years group, there are 22,775 person-period observations and the model's log-likelihood estimate is -12,503.585.

c. In the 65+ years group, there are 11,330 person-period observations and the model's log-likelihood estimate is -2,604.642.

6. Conclusion

This paper has examined the prevalence, patterns and motivations behind the use of HEW vial alternative mechanisms. We find that the incidence of HEW has generally increased over the decade, and older home owners' appetite for HEW has not abated despite a GFC and its aftermath. The proportion of older home owners cashing out some or all of their housing equity was 18 per cent in 2010, an incidence that remained higher than at the start of the decade (13% in 2001-02). In 2009-10, 678 200 older home owners engaged in HEW, over 1.5 times the number releasing housing equity at the beginning of the decade. The HEW mechanisms used by older home owners vary greatly across stages in later life; in situ equity borrowing is the dominant form of HEW among those under pension age, while there is a shift towards the more traditional forms of HEW – downsizing or selling up – among those above pension age. Home owners making HEWs are more likely to suffer from material deprivation than those who refrain from HEW. The former also have more housing-oriented wealth profiles. Unsurprisingly, income poor- housing asset-rich groups feature prominently among groups cashing in housing equity.

The quantitative and qualitative expenditure analyses combined to offer important evidence of the health insurance role played by housing equity later in the life course. Decision-making surrounding the use of housing equity among those above pension age is increasingly dominated by concerns about health or physical frailty, confirming our proposition that housing wealth is increasingly viewed as a means of achieving private provision of certain functions that are traditionally publicly provided, such as health care.

However, those under pension age use MEW to increase spending on a wider range of items; this includes holiday spending, home maintenance, car repairs or upgrades and the education costs of children. A contrasting pattern is evident when we turn to home owners 65 years and over. We find little in the way of significant differences in expenditures between in situ mortgage equity borrowers and those who refrain from withdrawing housing equity. More importantly, the majority of statistically significant differences stem from those releasing housing equity via downsizing or quitting ownership, but they are less inclined to increase spending than equity savers. It is possible that while in situ MEW is being used by pre-retirement age home owners to purchase ordinarily unaffordable items, HEW via the sale of one's home (particularly selling up) is precipitated by financial distress and, thus, used to reduce expenditures on upkeep and/or reduce the material deprivation associated with an inability to keep up with mortgage repayments or utility payments.

Home owners adding to their mortgages have sounder economic positions than downsizers or sellers. Older owners that sell up and move into rental tenures (or residential care), tend to have very little income or assets to fall back on when hit by adverse life events. Their wealth portfolios are almost entirely centred on their primary home, and they are the least able to raise emergency funds among all the groups investigated.

These findings are significant because they confirm ideas about the tactics that different home owners choose as they manage housing wealth in the years approaching and beyond pension age (Parkinson et al. 2009; Ong et al. 2013c; Wood et al. 2013). While in situ equity release by adding to mortgages is common, particularly in the group approaching retirement, and is associated with pressing spending needs, the typical in situ equity borrower has a relatively strong financial and employment context. These owners are becoming more indebted, but their borrowing is not reckless. If they *avoid serious misfortune* repayments will be met;[6] but if life takes an unexpected and harmful turn, financial stress could be 'round the corner'. Indeed those cashing in housing equity by downsizing and selling up are likely to have suffered unfavourable circumstances such as ill health, separation, divorce and bereavement prior to the sale of their primary home. One senses

[6] This applies to both MEW and non-MEW financial loans.

that amidst older downsizers and sellers, in situ MEW is no longer an option to cushion living standards in the face of adversity. Selling up are *'last resort'* options. Importantly, they appear to be options that older female, single-person households are prone to fall back on.

Our findings also offer some interesting insights into important debates around home ownership societies and the welfare role performed by owner-occupied housing in mid-to-late life. They suggest that owner occupied housing now performs a more wide-ranging welfare role beyond that of simply ensuring low housing costs in old age. Those approaching pension age might be using MEW finance expenditures commonly provided in some form by the government such as health and education, as well as to maintain social inclusion. Home owners also appear prepared to draw on housing equity to meet costs associated with health and physical frailty beyond pension age. However, home owners that use HEW to meet spending needs earlier in their life cycle will eat into housing wealth. Indeed, Haffner et al. (2013) and Ong et al. (2013a) confirm that more and more Australians are approaching retirement with outstanding mortgage debt, a trend that does not appear to have been reversed by the GFC. These mortgage debt holders will presumably have to continue making regular mortgage repayments after they retire, thus weakening the traditional welfare role of home ownership that is supposed to ensure low housing costs in old age when incomes are typically low. Those carrying mortgage debt into old age may be precariously perched on the edges of home ownership and confront a particularly uncertain future housing career that threatens their security in retirement.

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