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**Net Assets Available at Age of Death in Australia:
An Extension of the National Transfer Accounts Methodology**

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Abstract

Population ageing through much of the developed world presents the opportunity for a massive transfer of wealth across generations. One important and understudied intergenerational transfer in Australia occurs at or near death through inheritance or inter vivo transfers. In Australia, the number of deaths is projected to increase by 13% in just 10 years time, and by 95% mid century. With this significant change on the horizon, little academic interest has focused on the value of assets at age of death in Australia. In this report, we utilise the National Transfer Account (NTA) methodology to examine the per capita and aggregate (i.e., economy wide) value of net assets available at age of death in Australia for the years, 2003-04 and 2009-10. We take a substantial step in the development of a wealth transfer account within the National Transfer Account methodology by providing a procedure to estimate economy wide levels of assets and liabilities. We show that the assets available at age of death in Australia are very significant, amounting for between 60 and 70 billion dollars in 2003-04 and 2009-10. The majority of the asset value was tied up in property, with about three quarters of total average assets held in property by those dying at ages 65 and over. Using simulations, we also illustrate, that relative to the past, assets are now transferred much later in life because of the extended delay of death. We conclude with a discussion about government policies targeted at elder abuse and policies which constrain desired familial transfers.

Keywords: Ageing, Assets, Economic Life Cycle, National Transfer Accounts

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Introduction

Population ageing through much of the developed world presents the opportunity for a massive transfer of wealth across generations. There are various ways in which this transfer can occur: from the public sector to households, through inter and intra household transfers and with the rest of the world (Mason and Lee, 2011).

One important and understudied intergenerational transfer in Australia occurs at or near death through inheritance or inter vivo transfers. In Australia in 2015, there were an estimated 159,000 deaths (ABS, 2016), with over 80% of all deaths occurring at 65 years of age or over. In just 10 years time, this is projected to increase to 180,000 deaths per annum and to over 310,000 deaths per annum by mid-century (ABS, 2013).

With this significant change on the horizon, there has been a small, but growing number of Australian studies examining inheritance, will-making and post-mortem gift giving. These studies have included analyses of the distribution of estates (Baker and Gilding, 2011; Tilse et al, 2015), the prevalence of will-making (Tilse et al., 2015) and the distribution of assets in different demographic groups and regions (Gilding, 2005; O'Dwyer, 1996). Other studies have considered the implications of inheritance for elder abuse in Australia (Kaspiew et al., 2016) and the implications of housing inheritance specifically on housing supply (O'Dwyer, 1999) and wealth distribution (O'Dwyer, 2001).

Despite the contribution of these studies to our understanding of inheritance and will-making in Australia, there are no Australian studies that have focussed upon the economy wide level and type of assets available for dispersion at age of death. In this report, we utilise the National Transfer Account (NTA) methodology to examine the per capita and aggregate (i.e., economy wide) value of net assets available at age of death in Australia for the years, 2003-04 and 2009-10. The NTA is a generational accounting system that measures how people at each age produce, consume and allocate resources.

Under the NTA framework, differences between consumption and labour income, such as occurs in retirement, can be funded by transfers or by asset-based reallocations, such as asset income or saving. Assets are a vital mechanism used by individuals to manage fluctuations in consumption and labour income over the life cycle. Individuals can acquire assets in two distinct ways: through their own saving or through the receipt of asset transfers, such as inheritances (Mason et al., 2011).

It is important to quantify the value of these ways of acquiring assets, because each has distinct implications for economic behaviours such as consumption and labour force participation. Where individuals must rely primarily on savings rather than inheritances and other asset transfers in order to acquire assets, downward pressure is placed on consumption and upwards pressure is placed on labour force participation. Conversely, where inheritances and other asset transfers are comparatively large, the incentive to consume less and work more is ameliorated. The comparative importance of inheritances and other asset transfers also has significant implications for the relationship between different generations, with relatively large inheritances increasing

older generations' power vis-à-vis younger generations, but also placing older generations at greater risk of financial abuse. The comparative importance of inheritances and other asset transfers also has important implications for social inequality and intergenerational social mobility.

While the quantity of inheritances and other asset transfers is important, so too is the timing of these asset transfers. Inheritances received by individuals who live with young children is likely to have very different implications for economic transfers to children, including human capital investment, compared to inheritances received by those whose children have already left home. The timing of inheritances is also likely to shape recipients own saving behaviour.

The remainder of this article is structured as follows. First, we further describe the overarching conceptual framework and techniques employed in the Australian NTA. Following, we discuss the key household asset variables from the Australian NTA – including financial, property, other and net household assets. We then present estimates of the net value of assets, adjusted for liabilities, available at age of death using ABS estimates of death by single year of age. We conclude with a discussion of the findings and a strategy for extending these analyses.

Conceptual Background

The formal definition of the NTA is *“a system of macroeconomic accounts that measures current economic flows by age in a manner consistent with the United Nations System of National Accounts. NTA measures age- specific labour income, asset income,*

consumption, transfers and saving, accounting for flows within households, between households, through the public sector and with the rest of the world” (UN, 2013).

At the simplest level, the NTA examines the life cycle deficit, the difference between total consumption $C(x)$ and labour income $Y^l(x)$ at each age (x) in different economies and societies. When production at each age group is less than total consumption, age reallocations are used to fund this shortfall. The age reallocations consist of net transfers $(\tau^+(x) - \tau^-(x))$ and asset based reallocations which is simply asset income less saving $(Y^A(x) - S(x))$ yielding the following accounting flow identity:

$$C(x) - Y^l(x) = (\tau^+(x) - \tau^-(x)) + (Y^A(x) - S(x))$$

As a flow identity, the NTA accounts in their current form do not include capital transfers, although they do include flows on the return to capital. As the full theoretical and mathematical underpinnings are extremely detailed, the reader is directed to Lee and Mason (2011a, 2011b).

The purpose of the Australian NTA project is to document the economic life cycle through the NTA system: that is, the age-related patterns of consumption and labour income that are associated with the life cycle of education, work, and retirement. In this article, we build upon the extant NTA methodology by including capital into the system of accounts.

One of the goals of the global National Transfer Accounts project is to develop methodologies for estimating NTA wealth accounts, which are envisaged as providing statistics on wealth by age, with wealth consisting of two components: (1) assets and liabilities; and (2) transfer wealth. Transfer wealth refers to the present value of public

and private transfers expected to be made and received in the future by people of different ages (UN, 2013: 51-52). This report takes a substantial step in the development of these methodologies by providing statistics on the first of these two components, namely, assets and liabilities. We then show the utility of these accounts by providing estimates of net household assets held by individuals at the age of death in Australia.

Methodology

The creation of a methodology to incorporate wealth into the NTA, as part of the broader international NTA project, is not simple due to the need to create a temporal methodology – one that can be applied across many countries and across different points in time. The methodology we have developed is consistent with the broader NTA methodology and has aggregate benchmark sources obtained directly from the Australian National Accounts.

Standard NTA Methodology

The NTA methodology has been developed to maximize comparability between different countries. This has led to a flexible modelling approach where numerous data sources and methods are employed to estimate the underlying account items. Although individual items may bear differences in their calculation, each follows a general procedure, which we replicate, as follows:

- Step 1: Calculate the aggregate benchmark: i.e., aggregate amounts for the total economy (of consumption, labour income, public age reallocations and private age reallocations) derived from National Accounts or equivalent data sources.

- Step 2: Calculate an age pattern against which the aggregate benchmark is distributed. This is calculated using a combination of sample survey and administrative data. When individual level data are not available (i.e, data is only available at the household level), allocations must be made from the household to individual members to generate the age profile. Following the NTA methodology, we utilise several approaches, classified as follows:

- (1) Regression approach: regression coefficients are used as weights to allocate from the household level to the individual.

- (2) Iterative method: A series of weights are used within an iterative algorithm to allocate from the household to the individual level.

- (3) Equivalence method: An NTA derived equivalence scale is used to allocate from the household to the individual level.

- (4) Equal benefit method: All individuals share the same allocation regardless of characteristics.

- Step 3: Smooth the age profiles. Using a non-parametric smoother, we adjust the age profiles for sampling variation. Smoothing is not conducted for education and childcare.

- Step 4: Adjust the age patterns for missing populations. This is primarily an issue for residents of aged care facilities in the Australian NTA.

- Step 5: Adjust the age profiles to the aggregate benchmark. This ensures that the estimated age profile accords with the aggregate benchmark from the national accounts. A simple linear approach is adopted.

In addition to ABS demographic data, this project draws heavily upon ABS sample surveys, including the Household Expenditure Survey, Survey of Income and Housing, and Survey of Disability, Ageing, and Carers, as well as published administrative data on programmatic expenditure. Data from 2003-04 and 2009-10 were used because of the comprehensive level of detail on assets and liabilities in the Household Expenditure Surveys for these two points in time. Unfortunately, comparable assets data for earlier years in the Household Expenditure Surveys is not available.

As the procedures are extremely detailed, the interested reader is directed to UN (2013) and Rice, Temple, and McDonald (2014).

Considerations with Assets and Liabilities

While there are a number of important differences between NTA and Systems of National Accounts, NTA are constructed to be broadly consistent with and complementary to Systems of National Accounts. The estimates of assets and liabilities in the Australian NTA replicate this relationship.

Aggregate benchmarks for assets and liabilities are derived from information taken from the Australian System of National Accounts, while per capita age profiles are derived from information contained in the 2003-04 and 2009-10 Household Expenditure Surveys. Information from both of these sources is combined in order to construct the estimates of assets and liabilities in the Australian NTA. A number of differences exist, however, between these two sources of information – differences that complicate the process of combining them in order to estimate assets and liabilities.

Firstly, the Australian System of National Accounts includes information on assets and liabilities for a range of institutions or sectors, including general government, non-financial corporations, financial corporations, and households (ABS, 2000; 2013a). The 2003-04 and 2009-10 Household Expenditure Surveys, in contrast, focus solely on households (ABS, 2006; 2012). NTA, including those for Australia, focus on individuals within households, but treat all non-household institutions or sectors as intermediaries between individuals within households (United Nations, 2013: 27). Thus, in general, government is considered to be an intermediary between tax-payers and the beneficiaries of public transfers and corporations are considered to be intermediaries between their owners and their customers. In terms of sectoral or institutional scope, the Australian NTA has more in common with the Australian System of National Accounts than with the 2003-04 and 2009-10 Household Expenditure Surveys. The estimates of assets and liabilities in the Australian NTA replicate this relationship. Thus, public assets and liabilities are estimated and allocated to individuals within households, as are private corporation assets and liabilities. This is in addition to the estimation and allocation of household assets and liabilities.

Secondly, while both the Australian System of National Accounts and the 2003-04 and 2009-10 Household Expenditure Surveys contain information on the assets and liabilities of households, there are important differences in how these two sources of information define household assets. In particular, there are important differences in what is included in and what is excluded from these two sources' definitions.

One of these differences pertains to the treatment of consumer durables owned by households. In the Australian System of National Accounts, household expenditure on

consumer durables is included in household final consumption expenditure and, in line with this, consumer durables owned by households are not defined as assets. While not defined as assets in the Australian System of National Accounts, consumer durables are included in the Australian System of National Accounts as a memorandum item (ABS, 2000; 2013a; 2013b: 67-68). In contrast, the 2003-04 and 2009-10 Household Expenditure Surveys collected information on the value of a household's vehicles, as well as information on the value of the contents of a household's dwelling, and classified both of these as non-financial assets (ABS, 2006; 2012; 2013b: 67-68). In terms of the treatment of consumer durables, the estimates of assets and liabilities in the Australian NTA follow the Australian System of National Accounts. In the Australian NTA, household expenditure on consumer durables is included in consumption (not saving) and consumer durables are not defined as assets, although they are included as a memorandum item.

Another of these differences pertains to a variety of items that are defined as household assets in the Australian System of National Accounts, but not the 2003-04 and 2009-10 Household Expenditure Surveys. These items include household unfunded superannuation claims, household technical reserves of general and life insurance corporations, non-profit institutions serving households (NPISHs) bank deposit assets (net of bank borrowings), and household ownership transfer costs (ABS, 2013b: 67-68). Here again the estimates of assets and liabilities in the Australian NTA follow the Australian System of National Accounts. In the Australian NTA, these items are defined as household assets.

Assets and liabilities in the Australian NTA thus include public assets and liabilities, private corporation assets and liabilities, household unfunded superannuation claims, household technical reserves of general and life insurance corporations, NPISHs bank deposit assets (net of bank borrowings), and household ownership transfer costs, while at the same time excluding consumer durables (although consumer durables are included as a memorandum item).

A range of asset and liability classes are included in our calculations (Table 1). The NTA framework includes assets and liabilities held at the public and the private level. Assets and liabilities at the private level can be held by private corporations or households. For the purposes of estimating assets at age of death, we focus on the household account in the current analyses.

<TABLE 1 ABOUT HERE>

Results

Before turning to the estimates of aggregate values of assets by age of death, we first discuss the age specific distributions for each asset class for 2003-04 and 2009-10. In contrast to the public and private corporation accounts, the household account is quite detailed consisting of a range of liability and asset account items (Table 1). In the following analysis, we consider the net aggregated items from the household account.

Household Account Age Profiles

The first summary item from the household asset account is net financial assets. The components of household net financial assets include (i.) technical reserves of general

and life insurance corporations, (ii.) non-profit institutions serving households (NPISHs) bank deposits, (iii.) accounts held with financial institutions, (iv.) shares, (v.) own incorporated business (net of liabilities), (vi.) own unincorporated business (net of liabilities), (vii.) trusts, (viii.) accounts with superannuation funds and (ix.) other financial investments. The addition of these items is then netted by subtracting investment loans (a liability item).

<FIGURE 1 ABOUT HERE>

For both years, household net financial assets rise from about age 20, peaking at around age 50 (Figure 1). Between 2003-04 and 2009-10, on a per capita basis, there were sizeable real increases in net assets held by those aged from 50 to 65 years but little change at other ages.

In addition to financial assets, the Australian NTA distinguishes a range of property assets. Net property assets includes three asset items, (i.) ownership transfer costs, (ii.) owner-occupied housing and (iii.) non owner-occupied housing. These accounts are offset against two liability accounts, (i.) loans for owner-occupied housing and (ii.) loans for non-owner occupied housing.

<FIGURE 2 ABOUT HERE>

Interestingly, on a per capita basis, these profiles are similar to net financial assets until retirement age (Figure 2). Whereas net financial assets decrease from about the 60s, net property assets reach a peak at about age 50 and thereafter remain at that peak. Again, the only increase (in 2009-10\$) between the two years is gained by Australians aged 55

years and over. This is due primarily to increases in the net value of owner-occupied housing. Older people are more likely to fully own their houses and their houses are more likely to be located within the inner zones of the major cities, the areas that have been experiencing the highest increases in values.

The final balancing account for households is net other assets (Figure 3). This consists of assets that are non-financial and non-property in nature; less other liabilities, including education-related liabilities such as HECS/HELP and SFSS. In stark contrast to other household account items, this account is in net liability for most ages between the late teens and mid-60s. Interestingly, on both a per capita and aggregate basis, there was a reduction in net other assets liabilities for those aged from about 30 to 50 between the two years.

<FIGURE 3 ABOUT HERE>

As the household account is very detailed, a useful overall measure of the position of households is Household net worth (Figure 4) – being the summation of household net financial assets, household net property assets and household net other assets. On a per capita basis, net worth increases from about age 20 to the mid-50s before flattening and slightly declining in later age. Again, the increase in net worth is evident for older Australians, with little increase in net worth for those aged under 50 between the two years.

<FIGURE 4 ABOUT HERE>

Estimates of Age of Death

Combining these estimated aggregate and per capita profiles with ABS estimates of deaths by single year of age, we can generate estimates of the economy wide value of net assets at the age of death by asset class. Table 2 provides a summary across five age groups for both years, concorded to 2009-10 dollars.

<TABLE 2 ABOUT HERE>

On the basis of these estimates, in 2009-10, assets at death accounted for just over 70 billion dollars compared with about 63 billion in 2003-04 (in 2009-10 dollars). Deaths of persons aged 65 and over accounted for about 80% of total assets. Those aged 65-84 held about 34 billion in assets compared with 23 billion of those 85 and over.

The overall NTA estimate of net property wealth as a proportion of total household wealth is 60%. This concords very well with a recent Reserve Bank of Australia study of household wealth using data from the Household and Income Labour Dynamics in Australia (HILDA) survey (RBA, 2016). However, when asset class is examined at age of death, a slightly different picture emerges. For those aged 65-84 and 85+, housing comprises 69% and 74% of total net assets respectively. This weights the distribution of asset classes more strongly towards property at the time of death. In total, property accounts for about 68% of total net household worth for assets at the time of death.

Results in Figure 5 show the distribution of asset value and class by single years of age at death for 2003-04 and 2009-10. The distributions across the years are very similar, however in numerical terms there are some age differences between the years (Figure

6). Recalling that the figures are all benchmarked to 2009-10 dollars, it is curious to note the drop in aggregate net household assets held by people who died between ages 70 and 80 as the differences in asset age profiles are negligible. The reason for this difference is a drop in the number of deaths for this age group. Figure 7 displays the distribution of the number of deaths by age for 2009-10 and 2003-04 (top panel) and the difference between the numbers of deaths (bottom panel). Despite population growth, in the later year, there were over 3500 fewer deaths for those aged 70-80 when compared with 2003-04.

<FIGURES 5, 6, 7 ABOUT HERE>

The fall in the number of deaths in the 70-79 age group between the two points in time is due to higher rates of survival. Thus, it can be concluded that the disbursement of assets at death is being delayed by the deferral of death to older ages. This change in delayed survival has hastened from 1971 onwards. For men, for example, the probability of death between exact ages 70 and 71 was unchanged at about six percent from 1921 to 1971 but has fallen continuously since then to below two per cent today (McDonald 2016). Relatively similar falls in the probability of death have occurred at all male ages above 60 and for older women as well. A hypothetical exercise to illustrate the effect of the deferral of death is to recalculate the net assets at death in 2009-10 using probabilities of death from 1971.

Results (Figure 8) show that if the 1971 death rates had applied in Australia in 2009-10, an additional 14 billion dollars would have been made available from persons aged 85 and over and a very significant 76 billion dollars for those aged 40 to 84. These

figures reflect the very large increase in deaths when applying the 1970s probabilities, with 319,000 deaths, compared with 142,117 actual deaths in the 2009-10 financial year. While this result is hypothetical, it strongly underscores the fact that relative to the past, inheritances are now transferred much later due to the extended delay of death.

<FIGURE 8 ABOUT HERE>

Discussion and conclusions

Previous studies on inheritance in Australia have relied on state level convenience samples or data using specific asset types. For example, Baker and Gilding (2011) used probate data from Victoria and O'Dwyer (2001) made use of South Australian Property and Estate data. In this report, we build upon the extant NTA methodology to incorporate estimates of average assets and liabilities at average ages of death that are nationally representative. The benefit of this approach is that it is consistent with the broader NTA methodology and has aggregate benchmarks sources directly from the Australian National Accounts – thereby making the estimates representative of total assets and liabilities in the Australian economy.

However, these estimates have a number of limitations and do not directly measure the total level of assets available for inheritance for several reasons. The age profiles by asset class are cross-sectional and represent the smoothed estimates of the prevalence of value in each asset class at each point in time. That is, if we could measure assets leading up to death, with longitudinal data, it may be that the age profiles would differ. For example, studies from the USA, Canada and the UK acknowledged a large increase

in health expenditure during the last years before death (Hogan et al, 2001; Hoover et al, 2002; Pollock, 2001). It may be possible that some individuals dis-save from assets to help meet the costs of their health care privately, in addition to that publically provided. People who die after long term illness are more likely to have reduced their assets in the last years of life. Moreover, Australian and international studies have clearly established a socio-economic gradient in risk of mortality (Turrell & Mathers, 2001; Turrell et. al 2006). Similarly, by definition, there is a strong socio-economic gradient in the value of the asset holdings of Australian households (Marks, et al, 2005). Thus the levels of assets presented here are likely to be biased upwards.

For these estimates to be comparable to an inheritance-type transfer, the figures contained herein would need to be deflated to adjust for these two issues. One possibility we explored was to utilise the Australian HILDA survey, a longitudinal survey that began in 2001, to model the elasticity of assets with respect to death in the preceding year. This elasticity could be applied to the estimates contained herein to deflate the asset values by age. Unfortunately, asset values are only collected in four of the fifteen waves of HILDA with the sample of deaths in each year too small to provide reliable estimates. Indeed, there is a dearth of Australian data with which to measure asset decumulation leading up to death. However, in one recent Australian study, Wu, et al. (2015) examined the asset decumulation of older Australians in receipt of Centrelink payments using administrative data. They find remarkable stability in the preservation of financial and residential wealth among older households overall. Focusing on asset use close to death, they note “Residual wealth at death of pensioners ... confirms that low or slow decumulation is typical of many households” p. 19. The residual wealth at death ratio was remarkably consistent by age, level of household

assets and living arrangements indicating stability in wealth decumulation among different demographic groups.

Regardless of any statistical adjustment to these estimates, they do not measure the overall inheritance transfer for other conceptual reasons. For example, there is the possibility of inter vivos transfers, biasing our estimates in the opposite direction. That is some individuals may bequeath all or part of their estates while still living through various structures. For example, Gilding (2005) shows this occurs commonly among many high wealth families due to “dynastic ambitions, tax minimisation and trust”. For middle income families, this may also become prevalent as some assist their children to purchase into difficult property markets. The implication of this is that the value of assets available at death is already lower than its ‘natural level’ due to precautionary bequeathing. Thus, we are underestimating the full transfer.

These estimates also pay no attention to the tax liabilities in the event of transfer of assets upon death. Although Australia does not have a death or inheritance tax and has not had so since 1979, there are numerous capital gains tax (CGT) and superannuation death benefit taxes that some believe can act as a defacto inheritance tax (Burnheim et al. 2016). Indeed, the system is extremely complex and crosses all the asset classes discussed in this article.

Finally, in an intergenerational inheritance sense, we pay no attention to disaggregating first and final estates. First estates, where the spouse is still surviving, are unlikely to exhibit any form of intergenerational transfer on average. Final estates with no surviving spouse are likely to generate a very different outcome.

A more general limitation of the NTA approach we employ, is that it does not consider differences within specific age groups. The methodology, as it stands, disaggregates flows and the value of assets and liabilities by age. However, there are significant differences in the ways in which assets and liabilities are distributed *within* rather than *between* age groups. Methodological advances have started in this area with countries constructing NTA accounts disaggregated by gender and socio-economic status (Jimenez-Fontana, 2015; Mejia-Guevara, 2015).

Notwithstanding these limitations, estimates in the article point to the significant levels of assets held by older Australians and available at age of death in Australia. The first NTA estimates of assets and liabilities provide important data across public, private corporation and household wealth. Two summary items in particular are of interest. Firstly, there is household net worth which is the aggregation of household net financial assets, household net property assets and household net other assets. On a per capita basis, net worth increases from about age 20 to the mid-50s before flattening and slightly declining in later age. Importantly, increases in net worth between 2003-04 and 2009-10 were only evident for older Australians, with little increase in net worth for those aged under 50.

When considered from the perspective of assets available at death, the figures are substantial, amounting to between 60 and 70 billion dollars in 2003-04 and 2009-10. The majority of the asset value was tied up in property, with about three quarters of total average assets held in property by those dying at ages 65 and over. These figures are very significant, noting that in 2009/10 total government recurrent expenditure on

aged care services was \$7.3 billion (AIHW, 2011). In the same year, \$29.3 billion of the Federal budget was allocated to the Age Pension (ABS, 2012a).

As well as the economic issue of the distribution of the significant proportion of wealth that becomes available at death, these findings highlight the need to have strong controls on older Australians at risk of financial abuse. This may be an issue for both first estates (surviving spouse) and final estates (with no surviving spouse). In February 2016, the Attorney-General announced an inquiry led by the Australian Law Reform Commission (ALRC) into elder abuse and the strength of existing Federal laws to protect older persons from a range of financial and other abuse (Australian Law Reform Commission, 2016). The enquiry is looking into elder financial abuse across the range of asset classes listed in this paper. Results here combined with future projections of death suggest a rapid increase in the aggregate value of estates in Australia. With numerical ageing beginning to escalate strongly and the number of deaths more slowly, strengthening the legislative framework to protect the financial assets of older Australians is a priority. However, in designing a national plan to address elder abuse, as proposed by the ALRC, it is also important to consider providing clear guidance for desired, legal intergenerational transfers of property and financial assets. This is particularly pertinent as simulations presented here also point to the fact that relative to the past, inheritances are now transferred much later in life because of the extended delay of death.

This raises the question of how effective public policies can take account of this change. Because of the improved survival prospects, many families are likely to prefer to transfer assets years before death, relative to previous generations. Currently, aspects

of the social security and superannuation system strongly discourage inter-familial transfers of assets approaching or at age pension age. For example, any assets transferred in the five years prior to a claim for payment through the Department of Human Services (including the Age Pension) may be deemed by the Department to be an asset. Both singles and couples are entitled to gift \$10,000 per year, limited to \$30,000 over a five year period. In excess of this amount, the gift is assessed by the Department as a deprived asset for five years from the date of the gift and subject to income deeming provisions. These arrangements strongly discourage the transfer of wealth from one generation to the next even though, for various reasons such as home purchase by the next generation, such transfers may be socially desirable.

The issue of desired intergenerational transfers is complicated further given that the majority of assets at death are tied up in residential property – mostly the primary residence - and therefore a relatively illiquid asset. Future studies may wish to examine how public policy can support a shift in preferences for transfers of assets much earlier than the time of death relative to the past. This, of course, must be balanced against the financial needs of individuals living longer than ever before.

These analyses can also be extended in several other ways. Firstly, when the latest 2014 Household Expenditure Survey is released by the Australian Bureau of Statistics, the age profiles could be compared further across time, to examine whether further gains in net assets have accrued primarily to older households. Secondly, we intend to further analyse the public and private corporation components of the NTA asset and liability accounts. Third, the methodology presented here provides the opportunity for other countries in the global NTA network to replicate these analyses using their own country

specific data. Finally, as part of the Australian NTA project, we intend to develop the wealth account further to include age reallocations of assets.

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Table 1 – Asset and Liability Variables, by Sector (Public, Private, Households)

Public

Public net worth

Public, assets

Public, liabilities

Private

Private corporations

Private corporation net worth

Private, private corporations, assets

Private, private corporations, liabilities

Households

Household net worth

Household net financial
assets

Private, households, financial, unfunded superannuation claims

Private, households, financial, technical reserves of general and life insurance
corporations

Private, households, financial, NPISHs bank deposit assets (net of bank
borrowings)

Private, households, financial, other, accounts held with financial
institutions

Private, households, financial, other, shares

Private, households, financial, other, own incorporated business (net of liabilities)

Private, households, financial, other, own unincorporated business (net of
liabilities)

Private, households, financial, other, trusts

Private, households, financial, other, accounts with superannuation funds

Private, households, financial, other, other financial
investments

Private, households, financial, other, investment loans (liability)

Household net property
assets

Private, households, property, ownership transfer
costs

Private, households, property, other, owner-occupied housing

Private, households, property, other, non-owner-occupied
property

Private, households, property, other, loans for owner-occupied housing
(liability)

Private, households, property, other, loans for non-owner-occupied property
(liability)

Household net other assets

Private, households, other, other
assets

Private, households, other, HECS/HELP and Student financial Supplement Scheme
liability

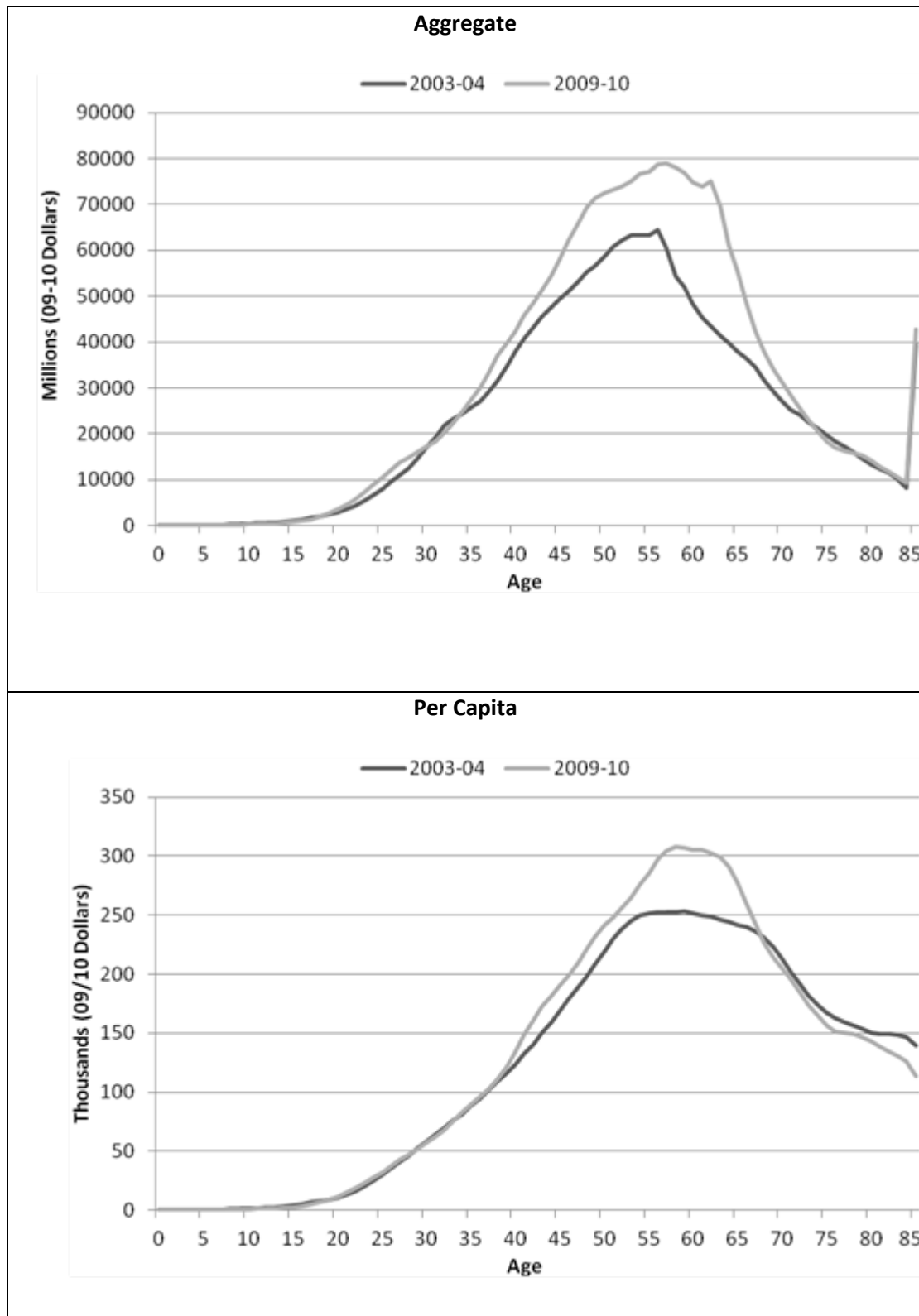
Private, households, other, other liabilities

Memorandum
item

Private, households, consumer durables*

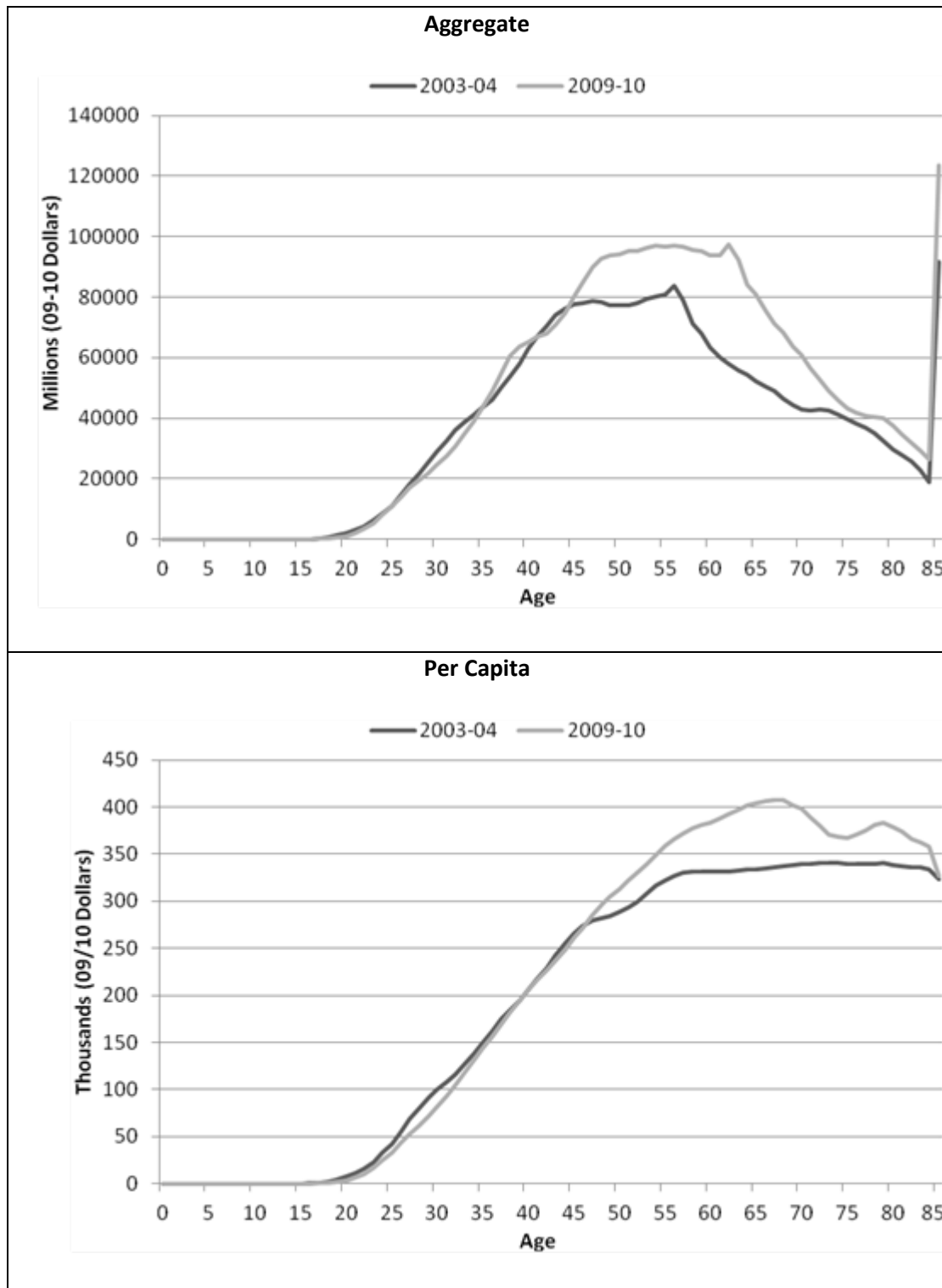
Source: Australian National Transfer Accounts.

Figure 1: Household Net Financial Assets, 2003-04 and 2009-10.



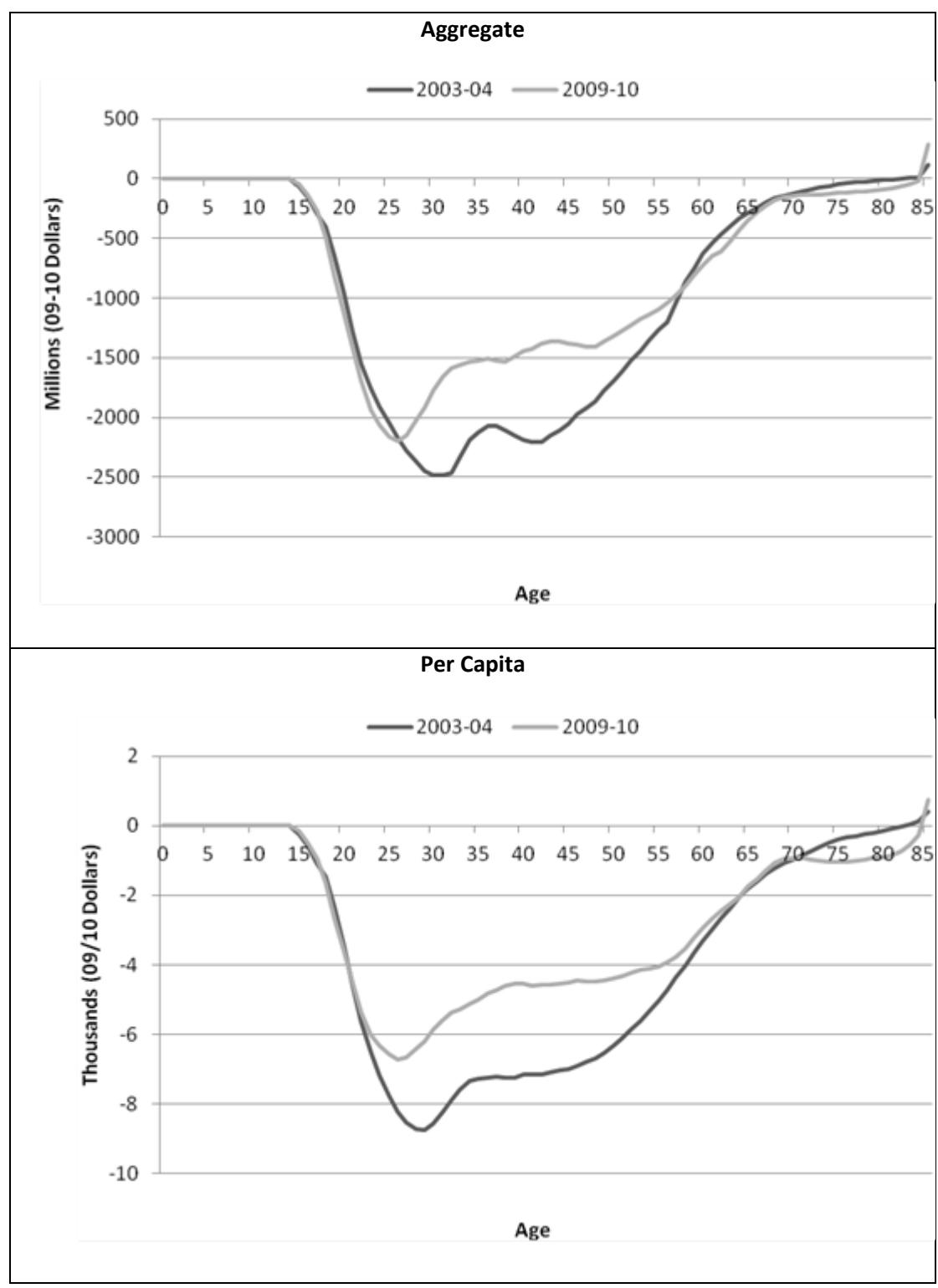
Source: Australian National Transfer Accounts.

Figure 2: Household Net Property Assets, 2003-04 and 2009-10.



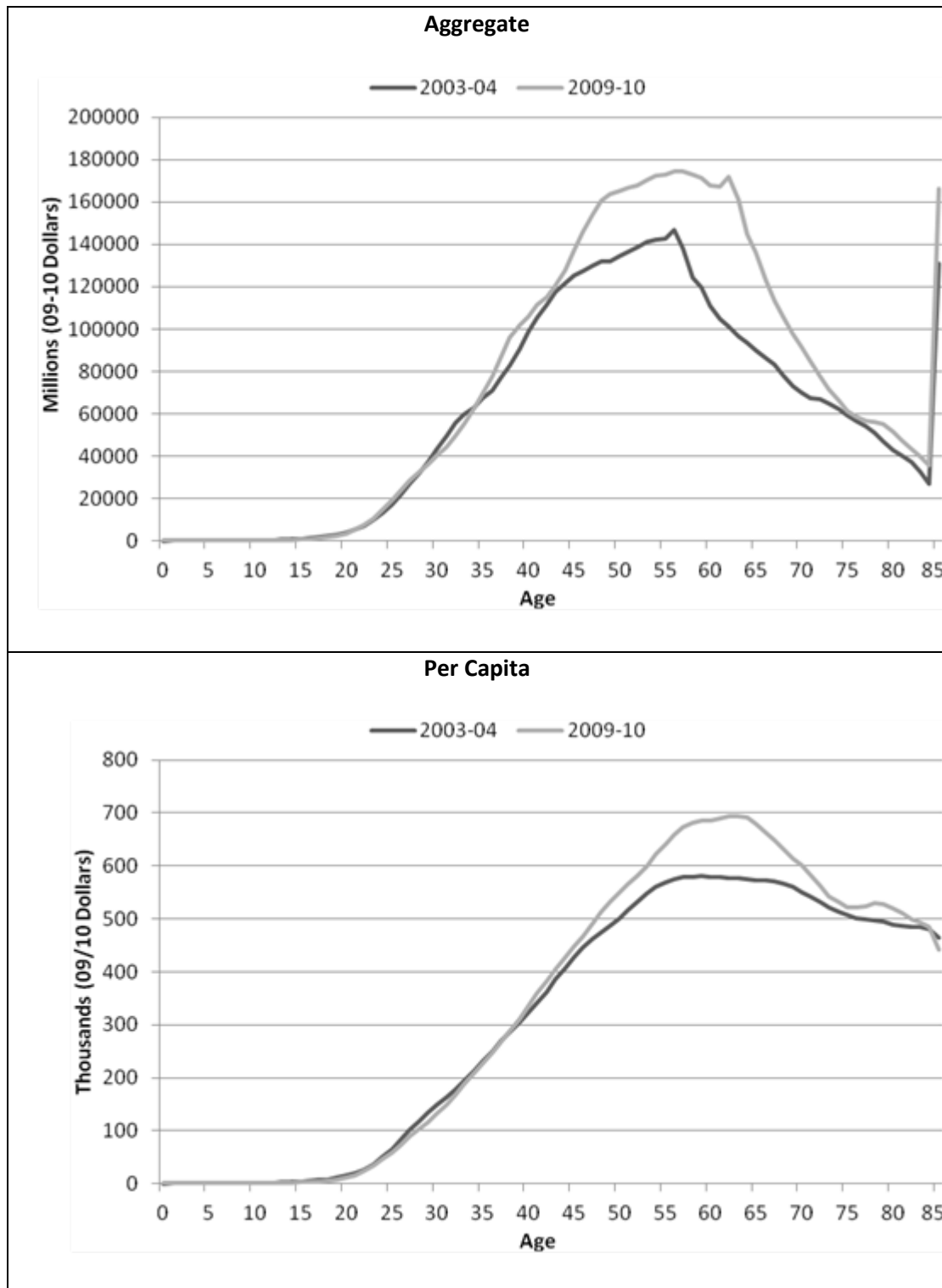
Source: Australian National Transfer Accounts.

Figure 3: Household Net Other Assets, 2003-04 and 2009-10.



Source: Australian National Transfer Accounts.

Figure 4: Household Net Worth, 2003-04 and 2009-10.



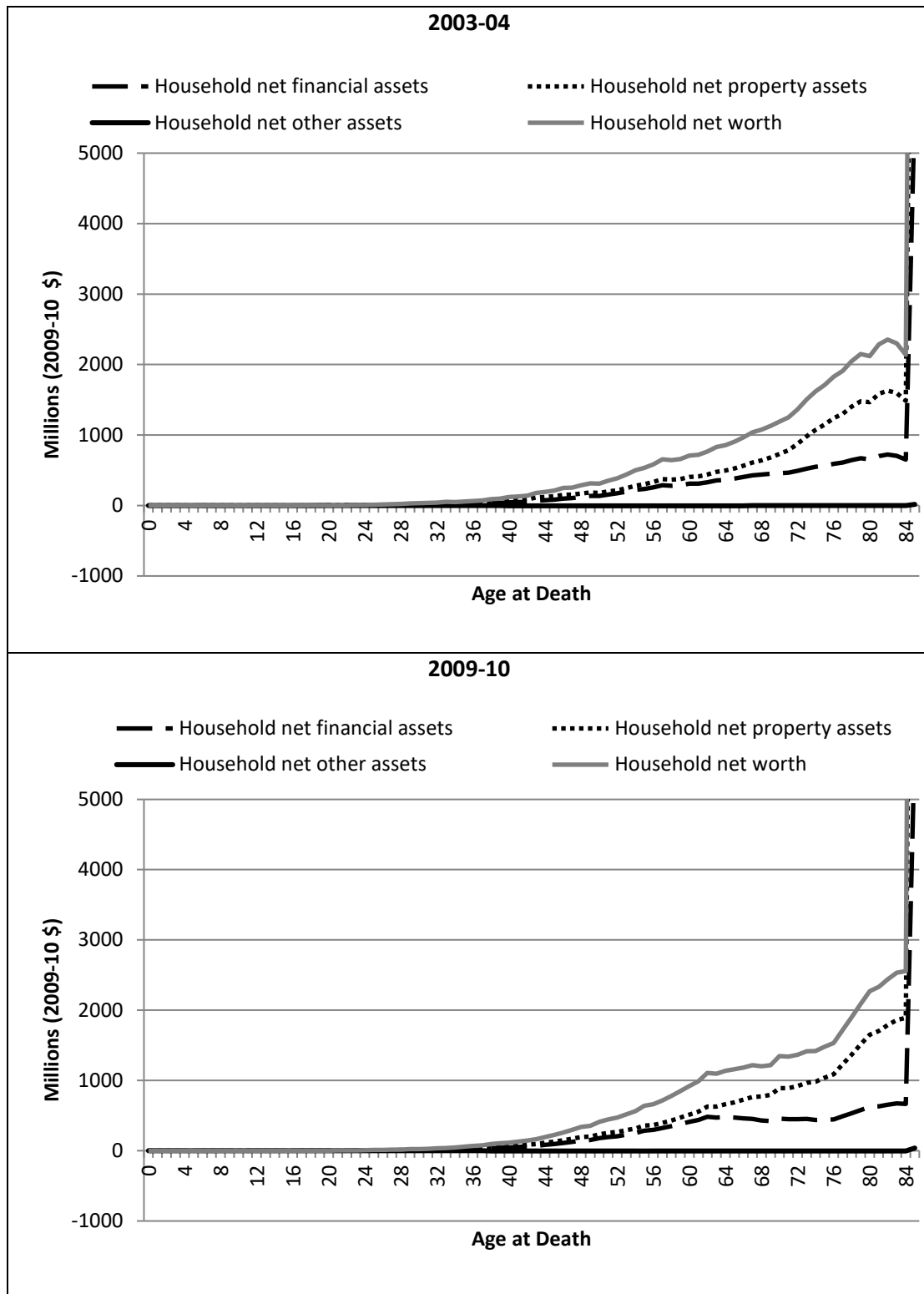
Source: Australian National Transfer Accounts.

Table 2: Estimated Net Assets at Death, by Age, 2003-04 and 2009-10, 2009-10 Dollars

	Net Financial Assets	Net Property Assets	Net Other Assets	Net Worth
2003-04 (Millions 2009-10 Dollars)				
0-14	1	0	0	1
15-44	577	941	-47	1471
45-64	4440	5900	-82	10258
65-84	11112	21807	-28	32891
85+	5663	13116	16	18795
Total	21794	41763	-141	63417
2009-10 (Millions 2009-10 Dollars)				
0-14	1	0	0	1
15-44	595	862	-32	1425
45-64	5613	7225	-69	12768
65-84	10232	23544	-56	33720
85+	5811	16781	38	22630
Total	22251	48411	-119	70544

Source: Authors calculations from Australian National Transfer Accounts and ABS(2016).

Figure 5: Average Aggregate Net Assets by Age of Deaths, 2003-04 and 2009-10, 2009-10 \$



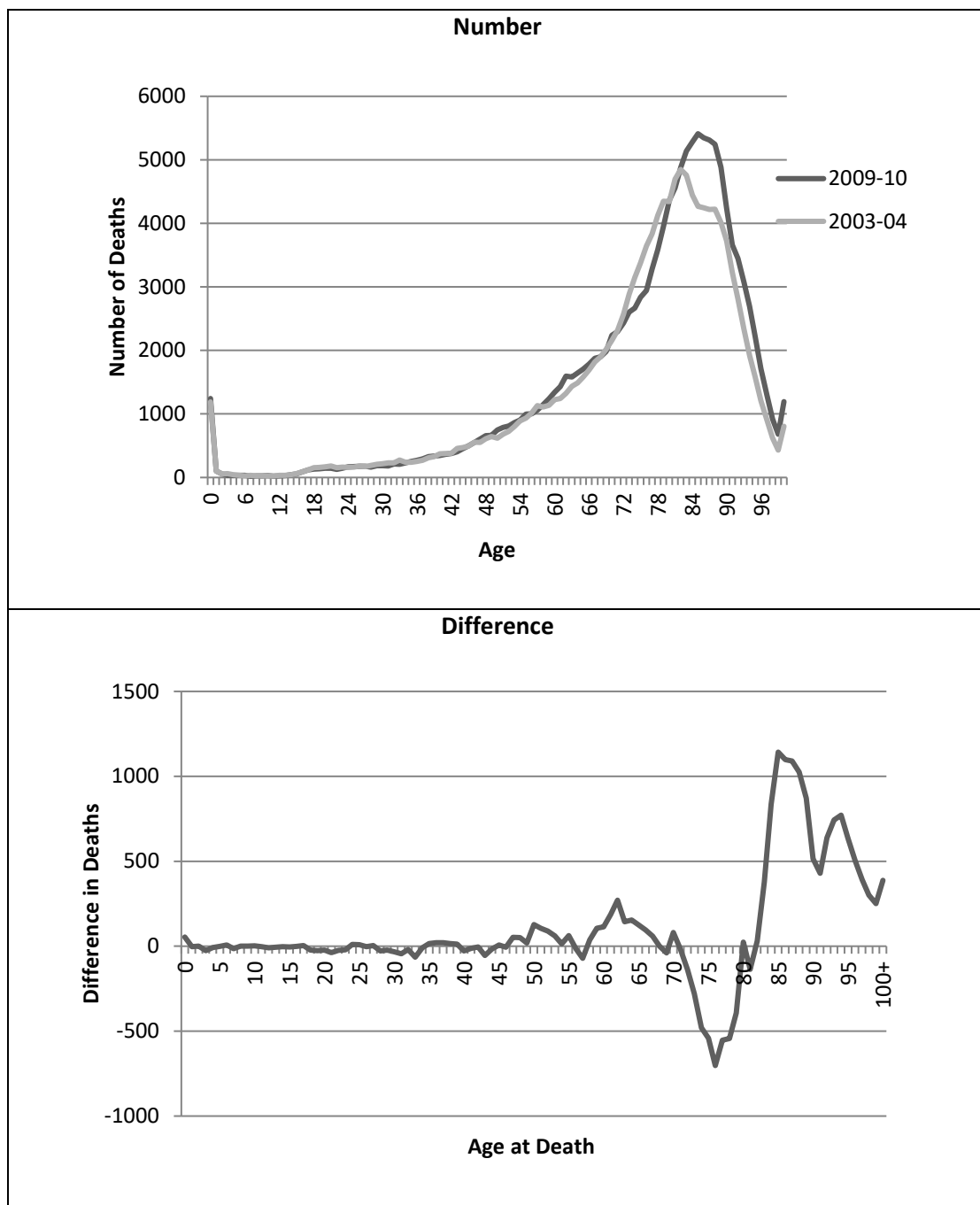
Source: Authors calculations from Australian National Transfer Accounts and ABS(2016).

Figure 6: Difference in Aggregate Net Assets Available at Age of Death, 2003-04 and 2009-10, Millions 2009-10 \$



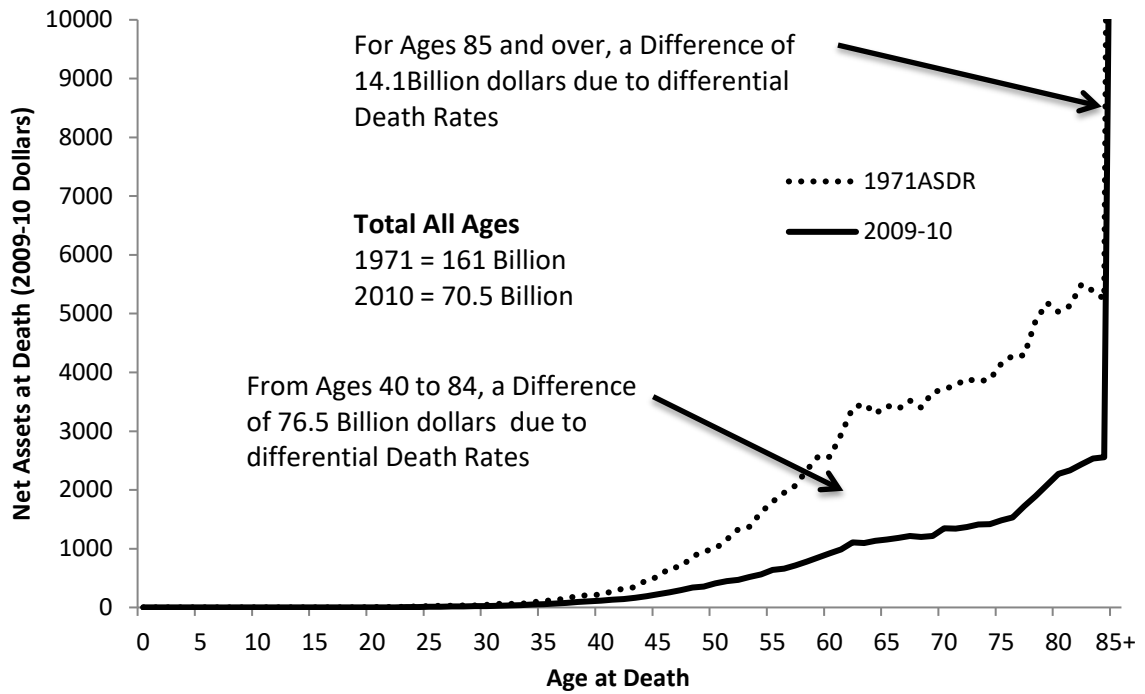
Source: Authors calculations from Australian National Transfer Accounts and ABS(2016).

Figure 7: Average Deaths, 2003-04 and 2009-10.



Source: Authors calculations from ABS(2016).

Figure 8: Simulated Net Assets by Age of Death, Using Actual Deaths (2009-10) and Deaths Generated by Applying 1971 Age Specific Death Rates (1971 ASDR), Millions 2009-10 \$



Source: Authors calculations from Australian National Transfer Accounts and ABS(2016).



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