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A Conceptual Framework to Measure Young Australians' Financial Wellbeing

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Commonwealth Bank of Australia and Melbourne Institute Financial Wellbeing Scales Technical Report No. 4
August 2019

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THE UNIVERSITY OF MELBOURNE

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Executive Summary

Young people's financial situations are increasingly perilous. Absolute indicators are worsening in many countries, with the current generation of young adults being saddled with more debt and higher nondiscretionary expenses than earlier generations and experiencing lower rates of home ownership and lower net wealth (Houle 2014; Lobaugh et al. 2019). Young people are also falling behind in relative terms because of growing educational costs and soaring housing prices—especially in Australia.

Despite these many concerns regarding young people's financial outcomes, we lack a universally accepted, holistic measure of their *financial wellbeing.* Adults' financial wellbeing has been carefully conceptualised. Most notably, researchers from the Melbourne Institute have collaborated with CBA to define financial wellbeing for Australian adults and to develop first-of-their-kind scale measures (Comerton-Forde et al. 2018). CBA-MI define financial wellbeing for adults as:

> *the extent to which people both perceive and have:*
> 1. *financial outcomes in which they meet their financial obligations,*
> 2. *financial freedom to make choices that allow them to enjoy life,*
> 3. *control of their finances, and*
> 4. *financial security —*
>
> *now, in the future, and under possible adverse circumstances.*

No such definition or measure exists for young people. This report addresses this gap by developing definitions and conceptual models of children's, adolescents', and emerging adults' financial wellbeing. The report also describes and assesses measures of the financial outcomes of children, adolescents, and emerging adults that are available in four large, existing Australian social surveys:

- the Longitudinal Surveys of Australian Youth (LSAY),
- the Longitudinal Study of Australian Children (LSAC),
- the Household, Income and Labour Dynamics in Australia (HILDA) survey, and
- the Survey of Income and Housing (SIH) and Household Expenditure Survey (HES).

We see this report as an important first step towards a longer-term goal of developing and implementing measures of financial wellbeing for young Australians. The measures would make it possible to document the distribution of young people's financial wellbeing, investigate the characteristics that contribute to financial wellbeing, and evaluate policies, programs, services, and interventions that might boost financial wellbeing. All of the analyses in this report are guided by this longer-term goal.

Elements of Financial Wellbeing from Studies of Adults

The studies for adults point to several general considerations for potential definitions of financial wellbeing.

- A focus on end-outcomes is needed if the eventual financial wellbeing measure is to be used to examine the effects of knowledge, attitudes, behaviours, access, and other financial circumstances on financial wellbeing.

- A comprehensive definition of financial wellbeing accounts for the functional and temporal elements of finances.
- The definition of financial wellbeing depends on context.
- Definitions of financial wellbeing may include subjective elements, objective elements, or a combination of these.

Each of these considerations is addressed in the CBA-MI definition for adults and used to develop new definitions for young people

Previous Research on Young People's Financial Outcomes

We review financial outcomes in childhood, adolescence, and emerging adulthood that studies have examined or discussed. We also point to financial outcomes that have rarely been addressed or been considered inapplicable. We review how researchers have framed their studies in terms of different theoretical, or conceptual, models of young people's and families' behaviour and discuss their evidence regarding the determinants of and influences on young people's financial outcomes.

We bring the results from the reviews of research on adults' and young people's together by listing the different components of the CBA-MI definition of adult financial wellbeing and using results from the studies of young people to describe the applicability of each component to children, adolescents, and emerging adults, respectively.

Definitions

From these analyses, we define **children's financial wellbeing** as

the extent to which children both perceive and have:

1. *financial outcomes that meet their needs and further their development*
2. *financial outcomes that allow them to enjoy life, and*
3. *financial security—*

now, in the future, and under possible adverse circumstances.

We define **adolescents' financial wellbeing** as

the extent to which adolescents both perceive and have:

1. *financial outcomes that meet their needs, that further their development, and in which they meet their age-appropriate financial obligations*
2. *financial outcomes that allow them to enjoy life*
3. *age-appropriate control of their finances, and*
4. *financial security—*

now, in the future, and under possible adverse circumstances.

And we define **emerging adults' financial wellbeing** as

the extent to which emerging adults both perceive and have:

1. *financial outcomes in which they meet their personal financial obligations*
2. *financial freedom to make choices that allow them to enjoy life and further their development*
3. *control of their finances, and*
4. *financial security—*

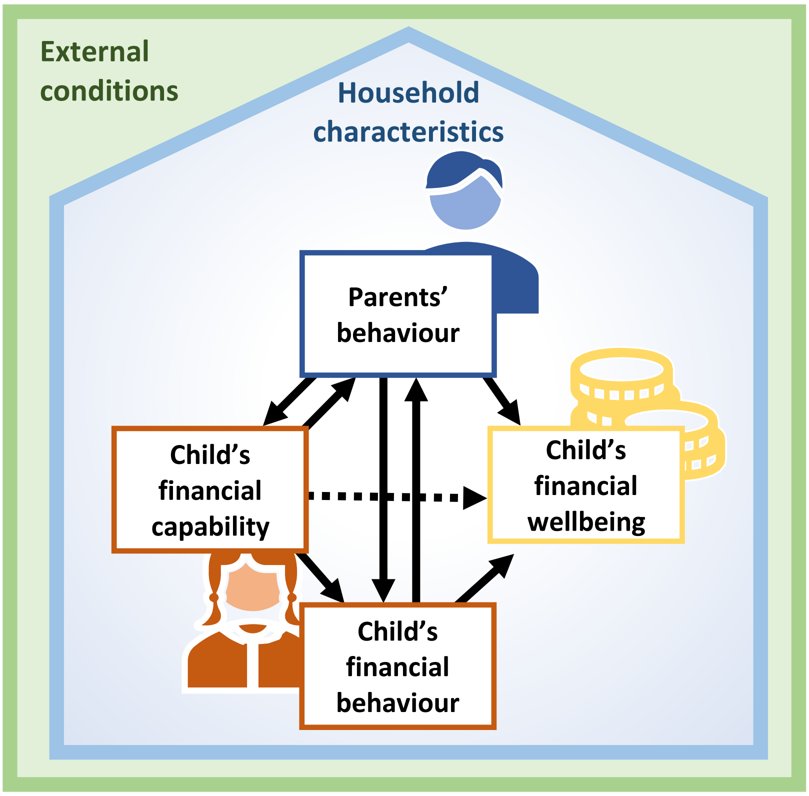
now, in the future, and under possible adverse circumstances.

Conceptual Model

In addition to conceptualising what young people's financial wellbeing *is*, we also conceptualise *how their financial wellbeing is determined*. We do this through a conceptual model that describes the relationships between the characteristics and circumstances of a young person and his or her financial wellbeing. The model helps us understand the properties of young people's financial wellbeing and helps us distinguish young people's financial wellbeing from the conditions and behaviours that contribute to it.

As depicted in the diagram below, our model shows that young people's financial wellbeing at a given age depends on their own financial behaviour, their financial capability, their parents' financial and socialising behaviours, other characteristics of their household, and conditions outside the household.

Conceptual Model of Children's Financial Wellbeing in One Time Period



Our model also considers how financial wellbeing is linked over time—how outcomes at one age provide resources and affect young people's financial capability at later ages. The model also views financial capability through a developmental lens, allowing financial capability to grow over time, be influenced by previous experiences with financial behaviour and financial wellbeing, and be influenced by parents' financial and socialising behaviours. An important implication of this model is that children's financial capabilities at any age will be associated with their entire life history of circumstances and experiences up to that age. The model tells us that experience with financial wellbeing is likely to be a valuable teacher.

Descriptions of Four Australian Social Surveys

The Longitudinal Surveys of Australian Youth is a study that follows cohorts of young Australians annually over a ten-year period, from their mid-teens to mid-twenties, as they move through school to further study, work, and beyond. The Longitudinal Study of Australian Children is a survey that has followed the families of two cohorts of Australian children every two years since 2003, when the cohorts were aged 4-5 years and 0-1 year respectively. The Household, Income and Labour Dynamics in Australia survey is a large national longitudinal survey that began with nearly 20,000 people in 2001 and has subsequently followed those people and their families in annual interviews. The Survey of Income and Housing and Household Expenditure Survey is a nationwide representative cross-sectional survey with large sample sizes. The LSAY, LSAC, and HILDA survey are panel data sets that allow us to identify detailed patterns of financial dynamics for people, whereas the SIH-HES consists of repeated cross-sections that only provide snapshots over all households at points of time. The LSAY and LSAC focus on young people and collect data directly from or about them, while the HILDA survey and SIH-HES are general population surveys that ask questions of all age groups.

The LSAY has few financial outcome measures, and most of these are only recorded after people reach emerging adulthood. The LSAY is a good source for studying financial satisfaction in late adolescence and emerging adulthood and for studying a few other outcomes; however, its limited content makes it a poor candidate for developing overarching, summative measures of financial wellbeing. Likewise, the LSAC currently has few person-specific financial outcome measures, but this will change in 2020 when the *survey will ask 20- and 21-year-olds the 10 questions of the CBA-MI Reported Financial Wellbeing Scale*.

The most comprehensive source of information on young people's financial outcomes is the HILDA survey. Each year the survey asks everyone ages 15 and over in all the households it interviews about their personal deprivations, financial satisfaction, savings habits, and ability to raise funds in an emergency. Every four years, it gathers additional objective information about personal net wealth, including account balances, debts (including educational loans), and overdue bills. These features make the HILDA survey the best available tool for studying and measuring Australians' financial wellbeing from mid-adolescence through emerging adulthood. However, the survey has other limitations.

Conclusions

Young or old, people's finances arise from a general set of spending, saving, borrowing, investing, planning, and insuring activities and address common concerns, including allowing and smoothing consumption, providing for future outcomes, and protecting against unforeseen negative events. Yet we also know that the applicability of several financial activities and concerns differ between young people and adults. Financial circumstances, capabilities, behaviour, and outcomes also differ. Another vital aspect of financial wellbeing is context, and because of contextual features, the elements of young people's financial wellbeing in Australia are likely to differ from elements in other countries.

Our definitions of children's, adolescents', and emerging adults' financial wellbeing address these issues and identify component outcomes and conditions of children's, adolescents', and emerging adults' financial wellbeing. However, they do not describe the sizes or variability of these components. Many of the outcomes, especially for children and adolescents, are also provided by families through resources that the parents control. The direct social and policy importance of young people's financial wellbeing depend on the size and variability of these components. Measures and empirical research are needed to determine these.

In a similar fashion, our conceptual model identifies the anticipated relationships between different characteristics and young people's financial wellbeing, but it does not tell us about the strength or magnitude of these relationships. These are important topics for future research, which will be facilitated by the development of actual financial wellbeing measures.

Although the large Australian social surveys ask about many financial outcomes, they *omit* several outcomes that would be needed for fully describing or summarising young people's financial wellbeing, including:

- personal financial outcomes for children and young adolescents,
- outcomes describing people's control over their financial outcomes and their financial freedom, and
- measures that are asked with comparable sets of outcomes and over comparable time frames.

A more complete set of measures, including measures describing young people's control over their finances and their financial freedom, could be added to surveys. Likewise, harmonised questions with similar sets of categorical outcomes and comparable time framings could be added to surveys. *Each* of these things will be done when the LSAC adds the 10 CBA-MI Reported Financial Wellbeing Scale items in 2020. The same items could be added to the HILDA survey. A challenge, however, is that new items will likely need to be developed for children's and adolescents' financial wellbeing. This may require trialling new candidate items in a special survey. This additional data would allow us to cover adequately components of financial capability, behaviour and wellbeing specific to children, young adolescents and emerging adults.

1. Introduction

Young people's financial situations are increasingly perilous. Absolute indicators are worsening in many countries, with the current generation of young adults being saddled with more debt and higher nondiscretionary expenses than earlier generations and experiencing lower rates of home ownership and lower net wealth (Houle 2014; Lobaugh et al. 2019). Young people are also falling behind in relative terms because of growing educational costs and soaring housing prices—especially in Australia. The dire financial circumstances that many young people face and differences in the financial situations of their parents contribute to widening lifetime wealth and income inequality (Lobaugh et al. 2019). They also contribute to delays in nest-leaving, achieving financial independence from parents, partnering, and family formation.

There's a good reason why millennials are reaching these milestones later in life: they are significantly financially worse off than previous similar-age cohorts (Lobaugh et al. 2019, p. 9).

Concerns regarding young people's financial situations motivate many existing and proposed policies and interventions. Child support requirements for non-residential parents exist because children have few resources of their own and depend on the resources of their parents. Many provisions of public assistance programs are geared toward raising children's welfare (Ribar 2017), and some programs, such as Australia's Youth Allowance program, are specifically targeted towards improving young people's financial outcomes. Laws restrict minors from entering into long-term debts and obligations because of their immature decision-making and because of the long-term consequences of these transactions. Tax-advantaged financial vehicles, including education savings accounts (e.g., "529" accounts in the United States) and minors trust accounts, are intended to promote savings and investments on children's behalf. Child development accounts (CDAs) with initial funding and subsequent contribution matching from the government have been proposed to spur asset development for children and reduce lifetime wealth inequality (Elliott 2012a). Financial education programs (McCormick 2009) and special banking products for children, such as Commonwealth Bank of Australia's (CBA's) Youth Saver and Smart Access accounts, are intended to provide children with the knowledge, habits, attitudes, and access to achieve good financial outcomes.

Low SES children may require support from federal institutions to save and build assets (Elliott 2012a, p. 10).

Despite these many concerns regarding young people's financial outcomes, we lack a universally accepted, holistic measure of their *financial wellbeing.* Adults' financial wellbeing has been carefully conceptualised. Most notably, researchers from the Melbourne Institute have collaborated with CBA to define financial wellbeing for Australian adults and to develop first-of-their-kind scale measures (Comerton-Forde et al. 2018). CBA-MI define financial wellbeing for adults as:

the extent to which people both perceive and have:

1. *financial outcomes in which they meet their financial obligations,*
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3. *control of their finances, and*
4. *financial security —*

now, in the future, and under possible adverse circumstances.

CBA-MI measure adults' financial wellbeing through two distinct, yet related, scales:

- a Reported Financial Wellbeing Scale that is formed from responses to 10 questions about whether people meet their financial obligations and have financial freedom, control, and security, and
- an Observed Financial Wellbeing Scale that is formed from five financial-record measures of people's financial net positions, spending, and payments.

No such definition nor measure exists for young people. A few studies (e.g., Rea et al. 2019; Shim et al. 2009) have attempted to construct definitions for young adults but do not distinguish their definitions from those for other adults. Sorgente and Lanz (2017) have scoped possible definitions for *emerging adults*—people who have reached the age of adulthood (age 18 or older) but are still residentially or financial dependent on their parents—but did not arrive at a definition. Even less has been done with respect to children's and adolescents' financial wellbeing. Researchers have studied many relevant financial outcomes for children and adolescents, such as access to bank accounts and savings accumulations (Angulo-Ruiz & Pergelova 2015; Clancy et al. 2016; Friedline 2012; Friedline et al. 2011; Huang et al. 2015; Kim et al. 2011; Loke et al. 2015; Otto 2013; Seuntjens et al. 2016), but have examined the measures *separately* without combining them into summative measures. More provocatively, some researchers, including Sorgente and Lanz (2017), reject the notion that financial wellbeing is meaningful for minors.

Definitions of financial wellbeing for adults and young people are likely to share many components; however, several special considerations need to be made of young people's financial wellbeing. Key areas of distinction include young people's financial dependence on their families, limited financial autonomy, developmental capacity, and financial capability. In considering how measures might be implemented, we also need to recognise the challenges associated with obtaining data from or about younger children. Each of these characteristics changes with age; accordingly, we need to distinguish among children, adolescents, and emerging adults.

This report addresses these gaps in our understanding by developing definitions and conceptual models of children's, adolescents', and emerging adults' financial wellbeing. It considers general elements of financial wellbeing—including how financial wellbeing is linked across time, how financial outcomes address personal needs, and how financial outcomes incorporate objective and subjective aspects—and evaluates these elements in light of young people's circumstances. The conceptual analyses draw on previous research on young people's financial behaviours, outcomes, and capabilities.

The report also describes and assesses measures of the financial outcomes of children, adolescents, and emerging adults that are available in four large, existing Australian data sources. We assess these measures considering the existing literature, the definitions of financial wellbeing, and our conceptual model. The four data sources are:

- the Longitudinal Surveys of Australian Youth (LSAY),
- the Longitudinal Study of Australian Children (LSAC),
- the Household, Income and Labour Dynamics in Australia (HILDA) survey, and
- the Survey of Income and Housing and Household Expenditure Survey (SIH-HES).

We see this report as an important first step towards a longer-term goal of developing and implementing measures of financial wellbeing for young Australians. The measures would make it possible to document the distribution of young people's financial wellbeing, investigate the characteristics that contribute to financial wellbeing, and evaluate policies, programs, services, and interventions that might boost financial wellbeing. All of the analyses in this report are guided by this longer-term goal.

The report's analysis begins in the next Section 2 with a review of financial wellbeing considerations drawn from studies and definitions for adults. In the following Section 3, we identify the financial outcomes that have been examined or proposed and the conceptual models that have been used in relation to children, adolescents, and emerging adults in existing research. We consider in Section 4 the elements of financial wellbeing that are and are not applicable at different ages and use this analysis to propose new definitions of children's, adolescents', and emerging adults' financial wellbeing. In Section 5, we develop a conceptual model of how parents' behaviour, young people's financial capabilities, and young people's financial behaviour contribute to young people's financial wellbeing. The model not only identifies the characteristics that are thought to affect young people's financial wellbeing but also helps to distinguish financial wellbeing from several closely related concepts. We further consider how children develop financial capability and how experiences with financial behaviour and financial wellbeing contribute to subsequent capability. In Section 6 we describe the key design features of the four Australian datasets. In Section 7, we describe the measures of children's, adolescents', and emerging adults' financial outcomes that the datasets contain and assess them based on the proposed definitions of financial wellbeing for young people. We offer recommendations for measurement and analysis in Section 8.

2. Elements of Financial Wellbeing from Studies of Adults

Relatively few studies have explicitly considered financial wellbeing for young people, but many have examined financial wellbeing for adults. The studies for adults point to several general considerations for potential definitions of financial wellbeing.

Nearly all the studies of adults indicate that financial wellbeing is multi-faceted and complex. Accordingly, conceptualisations of financial wellbeing for adults tend to have many elements. Joo (2008) has offered one of the broadest conceptualisations, which includes people's satisfaction with their financial situation, the objective status of finances, financial attitudes, and financial behaviours. Joo's conceptualisation paints a comprehensive picture of people's financial situations. However, it has a huge analytical weakness—it cannot be used to test how attitudes, knowledge, behaviours, and other financial circumstances separately contribute to financial wellbeing because it already *includes* these as components. Other conceptualisations of financial wellbeing, including the CBA-MI definition (Comerton-Forde et al. 2018), are motivated by a desire to study how changes in characteristics such as financial literacy, attitudes, and financial inclusion affect financial wellbeing. As a result, they are framed more narrowly in terms of end outcomes.

Consideration 1: A focus on end outcomes is needed if the eventual financial wellbeing measure is to be used to examine the effects of knowledge, attitudes, behaviours, access, and other financial circumstances on financial wellbeing.

Another consideration in the conceptualisation of financial wellbeing is the type of *functions* that finances perform. These include spending, borrowing, saving, paying bills and debts, insuring, and planning. Another type of functionality is how finances or financial outcomes help people by allowing them to control their circumstances and be secure. Finances also have *temporal* elements—they involve outcomes that affect us today, in the future, and in the event of unforeseen outcomes. CBA has described these elements of financial wellbeing as people's 'everyday', 'one day', and 'rainy day' outcomes.

Consideration 2: A comprehensive definition of financial wellbeing accounts for the functional and temporal elements of finances.

An implication of functionality is that financial wellbeing depends on people's contexts. People need their personal finances to do different things depending on the family, social, and economic institutions that surround them. For example, Kempson et al. (2017) conceptualised Norwegians' financial wellbeing in terms of meeting commitments, financial comfort, and financial resilience, but they omitted provisions for long-term future outcomes and retirement because of Norway's generous old-age pension system. Conceptualisations for the United States emphasise insurance outcomes because of the uneven nature of the country's health insurance system and its lack of social protections.

Consideration 3: The definition of financial wellbeing depends on context.

Conceptualisations of adult financial wellbeing have included subjective elements, objective elements, or a combination of these. Among the subjective conceptualisations, the U.S. Consumer Financial Protection Bureau (CFPB, 2015) defined financial wellbeing as having control over day-to-day and month-to-month finances, being able to absorb a financial shock, being on track to meet financial goals, and having financial freedom. Brüggen et al. (2017) argued that financial wellbeing depends on people's perceptions of current and anticipated desired living standards and on financial freedom. Prawitz et al. (2006) considered stress, satisfaction, meeting regular and unexpected expenses, and financial freedom, while Netemeyer et al. (2017) considered current money management stress and future financial security. Vlaev and Elliott (2014) included conditions of meeting expenses with funds left over and financial satisfaction. An issue with subjective conceptualisations however, is that they require someone to report on them. They also assume that the person who is reporting understands the meaning and importance of financial outcomes.

Other conceptualisations have been objective. Parker et al. (2016) characterised financial wellbeing in terms of spending, saving, borrowing, and planning outcomes. Greninger et al. (1996) offered ratios and thresholds of objective indicators. Bray (2001) focused on Australians' financial hardships, financial management problems, and financial exclusion.

Some conceptualisations blend subjective and objective elements. For Australians, Muir et al. (2017) considered domains of meeting expenses with money left over, being in control of finances, and feeling secure. Arber et al. (2014) considered the ability to make ends meet and problems with household expenditures, and Shim et al. (2009) considered satisfaction, debt positions, and the use of coping strategies.

Consideration 4: Definitions of financial wellbeing may include subjective elements, objective elements, or a combination of these.

In developing the CBA-MI definition of adults' financial wellbeing, Comerton-Forde et al. (2018) addressed all these considerations. As mentioned, CBA-MI define adults' financial wellbeing as

> *the extent to which people both perceive and have:*
>
> 1. *financial outcomes in which they meet their financial obligations*
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> 4. *financial security—*
>
> *now, in the future, and under possible adverse circumstances.*

The definition is very comprehensive. It includes functional dimensions of people meeting their financial obligations, having the financial freedom to enjoy additional consumption and other fulfilling choices, controlling rather than being controlled by finances, and having security and being free from financial anxiety. It includes temporal dimensions that involve outcomes now, in the future, and under possible adverse circumstances. It includes financial outcomes as people perceive and experience them and outcomes that can be observed in people's financial positions and transactions. Lastly, the definition was conceptualised and validated in the Australian context and is appropriate for Australian social and economic institutions. When we develop definitions for children's, adolescents', and emerging adults' financial wellbeing in Section 4, we use the CBA-MI definition as a starting point.

3. Previous Research on Young People's Financial Outcomes

3.1 Financial outcomes

Studies have examined many financial outcomes for young people but have not yet produced a universally accepted, holistic definition of their financial wellbeing. Except for some studies of emerging adults, the different elements that may contribute to financial wellbeing have been examined separately. This section reviews financial outcomes in childhood, adolescence, and emerging adulthood that studies have examined or discussed. It also points to financial outcomes that have rarely been addressed or have been considered inapplicable. Table 3.1 summarises the coverage of financial outcomes in the studies.

Table 3.1. Financial Outcomes Examined in Studies of Children, Adolescents, and Emerging Adults

Coverage	Children (less than age 12)	Adolescents (ages 12-17)	Emerging adults (age 18+)
Studies have examined:	• **Banking, assets, and savings** Savings accounts with a special focus on Child Development Accounts and college savings accounts • **Deprivations** Child poverty and hardships • **Insurance** Health insurance in US	• **Banking, assets, and savings** Majority have savings accounts • **Deprivations** Child poverty and hardships • **Insurance** Health insurance in US • **Financial management** Limited management responsibilities • **Expenses** Limited responsibility • **Financial anxiety** Worrying about family finances	• **Financial wellbeing** Apply adult measures • **Banking, assets and savings** • **Deprivations** Poverty and hardships • **Insurance** Health insurance in US • **Financial management** • **Borrowing** Student loan and credit card debt • **Financial independence** Including residential independence • **Expenses** Necessary and other expenditures • **Superannuation** Challenges accumulating balances
Inapplicable or rarely examined:	• **Financial management** • **Expenses** • **Financial anxiety** • **Responsibility for bills** • **Borrowing/debts** • **Financial management** • **Superannuation**	• **Responsibility for bills** Contributions to family expenses • **Borrowing/debts** Restrictions; informal borrowing • **Superannuation**	

Children. Researchers have examined whether children under the age of 12 have their own bank accounts. Having a bank account at young ages is associated with having one later in life (Kim et al. 2016; Friedline 2012). Although bank account ownership is not very common among children, studies from the United States suggest that most parents set aside some savings in their own accounts for their children.

Researchers have also studied Child Development Accounts and college savings accounts, which are largely managed by parents (Elliott 2012b; Huang et al. 2015; Clancy et al. 2016). A CDA experiment in Oklahoma provided an initial deposit of $1000 and incentives to make further deposits; however, families with access to these accounts had only achieved modest levels of savings. On average, these accounts held $1605 when the children were four years old and $1851 by the time they were seven (Huang et al. 2015; Clancy et al. 2016)—only a few hundred dollars more than the amounts from the initial deposits, incentives, and interest.

A focus in Australia and other countries is the rate of child poverty—that is, the percent of children who live in households with incomes below a poverty threshold. In Australia, the child poverty rate decreased from 18% in 1982 to 13% in 1996 for children under 15 years old (Harding & Szukalska 2000). Other indicators are homelessness and housing stress. The Australian Bureau of Statistics (ABS, 2018) estimated that 15,872 children under the age of 12 were homeless when the census was conducted in 2016. Rates of housing stress are higher. The Australian Institute of Health and Welfare (AIHW, 2018) estimated that 22% of Australian households with children under the age of 15 experienced housing stress in 2016. Researchers have also examined food insecurity among households with children, finding that 21% of such households in Australia and 17% of households in the United States are food insecure (Foodbank 2018; Ralston et al. 2017).

Children benefit from different forms of insurance, especially health insurance. Children's health insurance is not studied in Australia because of the universal coverage under the Medicare scheme. However, it is studied in the United States because of the country's lack of national health insurance and uneven health coverage (see, e.g., Frean et al. 2017; Howell & Kenney 2012; Wherry et al. 2016). This shows the importance of considering contextual differences between countries.

Other financial outcomes do not appear to be relevant for children. Researchers have directed little attention to children's bill-paying responsibilities and financial management behaviours, as these are typically inapplicable to children. Borrowing and debt are also inapplicable because of legal restrictions on children's activities.

Adolescence. Research indicates that a majority of adolescents in the United States have a savings account (Friedline et al. 2011; Friedline 2012; Kim et al. 2016; Elliott 2012a). Although adolescents take more control over their savings and finances than children, their savings balances tend to be modest (Loke et al. 2015).

Material deprivations and financial hardships affect adolescents (Harding & Szukalska 2000; Ralston et al. 2017). In addition, studies have found that adolescents can feel financial anxiety regarding their families' economic circumstances and ability to meet expenses (Kim et al. 2011). Housing insecurity and homelessness among adolescents is also a significant research area, as young people comprise a significant proportion of the homeless population (ABS 2018; McNamara 2015; van den Bree et al. 2009; Mallett et al. 2005).

Research on insurance for adolescents is similar to the research for younger children, with a focus on health insurance in the U.S. context. Insurance coverage, health service access and usage in the U.S. are largely determined by parental resources and behaviours, leading to inequitable outcomes (Newacheck et al. 2003).

Studies show that adolescents begin to have more say over their expenses (Lundberg et al. 2009). Despite this, adolescents' financial management responsibilities are relatively limited, as parents still make many key decisions. There has not been much research on adolescents' ability to pay necessary bills, as they are seldom assigned this responsibility in the household. Some limited evidence has shown however, that a minority (18%) of adolescents contribute to family expenses (Kim et al. 2011). As with childhood, adolescents face legal restrictions on their borrowing and debt. Seuntjens et al. (2016) found that informal debts may begin to accrue in adolescence; however, the amounts are very modest.

Although many adolescents take on work opportunities, very little academic attention has been given to superannuation or retirement savings. Some adolescents' employment arrangements involve superannuation, but little is known about their decisions and outcomes in this area. Some government online publications provide guidance and general information for adolescents regarding superannuation (Australian Securities and Investments Commission 2019).

Emerging adults. Studies on emerging adulthood have considered the full breadth of financial outcomes that are relevant to general adulthood, including measures of financial wellbeing. Sorgente and Lanz (2017) identify and review 44 studies of young and emerging adults that examine financial wellbeing in some form. Only a few studies in their review examine holistic measures. Of these, all apply measures that were developed for adults, and none develops measures specifically for emerging adults.

Researchers have generally found that most emerging adults hold savings accounts—particularly if they had an account in adolescence (Friedline et al. 2011; Kim et al. 2016). However, savings among young adults tend to be modest (Elliott 2012a).

Nondiscretionary expenditures have risen significantly among emerging adults, driven in large part by spending and borrowing for education in addition to credit card expenses (Lobaugh et al. 2019; Hoeve et al. 2014). Statistics show that 79% of 25-year-olds in the U.S. held debt in 2012, with an average balance of $23,000 (Brown et al. 2015).

The financial pressures can be challenging in emerging adulthood. Evidence among Australian university students indicates that they are less likely to believe that they are managing well financially and are more likely to borrow money from friends or family than non-students (Ryan 2014). Other researchers have examined young adults' self-reports of financial satisfaction and hardships (Cobb-Clark & Ribar 2012; Ribar 2015; Ryan 2014; Shim et al. 2009). Emerging adults frequently describe residential and financial independence as elements of financial wellbeing (Rea et al. 2019).

Health insurance coverage among emerging adults is an important topic in the U.S. A key policy development there was parents' ability to continue dependent coverage for their children up to age 25 (Sommers et al. 2013).

Some studies have also considered the retirement savings and superannuation outcomes among younger adults. Many young people lack an understanding or appreciation of superannuation and have poor engagement with their superannuation funds (Ali et al. 2015). With relatively few studies in this area however, not much is known about young Australians' superannuation decisions and outcomes (Parrish & Delpachitra 2012).

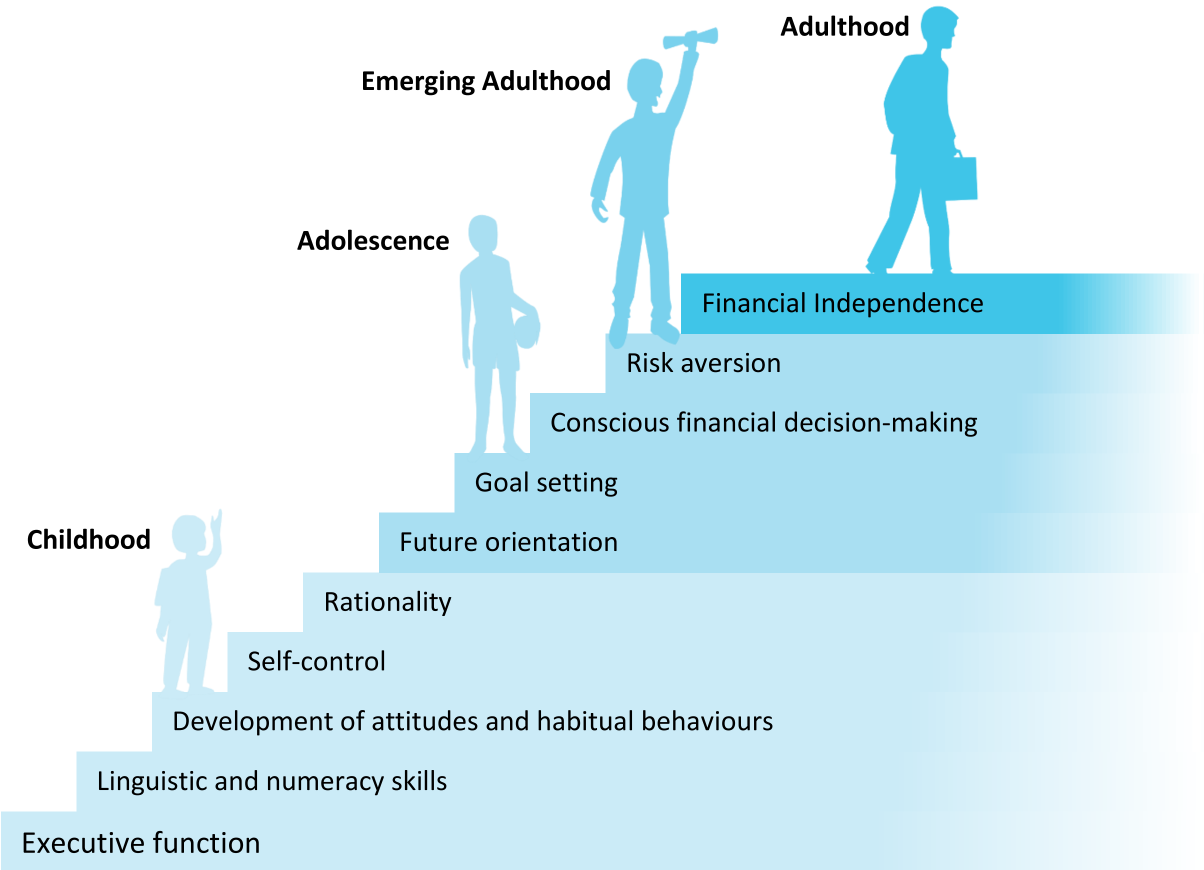
3.2 Conceptual models

Researchers have framed their studies of children's, adolescents', and emerging adults' financial outcomes in terms of different theoretical, or conceptual, models of young people's and families' behaviour. The models span many research disciplines, including developmental psychology, family relations, sociology, and economics. Although the models emphasise different aspects of behaviour and circumstances, there are many overlaps, and several should be viewed as alternative ways of organising the relationships, rather than as mutually exclusive or competing explanations.

<u>Developmental theories</u>. Given the focus on young people, researchers frequently draw on theories from developmental psychology. These theories describe how and when general cognitive, social, linguistic, behavioural, and other abilities manifest in young people, and the insights can be related to the development of young people's financial capability and behaviour. The theories describe what children can and cannot do well at different ages and help identify when different types of behavioural or skills interventions are likely to be effective. For example, Drever et al. (2015) emphasise that the development of executive function—the ability to focus on a problem and to marshal and manage cognitive resources to solve that problem—as a critical skill in early childhood, that the development of social and linguistic skills facilitates family socialisation in later childhood, and that additional cognitive skills and financial opportunities contribute to active financial learning in adolescence. Friedline (2015) considers how general developmental outcomes contribute to economic agency at different ages. Otto (2013) examines skills and abilities that facilitate economic socialisation towards savings, and Sutter et al. (2018) consider the development of rational and strategic behaviours, risk preferences, and social preferences that are relevant to financial outcomes. We list and illustrate the key developmental outcomes for young people's financial capability and behaviour in Figure 3.1.

<u>Life-course theory</u> extends the developmental lens to a person's entire life-span (Elder 1998). It considers the age-normed milestones that people face and considers how outcomes around these milestones or the timing of their achievement affect subsequent life trajectories. Life-course theory provides a natural way to extend the developmental approach of childhood and adolescence into emerging adulthood. The theory also carefully considers the importance of household, community, social, and other contexts. Houle (2014) has applied the life-course approach to understand changes in young adults' indebtedness across cohorts. Shim et al. (2009) take a similar approach to develop a general model of young adults' financial wellbeing.

Figure 3.1 Developmental Stepping Stones to Financial Capability and Behaviour



Other psychological theories. In addition to general developmental approaches, researchers have considered more specialised psychological theories. Angulo-Ruiz and Pergelova (2015) propose an empowerment theory approach that focuses on young people's actual and perceived control over financial matters and their own behaviour. Jorgensen et al. (2017) examine control but also consider attachment insecurities, which stem from the early bond formed between children and their parents. Seuntjens et al. (2016) focus on greed as a motivator for adolescent financial behaviour.

Financial capabilities. Many researchers have looked more narrowly at young people's financial capabilities—that is, at *the knowledge, skills, attitudes, and personality traits that help people achieve financial wellbeing*. Because an element of financial capability is financial knowledge, many researchers have considered the roles of financial education and literacy classes (Brown et al. 2015; Entorf & Hou 2018; Lusardi & Mitchell 2014; McCormick 2009). As Drever et al. (2015) point out, literacy interventions are more likely to be successful when young people not only have the cognitive tools to understand economic problems but also the need for that knowledge and opportunities to use it. Similar insights have led researchers, including Elliott (2012b), Friedline et al. (2011), Friedline (2012), Huang et al. (2015), Kim et al. (2016), Loke et al. (2015), and McCormick (2009), to expand the definition of financial capability for young people to include an additional component of *access* along with the components of knowledge, skills, attitudes, and personality traits. They argue that access makes literacy lessons more salient, provides a practical application of literacy lessons, and allows for experiential learning and the development of good habits.

Family socialisation. Researchers have also examined the role that families play in shaping young people's financial capability and behaviours. Processes of family socialisation, which have been discussed and examined by Elliott (2012a), Friedline et al. (2011), Gudmunson and Danes (2011), Jorgensen et al. (2017), Kim et al. (2011), and Rea et al. (2019), lead to the intergenerational transmission of financial capabilities through active strategies of family instruction and discussion, role-modelling, and observable financial experiences.

Economic theories. Economists apply game-theoretic, rational-choice models to their analyses. Models proposed by Cobb-Clark and Gørgens (2014) and Lundberg et al. (2009) assume that parents and children each make rational choices to obtain financial ends. They model interactions through non-cooperative 'dictator' games in which parents are 'first movers' who dictate allocations of resources to children and children are 'second movers' who take those allocations as given and then undertake actions.

Institutional theories. Institutional and social contexts feature in many conceptual approaches, especially life-course theories, but some researchers place these at the forefront of their modelling. Elliott (2012a) takes an institutional approach to describe how children's access to financial services and products, information structures, economic and legal incentives, bureaucracy, social expectations, legal restrictions, and security provisions affect economic socialisation.

3.3 Characteristics that influence young people's financial outcomes

Our review of the literature thus far has considered both the relevance of financial outcomes for young people and conceptual models of their financial capability and financial wellbeing. In the remainder of this section we review the empirical research into the determinants of and influences on young people's financial outcomes.

Age. Research has documented the developmental processes associated with financial behaviour (Drever et al. 2015). While the ability and willingness to save money may surface at age six, across ages 6-12 many children do not fully understand the functions and purpose of banking (Friedline 2015; Otto 2013). A future-oriented time perspective, feelings of self-efficacy, and more conservative risk preferences develop during adolescence however, leading to relatively sophisticated savings behaviours (Friedline 2012; Sutter et al. 2018). During adolescence, young people also gain greater decision-making autonomy from their parents, leading to a wider variety of saving and spending decisions (Lundberg et al. 2009). By reaching the age of majority (18 years old in many countries), emerging adults can begin to borrow and buy insurance for themselves, further expanding their responsibilities in managing their finances and outcomes (Hoeve et al. 2014; Kim et al. 2012).

Gender. Studies have considered differences in behaviour and outcomes by gender. Particularly in households with traditional gender attitudes, parents appear to grant male adolescents autonomy earlier (Bumpus et al. 2001). Studies of debt and borrowing indicate that by emerging adulthood, women tend to have larger student loans and face more financial problems than men (Hoeve et al. 2014; Kim et al. 2012).

Race and ethnicity. Studies have also examined differences between young people with different racial, ethnic, and cultural backgrounds. Researchers have found that minority youth in the U.S. were more likely to be unbanked and build up debt (Kim et al. 2012; Kim et al. 2016; Elliott 2012a). Differences by race and ethnicity are also evident in financial literacy, with African Americans and Hispanics having lower average scores of financial knowledge (Lusardi & Mitchell 2014).

Family socioeconomic status. The socioeconomic status of the household also affects young people's financial outcomes and developments. Parents tend to share their relative economic (dis)advantage with children, which has been observed in adolescents' savings and debt levels (Friedline 2012; Hoeve et al. 2014; Kim et al. 2012). This may not only affect access to resources, but also the young person's attitudes and risk preferences (Sutter et al. 2018). The availability of resources in the parental home can also affect when adolescents are permitted to make their own decisions, and when emerging adults become economically independent (Lundberg et al. 2009; Cobb-Clark & Gørgens 2014).

Policies and programs. Policy interventions to improve young people's financial outcomes have also been carefully investigated. This includes Saving for Education, Entrepreneurship, and Downpayment (SEED) demonstration programs in the United States, which provided CDAs to households to promote children's savings outcomes (Friedline et al. 2011; Elliott 2012b.; Okech 2013; Huang et al. 2015; Clancy et al. 2016). Adolescents' savings were also addressed by the MyPath Savings pilot program (Loke et al. 2015), which provided savings accounts and financial counselling at a 'teachable moment' for disadvantaged youth. Economic experiments have also sought to understand the effects of risk aversion, inequality aversion, and competitiveness among children (Sutter et al. 2018).

Financial literacy. Along with efforts to improve financial behaviours, policy initiatives have also addressed financial knowledge and attitudes (McCormick 2009; Willis 2011). Studies have shown very low financial literacy scores among high school and college students in the U.S. (Lusardi & Mitchell 2014) and have also indicated that young Australians have a weak understanding of superannuation (Ali et al. 2015; Parrish & Delpachitra 2012). Education efforts are effective in improving short-term financial knowledge but have rarely been shown to change long-term financial behaviour (Entorf & Hou 2018). Researchers have instead suggested that the effects of financial education may depend on the content that is taught, as some classes appear to worsen debt outcomes among youth (Brown et al. 2015).

Own resources. Studies have drawn a clear association between a person's own resources and his or her financial outcomes and wellbeing. Emerging adults who face relative economic disadvantage report greater financial hardships and reduced financial satisfaction, despite receiving government income support (Ryan 2014). In facing tightening economic constraints, recent cohorts of emerging adults are less likely (less able) to take mortgages and build wealth via home ownership (Lobaugh et al. 2019).

Attitudes and psychological traits. Financial attitudes and psychological characteristics are also relevant to financial behaviours. Attitudes that favour risk and debt—either among adolescents or their parents—are associated with more debt (Hoeve et al. 2014). Greed among young people is associated with greater expenses and debt and lower levels of savings (Seuntjens et al. 2016). Adolescents who are more impulsive appear to gain decision-making autonomy from their parents sooner, which may indicate lessened parental influence over financial behaviours (Lundberg et al. 2009).

Financial socialisation. Parents provide important financial socialisation for children, both by instructing and by role-modelling their own financial behaviours (Drever et al. 2015). Researchers show that parents who share positive relationships with emerging adults and consequently communicate with them about financial matters contribute positively to their financial wellbeing (Jorgensen et al. 2017).

Researchers have examined a wide variety of factors that influence young people's financial outcomes. A finding often emphasised among existing studies is that parents determine many financial outcomes for their children and can also influence their developmental progress. Since parental influences and other key factors tend to change as young people mature from childhood through to emerging adulthood, definitions of financial wellbeing ought to consider the relevant financial outcomes in each life stage.

4. Definitions

Drawing on the general elements of adults' financial wellbeing that we discussed in Section 2 and the findings from studies on young people from Section 3, we now consider how to define financial wellbeing for children, adolescents, and emerging adults. Many elements of adults' financial wellbeing are applicable to young people. For both groups, finances affect outcomes in the present, in the future, and under possible adverse circumstances. Avoiding deprivations and hardships is important, and savings and wealth are valuable. However, several financial outcomes for adults are not directly applicable to younger people, especially the ability to take on debt and the responsibility for paying bills among children and adolescents. Other important characteristics change with age, including young people's cognitive skills, behavioural processes, and financial capability. Although young people and adults share many of the same needs, others may differ—especially with respect to young people's developmental needs. A final but critical distinction is young people's financial dependence on their families. Young people can contribute to and affect their own financial wellbeing, but families will have much more influence on these outcomes for children and adolescents and substantial effects for emerging adults.

To analyse these elements more systematically, we have listed the different components of the CBA-MI definition of adult financial wellbeing in the first column of Table 4.1 and provided additional explanations of the components in the second column. In the next three columns, we describe the applicability of each component to children, adolescents, and emerging adults, respectively. We indicate elements that are fully or mostly applicable in gold and elements that are inapplicable or only partly applicable in blue.

For each group of young people, financial wellbeing should be considered as an extent or continuum rather than as a binary 'either/or' outcome. We expect that there are distinguishable high and low levels of financial wellbeing but also that there are smaller, marginal differences in financial wellbeing.

Children's, adolescents', and emerging adults' financial wellbeing are likely to have subjective and objective components. However, age-related differences in cognitive skills, the understanding of economic behaviours, and financial capability will affect children's and adolescents' perceptions of outcomes and young children's ability to report them.

We divide the financial obligations component of adult financial wellbeing into two parts: first, meeting the person's basic needs and second, managing bills, expenses, and debts. The first part, which we also associate with avoiding deprivations and hardships, applies to all people regardless of age. Young people, however, differ from adults in having these needs met by others instead of being primarily responsible themselves. In addition, young people have unique needs with respect to their cognitive, emotional, physical, social, and financial capability development. These developmental needs are age-sensitive—not meeting them or missing developmental milestones at particular ages may hinder subsequent developmental outcomes. Addressing these needs requires inputs of schooling, health care, and other services, activities, and goods.

We similarly split the next element of financial wellbeing into a sub-component involving 'financial freedom to make choices', or financial autonomy, and a sub-component involving the enjoyment of consumption. The first part is not applicable to children and only somewhat applicable to adolescents. Children have few independent resources and little autonomy. These increase with age, but Bumpus et al. (2001) and Lundberg et al. (2009) report that autonomy is still limited for many adolescents. The second sub-component involving enjoyment of consumption is applicable across different age groups. For emerging adults, we modify discretionary consumption to include personal developmental investments, especially as further education is optional but common.

For the same reasons as those given for financial autonomy, the next component of adult financial wellbeing involving control over finances differs by young people's life stages. Specifically, this seems to have little relevance for children, some relevance for adolescents, and more relevance for emerging adults.

Although many financial matters may be in their families' hands, children and adolescents are affected by financial and other risks. Therefore, the financial security component of financial wellbeing applies at all ages. As we mentioned though, children's and adolescents' ability to perceive and comprehend risks and future outcomes may be limited. This may affect their ability to report on financial security.

Finally, the temporal aspects of financial wellbeing—outcomes in the present, in the future, and under adverse possible circumstances—are applicable to all age groups.

Table 4.1. Elements of Financial Wellbeing for Adults, Children, Adolescents and Emerging Adults

CBA-MI adult definition	Explanation	Children (less than age 12)	Adolescents (ages 12-17)	Emerging adults (age 18+)
The extent to which people	FWB is a continuum, represented by a continuous variable	**Applicable**	**Applicable**	**Applicable**
both perceive and have	FWB has objective components and subjective, personal valuations of the objective components	Future valuation and ability to report are limited	Future valuation limited in younger adolescents	**Applicable**
1. financial outcomes in which they meet their financial obligations	a. meet minimum needs; avoid deprivation	**Applicable but with developmental needs**	**Applicable but with developmental needs**	**Applicable**
	b. manage and pay bills, including debts	Seldom responsible for bills or debts	Little responsibility	Some responsibility
2. financial freedom to make choices that allow them to enjoy life	a. autonomy over expenditures	Greatly limited	Limited	**Applicable**
	b. enjoying consumption	**Applicable**	**Applicable**	**Applicable but includes schooling and other investments**
3. control of their finances, and	Has personal and situational control	Little objective control; may value family's control	Limited personal control; may value family's control	Substantial but not full control
4. financial security—		**Applicable but with limited information**	**Applicable but with limited information**	**Applicable**
now, in the future, and under possible adverse circumstances	Consider current outcomes and expected, uncertain future outcomes	**Applicable**	**Applicable**	**Applicable**

Definitions

With these considerations, we define children's, adolescents', and emerging adults' financial wellbeing as follows.

We define **children's financial wellbeing** as the extent to which children both perceive and have:

1. financial outcomes that meet their needs and further their development
2. financial outcomes that allow them to enjoy life, and
3. financial security—

now, in the future, and under possible adverse circumstances.

The definition of children's financial wellbeing is adapted from the CBA-MI definition of adult financial wellbeing. The definition omits describing children's actions and control in financial outcomes to reflect children's limited resources, agency, and responsibility and to allow for family contributions to these outcomes. It describes needs instead of obligations. It also includes development, which can include physical, social, cognitive, emotional, and financial capability development.

We define **adolescents' financial wellbeing** as the extent to which adolescents both perceive and have:

1. financial outcomes that meet their needs, that further their development, and in which they meet their age-appropriate financial obligations
2. financial outcomes that allow them to enjoy life
3. age-appropriate control of their finances, and
4. financial security—

now, in the future, and under possible adverse circumstances.

This definition is also adapted from the CBA-MI definition of adult financial wellbeing. It omits describing adolescents' actions in some outcomes because of adolescents' limited resources, agency, and responsibility and to allow for family contributions. It modifies elements regarding financial obligations and financial control to be age-appropriate. It also includes development.

We define **emerging adults' financial wellbeing** as the extent to which emerging adults both perceive and have:

1. financial outcomes in which they meet their personal financial obligations
2. financial freedom to make choices that allow them to enjoy life and further their development
3. control of their finances, and
4. financial security—

now, in the future, and under possible adverse circumstances.

This definition is nearly the same as the CBA-MI definition of adult financial wellbeing. It is adjusted to include a limited set of personal financial obligations rather than a general set of financial obligations because of emerging adults' financial dependence on their families. It also includes choices to further their development to reflect educational investments and other personal investments.

5. Conceptual Model

In addition to conceptualising what young people's financial wellbeing *is*, we also conceptualise *how their financial wellbeing is determined*. We do this through a conceptual model that describes the relationships between the characteristics and circumstances of a young person and his or her financial wellbeing. The model helps us understand the properties of young people's financial wellbeing—for instance, how we would expect financial wellbeing to differ between young people with different levels of financial knowledge or from wealthier or poorer families. The model also helps us distinguish young people's financial wellbeing from the conditions and behaviours that contribute to it.

Assumptions. Our conceptual model is based on a simplified and abstract description of young people's and parents' financial behaviour. To begin, we distinguish between the young person, who we refer to as the 'child', and his or her parents. We divide the child's lifetime into separate periods (for example, years) starting with the present period and continuing into the future. In each period, the child and parents care about the amounts of goods and services that the child can consume and use. The parents also care about the amounts of goods and services that they can consume. We assume that all the goods and services are interchangeable so that we only consider the total expenditures on them (it is possible to distinguish between necessities and luxuries, perishable goods and capital goods, and so on). We assume that the future is uncertain; good and bad events are possible, but people do not know whether or when those events will occur.

The child and parents begin each period with their own stocks of net wealth that were obtained in earlier periods. Because of legal restrictions on borrowing, minor children's net wealth can never be negative. However, the parents' wealth and adult children's wealth can be negative if they have borrowed more money than they hold in assets. The child and parents each receive a return on positive net wealth each period or pay interest on negative net wealth. The child and parents may also receive other non-wealth income each period, such as earnings or government payments.

With their resources from wealth and income, minor children can spend or save—spending adds to consumption now, while saving adds to net wealth and thereby enables spending in the future. Parents and adult children have more options—besides spending and saving, they can also borrow and insure. Borrowing adds to consumption now but decreases wealth and spending in the future; insuring reduces consumption now but helps to maintain consumption in the future if a bad event happens.

In this model, the parents' and child's financial behaviours—parents' and adult children's spending, saving, borrowing, and insuring and minor children's spending and saving—are the proximate, or direct, ways that the parents and child affect the child's financial wellbeing. We assume that parents and older children make decisions about their behaviour in light of their influence on current and future outcomes. Their behaviours also depend on other behaviours and characteristics.

First, parents' and children's financial behaviour may influence each other. Parents may provide children with resources, such as an allowance, that children can allocate towards spending or savings. Parents and children may each adjust their own expenditures in light of the other's expenditure. Second, children's financial behaviour will be influenced by their own financial capability, which includes their financial knowledge and understanding, financial attitudes, cognitive skills, and psychological traits. Children's financial capability may also affect their perception and understanding of financial wellbeing.

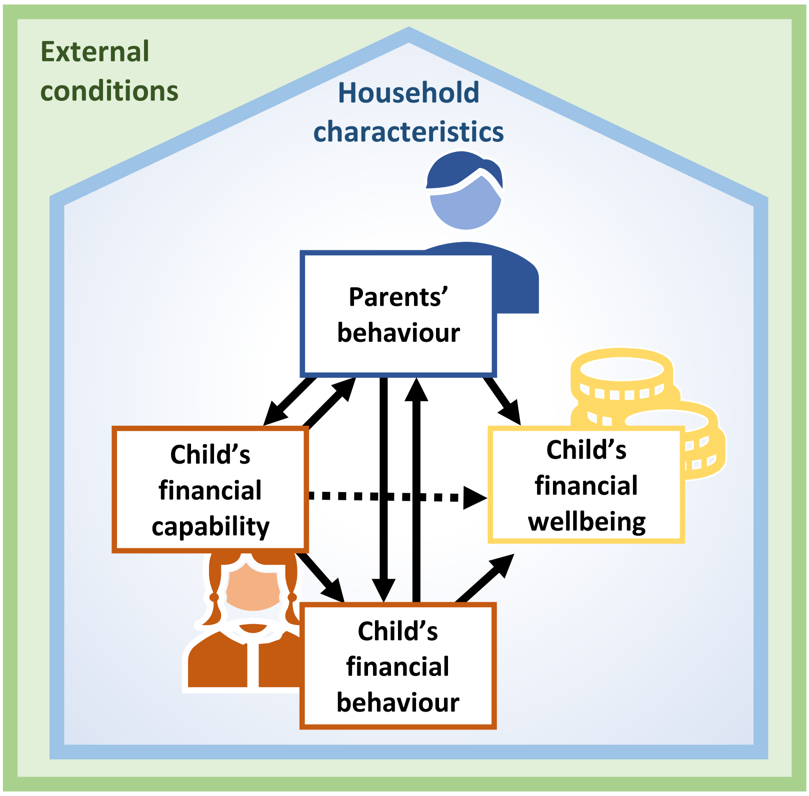
We also consider parents' influence on their child's financial capability. Parents actively influence children's financial capability through financial socialising behaviours, such as instructing them or talking to them about financial behaviour and sharing financial attitudes. Parents also indirectly influence children's financial capability through their own financial behaviour through role modelling; this role modelling can be passive or intentional. Because these approaches can be responsive to children's financial capabilities, the latter may influence parental behaviours.

Finally, all these processes occur within a familial and household context and within a larger environmental context. The household context includes all the other characteristics of the household and its members, including their economic and material resources, personal capabilities, needs, preferences and attitudes. Resources and capabilities expand parents' and children's opportunity sets and increase their ability to achieve financial wellbeing. Needs set a minimum level on expenditures; higher needs generally lead to lower levels of financial wellbeing. Preferences and attitudes shape parents' and children's valuations of outcomes; they can also directly influence behaviour.

Outside the household is an external or environmental context formed from community, social, societal, institutional, and economic characteristics. These include economic conditions that affect the availability of financial resources, social supports that can provide other resources, social norms that influence preferences and attitudes, public programs and social insurance that can protect households from negative events, the legal framework that affects households' and others' behaviour, and access to financial products and services.

<u>The relationships at a given point in time</u>. Figure 5.1 shows the relationships of the child's own financial behaviour, the parents' (financial and socialisation) behaviour, the child's financial capability, other characteristics of the child and child's household, and conditions external to the household with the child's financial wellbeing *within a given period of time*. The dashed arrow connecting the child's financial capability and the child's financial wellbeing reflects how the *perception and understanding* of financial wellbeing depends on the child's financial capability.

Figure 5.1. Conceptual Model of Children's Financial Wellbeing in One Time Period



We show the direct relationships between the parents' and the child's behaviours and financial wellbeing in the centre of the diagram. We place these inside a figure of a household to indicate that household characteristics affect all the processes and outcomes inside that household. Thus, they indirectly affect children's financial wellbeing through their influence on parents' and children's behaviour and also directly affect children's financial wellbeing. The household is placed inside a box labelled 'External conditions' to indicate that these conditions affect everything within. The figure shows the directions of relationships but not the strength of the relationships. For instance, young children's influence on their own financial wellbeing may be negligible, while their parents' influence may be very large. Conversely, the influence of emerging adults' behaviour on their financial wellbeing may be much more substantial than the influence of their parents' behaviour. Parents may be more active in the financial socialisation at some ages and less active at others. Determining the strength of the relationships is a matter for empirical research.

<u>Relationships across time</u>. Figure 5.1 shows the relationships within a period of time, but financial wellbeing is also determined over time. The definitions of financial wellbeing all indicate its relevance for present and future outcomes. Also, our conceptual model considers outcomes in the present and future. There are many linkages over time. Savings and wealth that are created in the present become resources and increase opportunities in the future. Debts and contracts that are incurred in the present create repayment obligations in the future. An insurance policy that is taken out today provides financial protection through the duration of its term. This further implies that past decisions and previous financial wellbeing affect current financial wellbeing. Many people who describe their finances as 'controlling' them are feeling the pinch of previous financial outcomes.

We depict these relationships over time in Figure 5.2. The top part of Figure 5.2 shows our within-period model for children' financial wellbeing at a given age *t*. The bottom part of the figure shows the within-period model for the next age, *t* + 1. To make the figure readable, we have lightened the shading on the arrows for the relationships within each period, even though we continue to assume that those relationships exist.

The relationship between the child's financial wellbeing at age *t* and the family's behaviour and the child's outcomes at age *t* + 1 is shown by the arrows from the top part of the figure to the bottom part. As we discussed, the child's financial wellbeing at one point in time affects the resources in the next point in time and thus the child's financial wellbeing. As we discuss below, the child's experiences with financial wellbeing at one point in time also influence the child's subsequent financial capability and thus indirectly affect subsequent financial wellbeing. We show this with the arrow from the child's financial wellbeing at time *t* to the child's financial capability at time *t* + 1. Figure 5.2 only shows the relationship over time from ages *t* to *t* + 1, but there would also be relationships from previous periods (e.g., from ages *t* – 1 to *t*) and in future periods (from ages *t* + 1 to *t* + 2).

We can also consider children in a developmental context in which their skills, capabilities, and other attributes change over time as they age—specifically, we can consider children's financial capability. A simple model of development of a skill or capability (see Cunha & Heckman 2007) assumes that its level at one point in time depends on

- its level from a previous period, which sets a baseline level of the skill or capability,
- learning from previous experience, and
- new learning or inputs.

Applying this to the child's financial capability, financial capability at age *t* + 1 depends on

- the parents' socialising and financial behaviours within the period, which we have already discussed,
- the child's financial capability developed through age *t*, and
- the child's experiences with financial behaviour and financial outcomes from age *t*.

We show these relationships in Figure 5.3. As with the previous figure, the top part of Figure 5.3 depicts the within-period relationships between the child's circumstances and the child's financial wellbeing at age *t*. The bottom part shows the within-period relationships at age *t* + 1. The developmental relationships are shown through the arrows across periods from the child's financial capability, financial behaviour, and financial wellbeing at age *t* to his or her financial capability at age *t* + 1 and through the arrows within the period from the parents' socialising and financial behaviours to the child's financial capability at age *t* + 1. As with the previous figure, there would also be similar relationships with periods before age *t* and after age *t* + 1.

As Cunha and Heckman (2007) have discussed, an important implication of this type of process is that children's financial capabilities at any age will be associated with their entire life history of circumstances and experiences up to that age. Another implication is that children's experiences with financial behaviour and the outcomes of those behaviours, including their financial wellbeing, contribute to their financial capability. Therefore, financial outcomes not only have a direct wellbeing impact, but they also have an indirect impact on subsequent wellbeing through the development of financial capability.

Figure 5.2. Effect of Children's Financial Wellbeing over Time

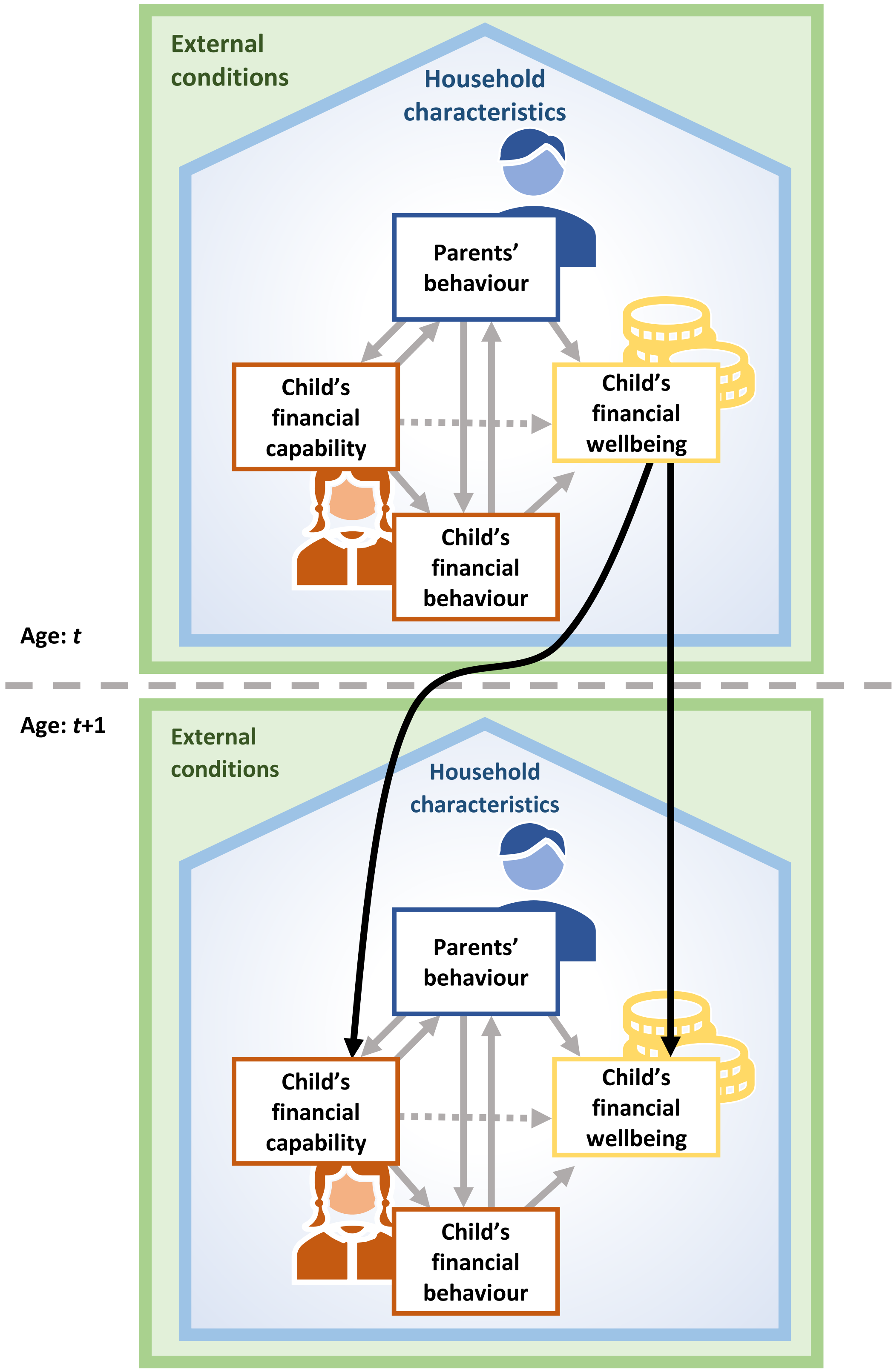
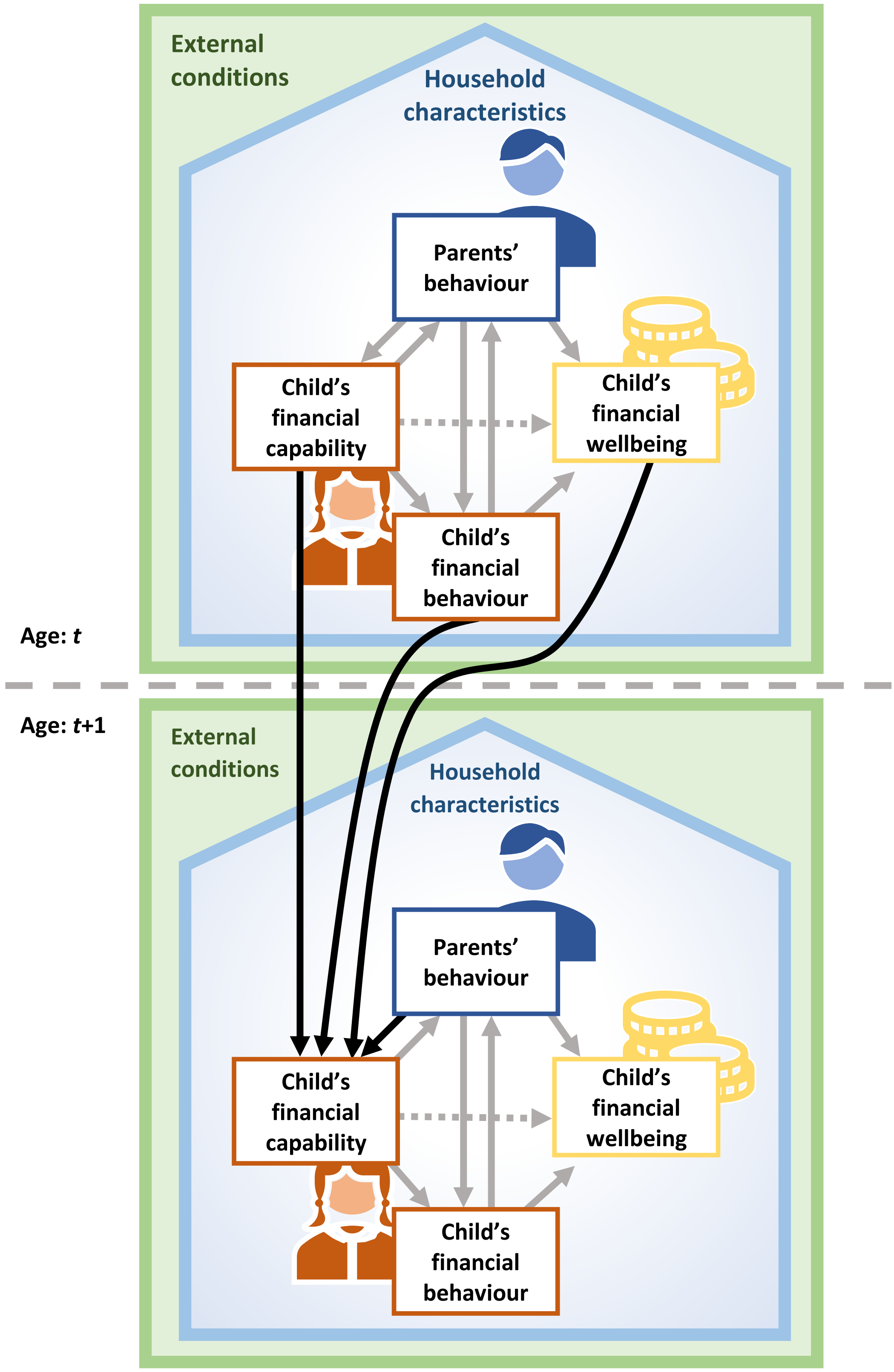


Figure 5.3. Developmental Model of Children's Financial Capability from Ages *t* to *t* + 1



6. Descriptions of Four Australian Social Surveys

In this section, we provide brief summaries of the sample populations and organisation four large Australian social surveys that obtain information on young people's financial outcomes:

- the Longitudinal Surveys of Australian Youth (LSAY),
- the Longitudinal Study of Australian Children (LSAC),
- the Household, Income and Labour Dynamics in Australia (HILDA) survey, and
- the Survey of Income and Housing and Household Expenditure Survey (SIH-HES).

Two of the surveys—the LSAY and LSAC—focus on young people and collect data directly from them, while the two others—the HILDA survey and SIH-HES—are general population surveys that ask questions of broader age groups.

6.1 The Longitudinal Surveys of Australian Youth

The Longitudinal Surveys of Australian Youth follow cohorts of young Australians annually over a ten-year period, from their mid-teens to mid-twenties, as they move through school to further study, work and beyond (see https://www.lsay.edu.au/ for an overview of the study and key documentation). Six cohorts of young Australians have been followed. The first consisted of approximately 14,000 Year 9 students in 1995 who were followed until 2006. Later cohorts with comparable numbers of students were surveyed starting in 1998, 2003, 2006, 2009 and 2015. Data on the last two cohorts are still being collected.

LSAY has an initial schooling-based focus with participants undertaking achievement tests and answering questions about their experience of schooling, before being asked in later years about their transition through further education and training into the world of work, income, housing, family formation, and adulthood.

6.2 The Longitudinal Study of Australian Children

The Longitudinal Study of Australian Children is a multi-informant survey that has followed the families of two cohorts of Australian children every two years since 2003, when the cohorts were aged 4-5 years and 0-1 year, respectively (see https://growingupinaustralia.gov.au/ for an overview of the study and key documentation). The first cohort is known as the Kindergarten cohort, while the second is known as the Birth cohort. The starting samples were about 5,000 children in each cohort.

For each cohort, the LSAC tracks children's development and life-course trajectories through interviews and observations of the focal children, interviews with their parents and teachers, and administrative health, education and government welfare information. It aims to investigate the effects of children's social, economic and cultural environments on their wellbeing and development over time. It has collected information on family economic circumstances, parental living arrangements, siblings, maternal and child health, school environment, and many cognitive and other developmental outcomes. From wave 8 in 2018 when children in the Kindergarten cohort were 18-19 years old, the focus of the data collection moved from their primary parent to the young person directly. For the Birth cohort, this transition will occur in wave 10.

6.3 The Household, Income and Labour Dynamics in Australia survey

The Household, Income and Labour Dynamics in Australia survey is a national longitudinal survey that began with 19,914 people in 7,682 Australian households in 2001 and has subsequently followed those people and their families in annual interviews (information about the survey can be found at https://melbourneinstitute.unimelb.edu.au/hilda). The survey currently covers more than 18,000 Australians. Wilkins and Lass (2018) summarise results in major research domains such as family life, economic wellbeing, the labour market, employment, self-employment, education, and cognitive abilities.

Each wave of the HILDA survey collects information through household interviews and through personal interviews and self-complete questionnaires for every household member aged 15 years or older. The HILDA survey covers standard demographic background information and topics including education, income, employment, and health across subjective and objective measures. Survey respondents report on a full set of economic and other outcomes, including financial outcomes. Children aged 0-14 are covered by the household context even though they are not directly surveyed.

6.4 The Survey of Income and Housing and Household Expenditure Survey

The Australian Bureau of Statistics has conducted its Survey of Income and Housing in 2002, 2003, 2005, 2009/10, 2011, 2013, and 2015 and included the Household Expenditure Survey in 2003, 2009, and 2015 (more information about the survey is available at https://www.abs.gov.au/ausstats/abs@.nsf/mf/6503.0, and an overview is given by Taylor 2018). The SIH-HES are national, cross-section surveys with samples of approximately 13,700 households in 2003, 17,900 households in 2009, and 19,200 households in 2015. The surveys provide comprehensive information on financial outcomes for households as a whole, including their sources and amounts of income, assets, debts, child-care and housing situations, expenditures, and financial stresses. However, the surveys provide limited information about the finances of individual household members. Thus, they can inform us about young people's households and household contexts but not about their personal financial outcomes.

7. Financial Outcomes in the Four Australian Social Surveys

In this section, we provide detailed information on the financial outcomes available in each of the four surveys. We do not deal explicitly with the availability of information on the other characteristics that have been found in the literature to influence young people's financial outcomes, though we note that all the data sets cover many demographic and economic characteristics.

7.1 The Longitudinal Surveys of Australian Youth

Financial outcomes data available from LSAY cohorts are summarised in Table 7.1. Information in the table is drawn principally from the National Centre for Vocational Education Research (NCVER, 2019) (the LSAY variable listing and metadata summary are available at https://www.lsay.edu.au/publications/search-for-lsay-publications/2621). The table lists the financial outcomes in the left-hand column and the ages at which the associated data items were collected for each survey cohort in the subsequent columns. For example, the first row indicates that the LSAY asked about respondents' satisfaction with the weekly money they received from around ages 16 through to 25 years for the Y1995 cohort and from ages 16 or 17 onwards for most of the other cohorts. The table also indicates that measures of income from work and government payments have been collected in most waves of LSAY, allowing us to place respondents' financial outcomes in some context.

The notes at the bottom of Table 7.1 point to Appendix Table A1 where more detailed information on the specific data items is provided, including the wording of questions, the response categories available to respondents, and the calendar years when the questions were asked.

Several features of the financial outcome data from LSAY are clear from the table. First, the LSAY collects only a few financial indicators, and the coverage of issues is limited in scope. Respondents' satisfaction with their living standards has been collected since about age 16 or 17 years for most cohorts, with experiences of hardship/deprivation by respondents captured from about age 19 or 20 years, along with information on experiences with saving and the repayment of credit card debt and respondents' overall sense of how they are managing financially. Second, once introduced for a cohort, these financial outcomes are collected consistently until respondents reach age 25 years.

What is not evident from Table 7.1 but is covered in the detailed appendix table, is that questions about respondents' ability to save and its frequency, along with repayment of credit card debt, do not include absolute magnitudes. Instead, respondents provide information about 'frequency' and 'ease'. The LSAY lacks other important information, such as the possession or balances of savings accounts and many other financial behaviours.

In addition to the financial variables, the LSAY collects information on living arrangements annually and whether individuals are accumulating Higher Education Contribution Scheme debts while studying, issues that have been studied in the international financial outcomes literature. The latter seems less of an issue in Australia than many other countries, given the uniform annual debt amounts across institutions and the contingent repayment arrangements, involving deferred repayments through the income tax system.

Given the ages of respondents, it is clear that the LSAY data would not support any analysis of child or early adolescent financial outcomes and only very limited analysis of adolescents by age 17 years. Nearly all the financial outcome data is collected from young people as they reach the emerging adult years, but this content is also limited. The LSAY is a valuable resource for studying some outcomes in late adolescence and emerging adulthood, but is not strongly suited for developing overarching, summative measures of financial wellbeing

Table 7.1 Summary of Financial Outcomes in the LSAY

Concept	Cohort					
	Y95[a]	Y98[a]	Y03	Y06	Y09[b]	Y15[b]
Financial satisfaction						
Satisfaction with money each week	16-25	16-25	17-25	17-25	17-23	–
Satisfaction with standard of living	16-25	16-25	17-25	17-25	17-23	–
Managing financially	21-25	18-25	20-25	19-25	19-23	–
Saving experiences						
Ability to save and frequency of saving	21-25	18-25	20-25	19-25	19-23	–
Experiences of hardship/deprivation						
Experiences of hardship	21-25	18-25	20-25	19-25	19-23	–
Credit card usage						
Repayment of credit cards	21-25	18-25	20-25	19-25	19-23	–
Income						
Derived average weekly pay[c]	14-25	14-25	15-25	15-25	15-23	15-17
Receipt of Government payments/benefits[c]	16-25	16-25	16-25	16-25	16-23	17

Notes: Information from NCVER (2019). Please see Appendix Table A1 for detailed information on questions and response values.
[a] These were Year 9 grade-based cohorts. Age shown is for the most common age in the cohort.
[b] Surveys of the Y2009 and Y2015 cohorts are ongoing. Data are currently available from the 2017 and earlier surveys, including results through age 23 for the Y2009 cohort and age 17 for the Y2015 cohort. Several financial outcomes have not yet been asked of the Y2015 cohort.
[c] NCVER provide derived income and payments variables. Take home pay is recorded in Wave 1, gross pay is recorded in subsequent waves.

7.2 The Longitudinal Study of Australian Children

Financial outcomes data available from LSAC Kindergarten cohort are summarized in Table 7.2 (information in the table is drawn from the Australian Institute for Family Studies, AIFS, 2019) and the LSAC data dictionary available at https://growingupinaustralia.gov.au/data-and-documentation/data-dictionary/downloads). The structure of the table is different from Table 7.1 and is designed to be informative about the concepts asked about, when they are asked, and whether the young person or their parents answered the questions. We shade cells in the table with a darker colour if the young person answered the question, a lighter colour if the parents answered it, and with a hatched pattern if both were asked overlapping questions. Data extending up to wave 7 have been currently released, and fieldwork for wave 8 has recently concluded.

Table 7.2 also distinguishes whether the focus of the financial outcome information was the family's or household's circumstances or behaviour (top panel) or the young person's circumstances or behaviour (bottom panel). When the child was young, questions were typically asked of the parent of the focal child about the financial outcomes of the family, and in the young person's adolescent years limited questions were asked about their use of money. While the main focus of the wave 7 questions when the young people were aged 16 to 17 years remained with the parent of the young person, questions were also asked directly of the young person about their financial outcomes. From wave 8, the young people have become the main respondents to the survey and will remain so into the future.

Once more, the notes at the bottom of the table point to a detailed table, this time in Appendix Table A2, where information on the specific data items are provided. This includes the wording of questions and the possible response categories, the waves in which the questions were asked, and the ages of the young people when asked the question.

The questions asked of the Birth cohort are not summarised in a manner like Table 7.2. The structure of the LSAC is to collect the same types of information from the Birth cohort two waves (four years) after it was collected from the Kindergarten cohort when the young persons are the same age. Appendix Table A2 does however, contain the detailed information on when questions were asked of the Birth cohort families (the young people have not yet become the focus of the data collection).

From Table 7.2, it is clear that LSAC contains information on the financial outcomes of the young person's parents that would have an effect on the young person's financial outcomes in terms of living in a household free from poverty and the experience of financial hardship and deprivation. These measures for the parents are available for the period from childhood through to emerging adulthood for the young person. There is no information about the possession of savings accounts, either on behalf of the child or in the child's own right until the young person answers such questions themselves at age 16 to 17 years.

Table 7.2 Summary of Financial Outcomes for the LSAC Kindergarten Cohort

Age Wave	4-5 1	6-7 2	8-9 3	10-11 4	12-13 5	14-15 6	16-17 7	18-19 8
Questions about Family Circumstances								
Parents' income								
Ability to raise $2000								
Experiences of hardship								
Monitoring expenses								
Rating of how the family is getting on financially								
Questions about Study Child/Young Person's Circumstances								
Receipt of pocket money								
Explicit provision of financial support to young person								
Income								
Experiences of hardship								
Possession of bank/financial accounts								
Use of money								
Ability to save								

: Asked of Parents   : Asked of Study Child/Young Person   : Asked of Parents and Study Child/Young Person

Notes: Information from AIFS (2019). Please see Appendix Table A2 for detailed information on questions, response values, and subject ages.

From age 16 to 17 onwards, the LSAC asks about the young people's incomes, their personal experiences of financial hardship and deprivation, their ability to save, and their possession of different types of savings and credit accounts. Further, there are detailed, overlapping questions asked of parents and children the about the provision of financial support to the young person at age 16 to 17. These are the only questions that provide actual magnitudes of financial support in the survey. Unfortunately, in the following wave these questions were changed such that the magnitudes of financial support were not elicited from the young people, who were the only respondents asked the questions.

Wave 8 of the LSAC data was collected during 2018 into early 2019. For the Kindergarten cohort, additional questions were asked about their financial outcomes, which are presented in Appendix Table A2. These data will not be released for some time, so are not presently available for analysis. The items include the extent to which the young person has a budget, keeps to the budget, has a savings plan, has a good knowledge of their savings account balance, has used different forms of credit finance in the previous year and the length of the loan.

Also of note about the financial outcomes data available in the future from the LSAC survey is that current piloting of the wave 9 survey data includes the 10 items used in the CBA-MI Reported Financial Wellbeing Scale. This will make it possible to test and validate the scale for this group with the LSAC data.

Compared to LSAY, the range of potential studies using LSAC data is more extensive, covering child, adolescent and emerging adult outcomes. The LSAC supports study of the incidence of experiences of deprivation, both for individual items and aggregated measures for both households and young people across age groups. It is also possible to look at financial accounts held across adolescents and emerging adults, as well as financial management of accounts across those ages and moves towards financial independence among emerging adults. As already noted, release of future data would add also to potential studies. Of further note about the LSAC data is that the numerous developmental indicators and personality-related measures collected about the young people would potentially provide a richer picture of the individual factors associated with the young person's financial outcomes than is typically available in other studies.

In summary, the scope for studying young people's financial outcomes with LSAC data is greater than for LSAY and the possibilities will improve in future waves. Nevertheless, it remains clear that indicators of financial wellbeing across childhood into early adulthood, consistent with the definitions developed in Section 4, will exist only for emerging adults within the LSAC collection, and will not be available for analysis for some time.

7.3 The Household, Income and Labour Dynamics in Australia survey

The HILDA provides comprehensive information on labour market indicators such as employment situations, wages and salaries and their components, superannuation savings, and other outcomes for all household members ages 15 and older. These components are essential to any economic analysis but are far too numerous to describe comprehensively here. We focus on the survey items related to financial outcomes, behaviours, and attitudes (the complete data dictionary for the HILDA survey and questions over time can be found at https://www.online.fbe.unimelb.edu.au/HILDAodd/Default.aspx.)

One characteristic of panel surveys is that *not all questions are asked in every year*, as additional questions increase respondent burden and attrition probabilities, which limit survey representativity. This affects the types of analyses that can be carried out, and the time frame of the analyses. Often sets of questions are asked in certain rotation periods. This is true of the HILDA as well. The standard socio-economic questions are asked in every year, such as household composition, wages, and employment status. Some questions had not been surveyed in the past, but then were taken up and asked every year; some questions have been asked until a point and then altogether dropped.

The HILDA started its wealth module in 2002, repeating every four years (2002, 2006, 2010, 2014). The next wave of such information will be 2018, which has been collected but will not be released until December 2019. The wealth module is quite detailed with respect to components and their respective values. In order not to jeopardise response rates, HILDA carries this out only every four years.

We summarise the financial outcome, behaviours and attitude content of the HILDA survey in Table 7.3. Because of the large number of questions, we list the information by domain. More detailed information is available in Appendix Table A3. As Table 7.3 indicates, the content can be grouped by when and how frequently it is collected:

- *Usually Every Year*: Decision making in household; Attitudes to finances; Housing; Household expenditure; Major life events; Child Support; Wage and salaries; and Household expenditure.
- *During Wealth Module Years (2002, 2006, 2010, 2014)*: Bank accounts; Business; Credit cards; Personal debt; Financial assets; Household bills; Household wealth; Motor vehicles; and Personal wealth.
- *One-off focus year in 2014*: Material deprivation.

Information on household decision making is available yearly or biennially. Information on attitudes and behaviours with respect to financial matters is available most years. A battery of questions dealing with financial hardships is asked yearly, such as having to pawn or sell items to cover financial needs, going without meals, or asking for financial help from friends and family. To address financial planning and reserves, respondents are asked how they would immediately raise $2,000-$3,000 for unexpected financial needs. Respondents are explicitly asked about their financial risk preferences on a four-point scale. Household annual expenditures on broad categories of goods and services such as alcohol, cigarettes, meals eaten out, and groceries are available every year since 2006. These indicators give insights into financial decision making with respect to immediate consumption and longer-term planning. A battery of questions concerning major life events, includes major financial improvement and worsening. People's subjective wellbeing indicators for their lives in general and their financial situation provide overview information of the person or household's financial situation. Especially when large year-on-year changes are experienced, whether positive or negative, this can provide valuable insight into financial dynamics and triggers. Given the high rate of marital dissolution, the transfer of resources from non-custodial parent to custodial parent can be key to identifying the resources available to children, adolescents and emerging adults. This information is available for most years.

Table 7.3. Domains of Financial Outcomes, Behaviours, and Attitudes in the HILDA Survey

	Wave																
Frequency and domain	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Every Year:																	
Decision making in household																	
Attitudes to finances																	
Household expenditure																	
Household annual expenditure																	
Major life events																	
Child support																	
Wage and salaries																	
Wealth Module Years:																	
Bank accounts																	
Business																	
Credit cards																	
Personal debt																	
Financial assets																	
Household bills																	
Household wealth																	
Motor vehicles																	
Personal wealth																	
One off focus in 2014:																	
Material deprivation																	

Notes: For brevity, the availability of the survey domains is listed by wave to illustrate the temporal coverage. The current most recently available wave of the HILDA is 2017. Please see Appendix Table A3 for more detailed information on specific questions within each domain.

Detailed bank account information is collected from those adolescents and emerging adults surveyed in the wealth modules directly (2002, 2006, 2010, 2014, etc). Also, parents are asked for bank account information for children in the household, if applicable. Detailed information on credit cards and use behaviour is also part of the wealth module, but general information on having credit cards is available yearly since 2012. Details of personal debt are asked. Of particular relevance to emerging adults is information of higher education related debt such as HECS debt or debt related to cars. Unpaid debt is explicitly asked about, as is the amount of unpaid debt.

In 2014, a very detailed one-off battery of material deprivations was asked, including 70 items. The battery aimed to identify the extent to which household or personal income information is insufficient to provide insight into people unable to take part in society in a "normal" manner. If households are highly restricted in their finances, they may not be able to pay for many "normal" goods or services on the margin. In other words, a financially "strapped" household may own a house, but live "month-to-month" due to high levels or mortgage payments and not be able to heat the house adequately, or have a separate bedroom for each child, or have a home with secure doors and windows.

As this discussion indicates, the HILDA survey provides comprehensive information on young people's financial outcomes from mid-adolescence through emerging adulthood and constitutes a valuable research resource. Nevertheless, there are some omissions and weaknesses. The HILDA survey lacks some crucial information from our definitions of financial wellbeing for young people, including their control over their finances and their financial freedom.

7.4 The Survey of Income and Housing and Household Expenditure Survey

Financial outcomes data available from the SIH-HES[1] are summarized in Table 7.4. The table outlines the items concerning financial stress, raising emergency money and missing-out experiences for 2003, 2009, and 2015. *All waves of data contain detailed information on income sources and expenditure categories*. This is the primary focus of this survey. It is specifically the HES component of the SIH survey that provides insight into the extent to which financial constraints are binding and cause stresses or hardships, such as not being able to afford certain things or take part in "regular" activities due to the ability to afford that activity. For this reason, the standard income components are not listed in the appendix tables (which would be almost the entire contents of the survey), but we focus on the components of: Financial Stress, Raising Emergency Money and Missing-Out Experiences.

Appendix Table A4 provides more detailed information on the financial stresses, missing-out experiences, and the ability to raise funds. For example, the first item identifies one financial stress in a battery "Whether could not pay gas/electricity/telephone bill on time due to shortage of money". It is available in 2003, 2009, and 2015, and is posed as a "Yes/No" question. The missing-out experiences item "Reason household does not have a holiday away from home for at least one week a year" is asked in all surveys years and allows the answers "Don't want it"; "Can't afford it"; "Other reason". The emergency money item "Main source of households emergency money" allows answers of "Own savings"; "Loan bank"; "Loan finance company"; "Loan credit card"; "Loan family or friends"; "Loan welfare or community org"; "Sell something"; "Other sources". Clearly the SIH-HES contains a tremendous amount of financial information. Because they sample from the entire set of Australian households, they are representative of households with children, adolescents, and emerging adults. As mentioned, however, they can inform us about young people's households and household contexts but not about their personal financial outcomes.

[1] Data dictionaries can be found at https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6503.02015-16, https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6503.02009-10, and https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6503.02003-04.

Table 7.4 SIH-HES Financial Outcomes Summary

Year:	2003	2009	2015
Questions about Family Circumstances			
Parents' income			
Child's income			
Ability to raise emergency income			
Experiences of hardship			
Management of household income			
Missing-out experiences			

: Asked of Adults

Notes: *Almost all* questions dealing with financial stress, ability to raise emergency income, or having missing-out experiences are assessed to the Household or Income Unit level and answered by adults. As such, these experiences/behaviours pertain to *all family members* and according to the demographic structure of the household, also apply to all ages of children. Further information is contained in Appendix Table A4.

8. Conclusion

Despite mounting public concern and growing academic interest in the financial outcomes of children, adolescents, and emerging adults, researchers have not developed summative measures of their financial wellbeing. Researchers have examined specific financial outcomes, including banking, savings, and experiences of deprivation, for each of these groups. They have also examined summative adult financial wellbeing measures for emerging adults. However, a need remains for overarching measures that capture the functional, temporal, and other dimensions of young people's financial wellbeing and that are appropriate to their financial dependence on their families, limited financial autonomy, developmental capacity, and financial capability. This report takes the first important step in forming those measures by analysing the components of financial wellbeing to develop definitions of young people's financial wellbeing, building models of how their financial wellbeing is determined, and scoping the availability of relevant financial measures in four large on-going Australian social surveys.

A need remains for overarching measures that capture the functional, temporal, and other dimensions of young people's financial wellbeing and that are appropriate to their financial dependence on their families, limited financial autonomy, developmental capacity, and financial capability.

8.1 Conceptualisation of Young People's Financial Wellbeing

Young or old, people's finances arise from a general set of spending, saving, borrowing, investing, planning, and insuring activities and address common objectives, including allowing for and smoothing consumption, providing for future outcomes, and protecting against unforeseen events. These shared features tell us that financial wellbeing, which has been defined and measured for adults, can be conceptualised for young people. Yet we also know that the applicability of several financial activities and concerns differ between young people and adults. Financial circumstances, capabilities, behaviour, and outcomes also differ.

Another vital aspect of financial wellbeing is context. Australia's government-run Medicare health insurance system reduces the need for people to arrange for their own insurance. Subsidies in Australia's post-secondary education system and the availability of income-contingent education loans reduce the need for educational savings and the potential crush of educational debt. The use of electronic payments in public assistance programs results in few young adults being unbanked. Youth Allowance provides many young people with financial resources, which would be essential for youths' financial security if they were living independent of their families. Because of these contextual features, the elements of young people's financial wellbeing in Australia are likely to differ from elements in other countries.

The elements of young people's financial wellbeing in Australia are likely to differ from elements in other countries.

With these considerations in mind and after a careful analysis of existing studies, we define:

- children's financial wellbeing as the extent to which children both perceive and have: (i) financial outcomes that meet their needs and further their development, (ii) financial outcomes that allow them to enjoy life, and (iii) financial security—now, in the future, and under possible adverse circumstances;
- adolescents' financial wellbeing as the extent to which adolescents both perceive and have: (i) financial outcomes that meet their needs, that further their development, and in which they meet their age-appropriate financial obligations, (ii) financial outcomes that allow them to enjoy life, (iii) age-appropriate control of their finances, and (iv) financial security—now, in the future, and under possible adverse circumstances; and
- emerging adults' financial wellbeing as the extent to which emerging adults both perceive and have: (i) financial outcomes in which they meet their personal financial obligations, (ii) financial freedom to make choices that allow them to enjoy life and further their development, (iii) control of their finances, and (iv) financial security—now, in the future, and under possible adverse circumstances.

Each of these definitions shares many elements with each other and with the CBA-MI definition of adults' financial wellbeing, but they also include *distinctive* elements that reflect young people's circumstances.

We also develop a conceptual model in which young people's financial wellbeing at a given age depends on their own financial behaviour, their financial capability, their parents' financial and socialising behaviours, other characteristics of their household, and conditions outside the household. Financial wellbeing is linked over time—outcomes at one age provide resources and affect young people's financial capability at later ages. The model also views financial capability through a developmental lens, allowing financial capability to grow over time, be influenced by previous experiences with financial behaviour and financial wellbeing, and be influenced by parents' financial and socialising behaviours. The model has many elements of the CBA-MI conceptual model for adults' financial wellbeing but adds roles for parents' behaviour and the development of financial capability.

Young people's financial wellbeing at a given age depends on their own financial behaviour, their financial capability, their parents' financial and socialising behaviours, other characteristics of their household, and conditions outside the household.

Although the model identifies the anticipated relationships between different characteristics and young people's financial wellbeing, it does not tell us about the strength or magnitude of these relationships. For example, it does not tell us whether children's or parents' behaviours have stronger effects on children's wellbeing, whether active or passive financial socialisation behaviours are more effective, how much children learn from previous experiences with financial behaviour, or how the strength of each relationship changes with age. These are all important topics for future research, which will be facilitated by the development of actual financial wellbeing measures.

Similarly, the definitions of children's, adolescents', and emerging adults' financial wellbeing identify component outcomes and conditions but do not describe the sizes or variability of these components. Many of the outcomes, especially for children and adolescents, are also provided by families through resources that the parents control. Research indicates that resources that are solely available for children and adolescents, such as their own bank and savings accounts or parent-managed educational savings accounts and CDAs, tend to be modest—when they exist at all. The direct social and policy importance of young people's financial wellbeing depend on the size and variability of these components. Measures and empirical research are needed to determine these.

Even if subsequent studies show that the amounts or personal financial outcomes that comprise young people's financial wellbeing are small, their financial wellbeing could still be indirectly important through developmental or other pathways. As Friedline (2012) and Kim et al. (2016) have shown, the mere act of holding a savings account as a child greatly affects holding one as an adult. Many researchers, including Elliott (2012b), Friedline et al. (2011), Friedline (2012), Huang et al. (2015), Kim et al. (2016), Loke et al. (2015), and McCormick (2009), argue that access to bank and savings accounts is so crucial to the development of children's financial capability that access should be part of the definition of that term. Experience with financial wellbeing is likely to be a valuable teacher and make other forms of financial socialisation and literacy instruction more effective.

Experience with financial wellbeing is likely to be a valuable teacher and make other forms of financial socialisation and literacy instruction more effective.

8.2 Capabilities in Australian Data Sets for Studying Young People's Financial Wellbeing

A natural starting point to studying and measuring young Australians' financial wellbeing is to use measures that have already been collected in large social surveys and that are available right now for analysis. The definitions from our conceptual analysis describe many possible domains and elements that we should consider. The financial outcomes that have been included in previous studies of young people are also good candidates for future research. We search for and catalogue relevant measures from:

- the Longitudinal Surveys of Australian Youth,
- the Longitudinal Study of Australian Children,
- the Household, Income and Labour Dynamics in Australia survey, and
- the Survey of Income and Housing and Household Expenditure Survey.

A key limitation of the surveys is that they have no direct, person-specific indicators of components of children's or young adolescents' (younger than age 15) financial wellbeing. Children and young adolescents are not a part of the sample population of the LSAY at all. The HILDA survey and SIH-HES ask questions about children's finances in the aggregate for households with children and young adolescents, but not person-specific questions about finances for each child or adolescent. These surveys would reveal person-specific information for households with only one child but not for households with more children. The LSAC asks many questions about individual children and young adolescents, but none of the questions at these ages addresses the children's personal finances.

A key limitation of the surveys is that they have no direct, person-specific indicators of components of children's or young adolescents' financial wellbeing.

Coverage in some other surveys is thin. The LSAY has few financial outcome measures, and most of these are only recorded after people reach emerging adulthood. The LSAY asks about satisfaction with money and living standards from age 16 or 17 onwards and asks about deprivations, saving behaviour, credit card usage, and satisfaction with 'managing financially' from about ages 18 to 20 onwards. As Ryan's (2014) research has shown, the LSAY is valuable for studying financial satisfaction in late adolescence and emerging adulthood and for studying a few other outcomes; however, its limited content makes it a poor candidate for developing overarching, summative measures of financial wellbeing.

Likewise, the LSAC currently has few person-specific financial outcome measures, but this will change in 2020. From age 16 onwards, the LSAC asks about young people's deprivations, possession of financial accounts, uses of money, and ability to save. However, in an exciting development, the 2020 wave of the LSAC is expected to ask 20- and 21-year-olds the 10 questions of the CBA-MI Reported Financial Wellbeing Scale, making it possible to test and validate the scale for this group. If the questions are asked in subsequent waves, longitudinal changes in emerging adults' financial wellbeing can be tracked.

The 2020 wave of the LSAC is expected to ask 20- and 21-year-olds the 10 questions of the CBA-MI Reported Financial Wellbeing scale.

The most comprehensive source of information on young people's financial outcomes is the HILDA survey. Each year the HILDA survey asks everyone ages 15 and over in all the households it interviews about their personal deprivations, financial satisfaction, savings habits, and ability to raise funds in an emergency. Every four years, it gathers additional objective information about personal net wealth, including account balances, debts (including educational loans), and overdue bills. The HILDA survey is the best available tool for studying and measuring Australians' financial wellbeing from mid-adolescence through emerging adulthood. However, the HILDA survey lacks some crucial information from our definitions, especially regarding people's control over their finances and their financial freedom.

The HILDA survey is the best available tool for studying and measuring Australians' financial wellbeing from mid-adolescence through emerging adulthood.

8.3 We Need More Data

Although the large Australian social surveys ask about many financial outcomes, they omit several outcomes that would be needed for fully describing or summarising young people's financial wellbeing, including:

- personal financial outcomes for children and young adolescents,
- outcomes describing people's control over their finances and their financial freedom, and
- measures that are asked with comparable sets of outcomes and over comparable time frames.

For each of these areas, we need to collect additional data through new surveys or through new questions in the existing surveys.

For practical and methodological reasons, the biggest challenge will be to collect data on children's and adolescents' personal financial outcomes. The practical issue is that none of the existing social surveys currently interviews or directly asks about substantial numbers of outcomes for individual children. The children in the LSAC will all be 16 or older in the next interviews in 2020; children and young adolescents are outside the scope for interviewing in the LSAY and HILDA survey. While the SIH-HES collects detailed financial data for individuals 15 and over, it contains many financial outcomes only for the household as a whole. The methodological issue is that young children have limited ability to report on their own outcomes and an incomplete understanding of financial outcomes. However, these concerns can be successfully addressed. The LSAC has used interviews with parents to obtain non-financial information for young children and interviews with the children themselves for older children. The Child Development Supplements of the Panel Study of Income Dynamics in the United States used a similar approach to obtain person-specific financial information and was the basis of research by Friedline et al. (2011), Friedline (2012), Kim et al. (2011), and Kim et al. (2016). This approach could be used in a new survey or in a child development supplement to the HILDA survey.

A more complete set of measures, including measures describing young people's control over their finances and their financial freedom, could be added to surveys. Likewise, harmonised questions with similar sets of categorical outcomes and comparable time framings could be added to surveys. Each of these things will be done when the LSAC adds the 10 CBA-MI Reported Financial Wellbeing Scale items in 2020. The same items could be added to the HILDA survey. A challenge, however, is that new items will likely need to be developed for children’s and adolescents’ financial wellbeing. This may require trialling new candidate items in a special survey.

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Appendix Table A1. Young People’s Financial Outcome Measures in the Longitudinal Surveys of Australian Youth

Domain or Concept / Question wording	Cohorts	Waves	Years	Values	Subject ages	Variable ID
Life Satisfaction						
How happy are you with: The money you get each week?	Y95 Y98 Y03 Y06 Y09	3-12 3-12 3-11 3-11 3-9	1997-2006 2000-2009 2004-2013 2007-2016 2010-2017	Very happy; Happy; Unhappy; Very unhappy; Can't say/Don't know 0-10	~16-~25 16-25 16-23	DAAH003
How happy are you with: Your standard of living?	Y95 Y98 Y03 Y06 Y09	3-12 3-12 3-11 3-11 3-9	1997-2006 2000-2009 2004-2013 2007-2016 2010-2017	Very happy; Happy; Unhappy; Very unhappy; Can't say/Don't know 0-10	~16-~25 16-25 16-23	DAAH015
Managing financially						
So, in a typical month, how well do you manage financially?	Y95 Y98 Y03 Y06 Y09	8-12 5-12 6-11 5-11 5-9	2002-2006 2002-2009 2008-2013 2010-2016 2013-2017	Very difficult; Fairly difficult; Neither difficult nor easy; Fairly easy; Very easy	~21-~25 ~18-~25 20-25 19-25 19-23	DBAC004
Ability to save money						
Would you say you can save fairly regularly or only occasionally?	Y95 Y98 Y03 Y06 Y09	8-12 5-12 6-11 5-11 5-9	2002-2006 2002-2009 2008-2013 2010-2016 2013-2017	In 2002: Usually spend more than income; Usually spend as much as income; Save whatever left over at end of month; Spend regular income save other income; Save regularly put money aside each month From 2003: Fairly regularly; Only occasionally; Can't say/Don’t know	~21-~25 ~18-~25 20-25 19-25 19-23	DBAC003

Domain or Concept / Question wording	Cohorts	Waves	Years	Values	Subject ages	Variable ID
Generally speaking, are you able to save money?	Y95 Y98 Y03 Y06 Y09	8-12 5-12 6-11 5-11 5-9	2002-2006 2002-2009 2008-2013 2010-2016 2013-2017	No; Yes	~21-~25 ~18-~25 20-25 19-25 19-23	DBAC001
Experience of hardship/deprivation						
Have any of the following happened to you over the past year, because of a shortage of money?						
You couldn't afford to heat your home	Y95 Y98 Y03 Y06 Y09	8-12 5-12 6-11 5-11 5-9	2002-2006 2002-2009 2008-2013 2010-2016 2013-2017	No; Yes	~21-~25 ~18-~25 20-25 19-25 19-23	DBAC005
You couldn't buy other things you needed	Y95 Y98 Y03 Y06 Y09	8-12 5-12 6-11 5-11 5-9	2002-2006 2002-2009 2008-2013 2010-2016 2013-2017	No; Yes	~21-~25 ~18-~25 20-25 19-25 19-23	DBAC006
You couldn't buy text books or other study materials	Y95 Y98 Y03 Y06 Y09	8-12 5-12 6-11 5-11 5-9	2002-2006 2002-2009 2008-2013 2010-2016 2013-2017	No; Yes	~21-~25 ~18-~25 20-25 19-25 19-23	DBAC007
You couldn't pay electricity, gas or telephone bills on time	Y95 Y98 Y03 Y06 Y09	8-12 5-12 6-11 5-11 5-9	2002-2006 2002-2009 2008-2013 2010-2016 2013-2017	No; Yes	~21-~25 ~18-~25 20-25 19-25 19-23	DBAC008

Domain or Concept / Question wording	Cohorts	Waves	Years	Values	Subject ages	Variable ID
	Y95	8-12	2002-2006		~21-~25	
	Y98	5-12	2002-2009		~18-~25	
You couldn't pay mortgage/rent on time	Y03	6-11	2008-2013	No; Yes	20-25	DBAC009
	Y06	5-11	2010-2016		19-25	
	Y09	5-9	2013-2017		19-23	
	Y95	8-12	2002-2006		~21-~25	
	Y98	5-12	2002-2009		~18-~25	
You did not get medicines or go to a doctor	Y03	6-11	2008-2013	No; Yes	20-25	DBAC010
	Y06	5-11	2010-2016		19-25	
	Y09	5-9	2013-2017		19-23	
	Y95	8-12	2002-2006		~21-~25	
	Y98	5-12	2002-2009		~18-~25	
You had to ask family or friends for money	Y03	6-11	2008-2013	No; Yes	20-25	DBAC011
	Y06	5-11	2010-2016		19-25	
	Y09	5-9	2013-2017		19-23	
	Y95	8-12	2002-2006		~21-~25	
	Y98	5-12	2002-2009		~18-~25	
You had to borrow money just to live on	Y03	6-11	2008-2013	No; Yes	20-25	DBAC012
	Y06	5-11	2010-2016		19-25	
	Y09	5-9	2013-2017		19-23	
	Y95	8-12	2002-2006		~21-~25	
	Y98	5-12	2002-2009		~18-~25	
You sold something because you needed money	Y03	6-11	2008-2013	No; Yes	20-25	DBAC013
	Y06	5-11	2010-2016		19-25	
	Y09	5-9	2013-2017		19-23	
Sought help from welfare or community org.	Y98	5	2002	No; Yes	~18	DBAC014
	Y95	8-12	2002-2006		~21-~25	
	Y98	5-12	2002-2009		~18-~25	
You went without meals	Y03	6-11	2008-2013	No; Yes	20-25	DBAC016
	Y06	5-11	2010-2016		19-25	
	Y09	5-9	2013-2017		19-23	

Domain or Concept / Question wording	Cohorts	Waves	Years	Values	Subject ages	Variable ID
Credit card usage						
How often do you pay the whole amount you personally owe on credit cards, rather than just a part of it?	Y95	8-12	2002-2006	Hardly ever or never; Not very often; About half the time; Most months; Always or almost always	~21-~25	DBAC002
	Y98	5-12	2002-2009		~18-~25	
	Y03	6-11	2008-2013		20-25	
	Y06	5-11	2010-2016		19-25	
	Y09	5-9	2013-2017		19-23	
Do you personally have any credit cards or store cards of the kind that require you to make a monthly payment?	Y95	8-12	2002-2006	No; Yes	~21-~25	DBAC017
	Y98	5-12	2002-2009		~18-~25	
	Y03	6-11	2008-2013	No; Yes; Have a card but don't use it	20-25	
	Y06	5-11	2010-2016		19-25	
	Y09	5- 9	2013-2017		19-23	

Table notes: The Y2015 cohort has not yet fielded any of these questions.
Source: National Centre for Vocational Education Research. (2019). *LSAY variable listing and metadata.* Technical paper. Adelaide: NCVER <https://www.lsay.edu.au/publications/search-for-lsay-publications/2621, accessed 5 July 2019>.

Appendix Table A2. Financial Outcome Measures in the Longitudinal Study of Australian Children

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
Parental income sources					
Could you please tell me if you receive any income from any of these sources?	B; K	2-7; 2-7	Yes; No	2-13; 4-17	fn02a
Wages or salary			Yes; No		fn02a1
Profit or loss from own unincorporated business or share in partnership					fn02a2
Any government pension, benefit or allowance					fn02a5
Any other regular source					fn02a9
What is that source?			String		fn02ao
Before income tax is taken out, how much do you usually receive from these sources in total? If respondent unable to answer, prompt for their best estimate	B; K	2-7; 2-7	Amount; Nil; (Loss)	2-13; 4-17	fn09a1
Enter amount			Number		fn09a2
What period does that cover?			Week; Fortnight; Four weeks; Calendar month; Year; Other		fn09a3
Enter period			String		fn09a4
Parent 1 weekly income	B; K	2-7; 2-7	Number; (Loss)	2-13; 4-17	fn09a
[Uncleaned]					fn09au
[Untopcoded]					fn09ao
[Categorical]			Less than $500 pw; $500-$999 pw; $1,000-$1,999 pw; $2,000 or more pw		fn09a5
Parent 1 weekly income (with amount for loss)	B; K	2-7; 2-7	Number	2-13; 4-17	fn09a8
Before income tax is taken out, how much does … usually receive from all sources in total?	B; K	2-7; 2-7	Number	2-13; 4-17	
[Imputed value]					fn09ai
[Imputation method]			Not Imputed; Nearest Neighbour; Little and Su		fn09aif

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
Does this total amount include any child support payments?			Yes; No		fn09a9a
Parental salary					
Parent 1's weekly salary [Uncleaned] [Untopcoded] [Categorical]	B; K	2-7; 2-7	Number Less than $500 pw; $500-$999 pw; $1,000-$1,999 pw; $2,000 or more pw	2-13; 4-17	fn13a fn13au fn13ao fn13a5
What is your main source of income?	B; K	2-7; 2-7	Wages or salary; Profit or loss from own unincorporated business or share in a partnership; Profit or loss from rental property; Dividends or interest; Any Government pension or allowance; Child Support or maintenance; Superannuation or Annuity; Workers' Compensation; Other	2-13; 4-17	fn03a1
Before income tax, salary sacrifice or anything else is taken out, how much do you usually receive from wages and salary (in ALL jobs) in total? What period does that cover? Enter period	B; K	2-7; 2-7	Number Week; Fortnight; Four weeks; Calendar month; Year; Other String	2-13; 4-17	fn13a2 fn13a3 fn13a4
Money for emergencies					
Suppose you only had one week to raise $2000 for an emergency. Which of the following best describes how hard it would be for you to get that money?	B; K	2-7; 2-7	I could easily raise the money; I could raise the money, but it would involve some sacrifices; I would have to do something drastic to raise the money; I don't think I could raise the money	2-13; 4-17	fn10a

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
Which of the following would you mainly use to raise the $2000?	B; K	5-7; 5-7	Savings/cheque account; New loan from a bank or credit union; Existing loan from a bank, building society or credit union; Loan from a finance company; Credit card; Cash; Loan/gift from family or friends; Loan/help from welfare or community organisation; Sell something; Drawing down on superannuation; Other (specify)	8-13; 10-17	fn10a1
Other source	B; K	5-7; 5-8	String	8-13; 10-17	fn10a1o
Parents' government benefits/allowances					
Do you currently receive any of these pensions, allowances or other forms of assistance?					fn11a3
Family Tax Benefit or Family Payment (FTB Part A or Part B)					fn11a2a
Parenting Payment - Partnered	B; K	2-7; 2-7	Yes; No	2-13; 4-17	fn11a2b
Parenting Payment - Single					fn11a2c
Newstart Allowance					fn11a2p
Youth Allowance					fn11a2g
Abstudy/ Austudy					fn11a2q
Disability Support Pension (Centrelink)/Disability Pension (DVA)					fn11a2i
Carer payment					fn11a2r
Carer Allowance					fn11a2d
Australian Age Pension/Service Pension (DVA)					fn11a2s
Overseas pensions/benefits					fn11a2j
No government payments					fn11a2t
Other					fn11a2k
Other (specify)			String		fn11a2o

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
Parents' experience of hardship/deprivation					
In the last 12 months, have any of these happened to you because you were short of money?					
Could not pay gas, electricity or telephone bills on time	B; K	2-7; 2-7	Yes; No	2-13; 4-17	fn07a
Could not pay the mortgage or rent payments on time					fn07b
Went without meals					fn07c
Were unable to heat or cool your home					fn07d
Pawned or sold something because you needed cash					fn07e
Sought assistance from a welfare or community organisation					fn07f
Were not able to send your child to kindergarten/preschool /childcare for as much time as you would like	B; K	3-4		4-7; 8-11	fn07h
Were unable to send your child to excursion/ extra-curricular activities/ tutoring as much as you would like?	B; K	5-7		8-13; 12-17	fn07i
You had financial limits on the type of food you could buy?	B; K	1		0-1; 4-5	fn07g
Managing financially					
Given your current needs and financial responsibilities, how would you say you and your family are getting on?	B; K	2-7; 2-7	Prosperous; Very comfortable; Reasonably comfortable; Just getting along; Poor; Very poor	2-13; 4-17	fn06a
(Asked of parents) Pocket money					
In the last 12 months has child received pocket money?	B; K	6-7; 4-6	Yes; No	10-13; 10-15	fn14a
Does the child receive pocket money on a regular basis?	B; K	6-7; 4-6	Yes; No	10-13; 10-15	fn14a1a2
Weekly amount	B; K	6-7; 4-6	Number	10-13; 10-15	fn14a2a2
How much money does the child receive?	B; K	6-7; 4-6	Number	10-13; 10-15	fn14a3a2
What period does that cover?			Week; Fortnight; Month; Other (specify)		fn14a4a2
What period does that cover? Other (specify)			String		fn14a4o2
In the last 12 months, approximately how much pocket money did child receive in total?	B; K	6-7; 4-6	Number	10-13; 10-15	fn14a2b

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
Does the child have to do any of the following to get his/her pocket money?	B; K	6-7; 4-6	Yes; No	10-13; 10-15	fn14a5y2
Chores or tasks			Yes; No		fn14a5a2
Follow household rules					fn14a5b2
Homework					fn14a5c2
Does the child get extra pocket money?	B; K	6-7; 4-6	Yes; No	10-13; 10-15	fn14a6y2
Does the child get extra pocket money for:	B; K	6-7; 4-6	Yes; No	10-13; 10-15	
Good behaviour					fn14a6a2
Following household rules					fn14a6b2
Doing well at school					fn14a6c2
Completing homework					fn14a6d2
Does the child get any of his/her pocket money stopped or taken away for any of these reasons?	B; K	6-7; 4-6	Yes; No	10-13; 10-15	fn14a7y2
Poor behaviour?			Yes; No		fn14a7a2
Not following household rules					fn14a7b2
Not doing well at school					fn14a7c2
Not completing homework					fn14a7d2
(Asked of parents) Financial support of the young person					
In last 12 months have you or other family members provided [Study Child] with any of these types of financial support?	K	7	Yes; No	16-17	
Purchasing real estate, including investment properties (including mortgage repayments or outright purchases)					pa28p1a
Paying for accommodation (rent or board payments)					pa28p1b
Other housing costs (e.g. gas and electricity)					pa28p1c
Purchasing a car or similar (including car loans or outright purchases)					pa28p1d
Other motor vehicle costs (e.g. car insurance, motor vehicle running costs, registration, petrol)					pa28p1e
Education Fees (e.g. university or TAFE fees or other study related costs)					pa28p1f

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
In last 12 months have you or other family members provided [Study Child] with any of these types of financial support?					
Extracurricular activities cost (e.g. sports and sport gear, singing or music lessons and music instruments etc.)					pa28p1g
Personal bills or expenses (e.g. phone, credit card bills, etc.)					pa28p1h
Paying fines					pa28p1i
Medical cost (including individual health insurance, dental expenses, etc.)	K	7	Yes; No	16-17	pa28p1j
A general living allowance (e.g. pocket money)					pa28p1k
Ad hoc money as needed					pa28p1l
Allowing [Study Child] to live in your or other family member's investment property rent free or for low rent					pa28p1m
Other expenses					pa28p1n
Thinking about the last 12 months how regularly have you or other family members provided [study child] with financial support for [each item listed above]?	K	7	One-off payment; Irregular payments; Regular payments	16-17	pa28p2a1-pa28p2a3
Still thinking about the last 12 months how much was the one-off payment provided to [study child] for [each item listed above]	K	7	$ amount	16-17	pa28p3a1-pa28p3n1
How much of this one-off payment is expected to be paid back? For [each item listed above]	K	7	None; Some; About half; Most; All; All plus interest	16-17	pa28p4a1-pa28p4n1
Still thinking about the last 12 months how often do/did you or other family members provide [study child] with regular financial support for [each item listed above]	K	7	Weekly; Fortnightly; Monthly; Quarterly; Half-yearly; Yearly	16-17	pa28p5a3-pa28p5n3
How much was the weekly/fortnightly/monthly/quarterly/half-yearly/yearly/unknown regular payment provided to [study child] for [each item listed above]	K	7	$ amount	16-17	pa28p3a3-pa28p3n3
Still thinking about the last 12 months how long have/did you or other family members provide [study child] with regular financial support for [each item listed above]	K	7	Less than 3 months; 3 months to less than 6 months; 6 months to less than 12 months; 12 months or more	16-17	pa28p6a3-pa28p6n3

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
How much of the irregular payments are expected to be paid back? For [each item listed above]	K	7	None; Some; About half; Most; All; All plus interest	16-17	pa28p4a2-pa28p4n2
(Asked of young person) Financial support of young person					
In the last 12 months have your parent(s) or other family members provided you with financial support for any of these types of expenses?	K	7	Yes; No	16-17	
Purchasing real estate, including investment properties (including mortgage repayments or outright purchases)					pa28c1a
Paying for accommodation (rent or board payments)					pa28c1b
Other housing costs (e.g. gas and electricity)					pa28c1c
Purchasing a car or similar (including car loans or outright purchases)					pa28c1d
Other motor vehicle costs (e.g. car insurance, motor vehicle running costs, registration, petrol)					pa28c1e
Education Fees (e.g. university or TAFE fees or other study related costs)					pa28c1f
Extracurricular activities cost (e.g. sports and sport gear, singing or music lessons and music instruments etc.)					pa28c1g
Personal bills or expenses (e.g. phone, credit card bills, etc.)					pa28c1h
Paying fines					pa28c1i
Medical cost (including individual health insurance, dental expenses, etc.)					pa28c1j
A general living allowance (e.g. pocket money)					pa28c1k
Ad hoc money as needed					pa28c1l
Allowing [Study Child] to live in your or other family member’s investment property rent free or for low rent					pa28c1m
Other expenses					pa28c1n
Thinking about the last 12 months how regularly have your parents or other family members provided you with financial support for [each item listed above]?	K	7	One-off payment; Irregular payments; Regular payments	16-17	pa28c2a1-pa28c2a3

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
Still thinking about the last 12 months how much was the one-off payment provided to you for [each item listed above]	K	7	$ amount	16-17	pa28c3a1-pa28c3n1
How much of this one-off payment is expected to be paid back? For [each item listed above]	K	7	None; Some; About half; Most; All; All plus interest	16-17	pa28c4a1-pa28c4n1
Still thinking about the last 12 months how often do/did your parents or other family members provide you with regular financial support for [each item listed above]	K	7	Weekly; Fortnightly; Monthly; Quarterly; Half-yearly; Yearly	16-17	pa28c5a3-pa28c5n3
How much was the weekly/fortnightly/monthly/quarterly/half-yearly/yearly/unknown regular payment provided to you for [each item listed above]	K	7	$ amount	16-17	pa28c3a3-pa28c3n3
Still thinking about the last 12 months how long have/did your parents or other family members provide you with regular financial support for [each item listed above]	K	7	Less than 3 months; 3 months to less than 6 months; 6 months to less than 12 months; 12 months or more	16-17	pa28c6a3-pa28c6n3
How much of the irregular payments are expected to be paid back? For [each item listed above]	K	7	None; Some; About half; Most; All; All plus interest	16-17	pa28c4a2-pa28c4n2
In the last 12 months have your parent(s) or other family members provided you with any of these types of financial support? Household expenses (e.g. gas and electricity) (exclude rent, board/mortgage payments) Purchasing a car or similar (e.g. car loans or outright purchases) Other motor vehicle costs (e.g. car insurance, motor vehicle running costs, registration, petrol) Education costs (e.g. university or TAFE fees or other study related costs) (exclude accommodation) Organised activity costs (e.g. sports and sports gear, singing or music lessons, music instruments) Personal bills or expenses (e.g. phone, credit card bills) Paying fines	K	8	Yes; No; Not applicable - did not have that expense	18-19	

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
In the last 12 months have your parent(s) or other family members provided you with any of these types of financial support? Medical costs (e.g. individual health insurance, dental expenses) A general living allowance (e.g. pocket money) Other expenses (specify)	K	8	Yes; No; Not applicable - did not have that expense	18-19	
Still thinking about the last 12 months, how much did your parent(s) or another family member contribute towards your financial support?	K	8	The full amount; More than half; About half; Less than half; Don't know	18-19	
In the last 12 months have your parent(s) or other family members provided you with any of these following types of housing-related financial support? Purchasing real estate (including mortgage repayments, outright purchases and purchasing investment properties) Paying for accommodation (that is, rent or board payments, including university accommodation) Allowing you to live in their or other family member's investment property rent free or for low rent	K	8	Yes; No; Not applicable - did not have that expense (only for items a and b)	18-19	
Still thinking about the last 12 months, how much did your parent(s) or another family member contribute towards this financial support?	K	8	The full amount; More than half; About half; Less than half; Don't know	18-19	
Young person's income sources					
Could you please tell me if you receive any income from any of these sources? Wages or salary Profit or loss from own unincorporated business or share in partnership Any government pension, benefit or allowance Any other regular source What is that source?	K	7-8	Yes; No Yes; No String	16-19	fn02c fn02c1 fn02c2 fn02c5 fn02c9 fn02co

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
Before income tax is taken out, how much do you usually receive from these sources in total? If respondent unable to answer, prompt for their best estimate Enter amount What period does that cover? Enter period	K	7-8	Amount; Nil; (Loss) Number Week; Fortnight; Four weeks; Calendar month; Year; Other String	16-19	fn09c1 fn09c2 fn09c3 fn09c4
Study child/Young Person weekly income [Uncleaned] [Untopcoded] [Categorical]	K	7-8	Number; (Loss) Less than $500 pw; $500-$999 pw; $1,000-$1,999 pw; $2,000 or more pw	16-19	fn09cu fn09co fn09c5
Study child/Young Person weekly income (with amount for loss)	K	7-8	Number	16-19	fn09c8
Parent 1 weekly income	K	7-8	Number; (Loss)	16-19	fn09c
Before income tax is taken out, how much does … usually receive from all sources in total? [Imputed value] [Imputation method]	K	7-8	Number Not Imputed; Nearest Neighbour; Little and Su	16-19	
Young person's salary					
Study child/Young Person's weekly salary [Uncleaned] [Untopcoded] [Categorical]	K	7-8	Number Less than $500 pw; $500-$999 pw; $1,000-$1,999 pw; $2,000 or more pw	16-19	fn13c10 fn13c10u fn13c10o fn13c5
What is your main source of income?	K	7-8	Wages or salary; Profit or loss from own unincorporated business or share in a partnership;	16-19	fn03c1

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
What is your main source of income?	K	7-8	Profit or loss from rental property; Dividends or interest; Any Government pension or allowance; Child Support or maintenance; Superannuation or Annuity; Workers' Compensation; Other	16-19	fn03c1
Before income tax, salary sacrifice or anything else is taken out, how much do you usually receive from wages and salary (in ALL jobs) in total?	K	7-8	Number	16-19	fn13c10c
What period does that cover?			Week; Fortnight; Four weeks; Calendar month; Year; Other		fn13c10d2
Enter period			String		fn13c10d
Government benefits/allowances					
Do you currently receive any of these pensions, allowances or other forms of assistance?	K	7-8	Yes; No	16-19	fn11c3
Family Tax Benefit or Family Payment (FTB Part A or Part B)			Yes; No		fn11c2a
Parenting Payment – Partnered					fn11c2b
Parenting Payment – Single					fn11c2c
Newstart Allowance					fn11c2p
Youth Allowance					fn11c2g
Abstudy/ Austudy					fn11c2q
Disability Support Pension (Centrelink)/Disability Pension (DVA)					fn11c2i
Carer payment					fn11c2r
Carer Allowance					fn11c2d
Rent Assistance					fn11c2u
Australian Age Pension/Service Pension (DVA)					fn11c2s
Overseas pensions/benefits					fn11c2j
No government payments					fn11c2t
Other					fn11c2k
Other (specify)			String		fn11c2o

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
(Asked of young person) Experience of hardship/deprivation					
Have any of the following happened to you over the past year, because of a shortage of money?			Yes; No		fn17c; fn18c
You sold something because you needed money	K	7-8	Yes; No	16-19	fn17c1; fn18c1
You went without meals					fn17c2; fn18c2
You had to ask family or friends for money					fn17c3; fn18c3
You had to borrow money just to live on					fn17c4; fn18c4
You didn’t get medicines or go to the doctor when you needed to					fn17c5; fn18c5
You couldn’t buy text books or other study materials					fn17c6; fn18c6
You couldn’t buy other things you needed					fn17c7; fn18c7
You couldn’t pay electricity, gas or telephone bills on time					fn18c8
You couldn’t pay mortgage/rent on time					fn18c9
You couldn’t afford to heat your home					fn18c10
Possession of a bank account					
Do you have any of the following?					
A bank account with a debit/ATM/EFTPOS card in your own name	K	7-8	Yes; No	16-19	fn14c9a1
Use of a bank account with a debit/ATM/EFTPOS card in someone else's name					fn14c9a2
A bank account without a debit/ATM/EFTPOS card					fn14c9a3
A credit card in your own name					fn14c9b1
Use of a credit card in someone else's name					fn14c9b2
None of the above					fn14c9d

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
(Asked of young person) Use of money					
How do you use the money you receive from all sources?					fn14c8a
For savings or investments					fn14c8b
For household expenses (e.g. food, gas, electricity)					fn14c8g
For accommodation costs (e.g. rent, board, mortgage)					fn14c8c
For mobile phone / Internet usage	K	7-8	Yes; No	16-19	fn14c8h
For car expenses					fn14c8d
For other personal expenses					fn14c8e
Other					fn14c8f
Do not receive money from any source					
How well do you know how much is in the bank account you use for day to day activities?	K	8	I know how much there is to within $10; I know how much there is to within $50; I know how much there is to within $100; I know how much there is to within $500; I have a rough idea but it varies because I have payments being made from it; I don't know how much there is	18-19	
Do you have a weekly/fortnightly/monthly budget? Do you usually manage to keep to your budget?	K	8	Yes; No	18-19	
Which of the following statements comes closest to describing your savings habits?	K	8	Don't save: spend more than income; Don't save: spend all income; Save: no regular plan; Save: regular plan	18-19	
Have you used any of these forms of credit over the past 12 months?	K	8	Credit card; Bank loan; Payday lending service; Centrelink Advance Payment; Pawnbroker; No or low interest loan from a Microfinance organization; Peer-to-peer online loans; Loan from family or friends; Other (specify); Have not used any form of credit	18-19	

Domain or Concept / Question wording	Cohorts	Waves	Values	Subject ages	Variable ID
For how many weeks in the past 12 months have you had an outstanding balance on this loan or loans?	K	8	0-52	18-19	
(Asked of parents) Use of money					
How does the study child/young person use the money they receive from all sources?					
For savings or investments	B; K	6-7; 4-6	Yes; No	10-13; 10-15	fn14a8a
For household expenses (e.g. food, gas, electricity)					fn14a8b
For accommodation costs (e.g. rent, board, mortgage)					fn14a8g
For mobile phone / Internet usage					fn14a8c
For car expenses					fn14a8h
For other personal expenses					fn14a8d
Other					fn14a8e
Do not receive money from any source					fn14a8f
Ability to save					
Generally speaking, are you able to save money?	K	7	Yes; No	16-17	fn16c
When dealing with your money on a day-to-day basis, how much does this statement sound like you?					
I like to look ahead and plan for the future financially	K	7-8	Not at all; A little; Somewhat; Quite a lot; Very much	16-19	fn16c1
I am cautious with my money and try to avoid getting into debt as much as possible					fn16c2
I am present-focused and financially like to live for today					fn16c3
I find it very easy to spend my money					fn16c4
I like to save money and I would say that the phrase 'save for a rainy day' applies to me					fn16c5
'Spend, spend, spend' is a phrase that applies to me					fn16c6

Table notes: Source: Australian Institute for Family Studies. (2019). *Longitudinal Study of Australian Children Data dictionary Release 7.0, Waves 1-7*, Melbourne: AIFS < https://growingupinaustralia.gov.au/data-and-documentation/data-dictionary/downloads, accessed 5 July 2019>.

Appendix Table A3. Financial Outcome Measures in the Household, Income and Labour Dynamics in Australia Survey

Domain or Concept / Question or measure	Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Bank accounts																			
Any bank accounts in your name only		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bayno
Total amount held in these accounts combined		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	baynoa
Any joint accounts		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	baja
Number of joint accounts		—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajano
Joint accounts held with people not living in HH		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajnr
Number of accounts		—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajnum
Person IDs - A/C 1 - 0001		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	baja101
Person IDs - A/C 1 - 0002		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	baja102
Person IDs - A/C 1 - 0003		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	baja103
Person IDs - A/C 1 - 0004		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	baja104
Total amount held in account - A/C 1		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajnh1a
Total amount held in account - A/C 2		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajnh2a
Total amount held in account - A/C 3		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajnh3a
Total amount held in account - A/C 4		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajnh4a
Total amount held in account - A/C 5		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajnh5a
Answered for each joint bank account		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajind
Total balance in all your joint accounts		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajta
What percentage belongs to you?		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajpown
What percentage belongs to other people in household?		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bajpoth
Any children with own bank account		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bachld
Amount in children's bank accounts		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bachlda
Business																			
Any household members own any businesses		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bfown
Value of businesses - Number of values recorded		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	bfnumv
Credit cards																			
Any credit cards, charge cards or store accounts		—	X	—	—	—	X	—	—	—	X	—	X	X	X	X	X	X	crhave

Domain or Concept / Question or measure Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Any cards in your name only	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	cryno
Maximum borrowing limit on all cards in own name	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crymbl
Paid entire balance owing on these statements for own card accounts	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crypeb
How much still owed after payments on own name credit card accounts	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	cryowe
Total amount currently owed on own name credit card accounts	—	—	—	—	—	—	—	—	—	X	—	—	—	X	—	—	—	crycowe
Any credit cards, charge cards or store accounts held jointly (also has card in own name)	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crjon
Other members in household on these accounts (ID) - 0001	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crj01
Other members in household on these accounts (ID) - 0002	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crj02
Other members in household on these accounts (ID) - 0003	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crj03
Other members in household on these accounts (ID) - 0004	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crj04
Maximum borrowing limit on all cards in joint names	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crjmbl
Paid entire balance owing on these statements for joint card accounts	—	—	—	—	—	—	—	—	—	X	—	—	—	X	—	—	—	crjpeb2
How much still owed after last payments on joint accounts	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crjowe
Total amount currently owed on joint credit card accounts	—	—	—	—	—	—	—	—	—	X	—	—	—	X	—	—	—	crjcowe
How often is entire balance on all your credit cards paid off each month	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	crpebm
Decision making in household																		
Managing day-to-day spending and paying bills	—	—	—	—	X	X	X	X	X	X	X	X	X	X	—	X	—	dhhdd
Making large household purchases	—	—	—	—	X	X	X	X	X	X	X	X	X	X	—	X	—	dhhlhp
Savings, investment and borrowing	—	—	—	—	X	X	X	X	X	X	X	X	X	X	—	X	—	dhsib
Personal debt																		
HECS debt or other student loans	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dthecs
Amount owed on HECS or student loans	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dthecsa
A loan to buy a car	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dtcarh
Amount owed on car loan	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dtcara
A hire purchase loan/agreement	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dthph
Amount owed on hire purchase loan	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dthpa
Amount owed on loans from other types of lenders	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dtola
Loans from friends or relatives not living in this HH	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dtfrh
Amount owed on loans from friends and relatives	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dtfra
Do you have any unpaid personal bills now overdue	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dtbill

Domain or Concept / Question or measure	Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Total value of these unpaid overdue personal bill		—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	dtbilla
Financial assets																			
Any household member currently owns investments		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	fainvc
Total current value of all investments		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	fainvcv
Approximate range the household has in these investments if current value unknown		—	—	—	—	—	—	—	—	—	X	—	—	—	X	—	—	—	fainvr2
Other financial investments such as bonds, debentures, certificates of deposit and mortgage-backed securities		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	faofi
Current value of other financial investments for all household members		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	faoficv
Approximate range that household has in bonds, debentures, certificates of deposit and mortgage-backed securities if value unknown		—	—	—	—	—	—	—	—	—	X	—	—	—	X	—	—	—	faofir2
Attitudes to finances																			
Prosperity given current needs and financial responsibilities		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fiprosp
Could not pay electricity, gas or telephone bills on time		X	X	X	X	X	X	X	X	X	—	X	X	X	X	X	X	X	fiprbeg
Could not pay the mortgage or rent on time		X	X	X	X	X	X	X	X	X	—	X	X	X	X	X	X	X	fiprbmr
Pawned or sold something		X	X	X	X	X	X	X	X	X	—	X	X	X	X	X	X	X	fiprbps
Went without meals		X	X	X	X	X	X	X	X	X	—	X	X	X	X	X	X	X	fiprbwm
Was unable to heat home		X	X	X	X	X	X	X	X	X	—	X	X	X	X	X	X	X	fiprbuh
Asked for financial help from friends or family		X	X	X	X	X	X	X	X	X	—	X	X	X	X	X	X	X	fiprbfh
Asked for help from welfare/community organisations		X	X	X	X	X	X	X	X	X	—	X	X	X	X	X	X	X	fiprbwo
Difficulty in raising (waves 1-8) $2,000 (waves 9+) $3,000 for an emergency		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fiemerf
How would obtain (waves 1-8) $2,000 (waves 9+) $3,000 - Use savings		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fisav
… Borrow from a relative who lives with you		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fibrelh
… Borrow from a relative who lives elsewhere		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fibrelo
… Borrow from a friend		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fibfri
… Borrow from a financial institution		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fibfin
… Sell an asset		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fisass
… Use some other method		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fioth
… No Answer		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	fina
Most important time period when planning savings and spending		X	X	X	X	—	X	—	X	—	X	—	X	—	X	—	X	—	fisavep

Domain or Concept / Question or measure	Waves 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Savings habits	X	X	X	X	—	X	—	X	—	X	—	X	—	X	—	X	—	fisave
I feel confident about the financial decisions I make	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfcon
I keep a close personal watch on my financial affairs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfwat
I make certain I understand the commitments I agree to in financial contracts	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfund
I set long-term financial goals and strive to achieve them	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfltg
I am very organised when it comes to managing my money day to day	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimforg
I always make sure I have money saved up for emergencies or unexpected expenses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfeue
I do a good job of balancing my spending and savings	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfbss
I feel very comfortable dealing with banks and other financial institutions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfbfi
I am good at dealing with day-to-day financial matters	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	fimfd2d
Financial risk prepared to take	X	X	X	X	—	X	—	X	—	X	X	X	X	X	X	X	X	firisk
Financial risk - assumed	—	—	—	—	—	X	—	X	—	X	X	X	X	X	X	X	X	firiska
Household bills																		
Does household have any unpaid bills now overdue	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hbany
Total value of these unpaid overdue household bills	—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hbval
Household wealth																		
Home value [Imputed value]	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	hsvalue hsvalui
Own bank accounts [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwobank hwobani
Joint bank accounts [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwjbank hwjbani
Children’s bank accounts [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwcbank hwcbani
Trust funds [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwtrust hwtrusi
Cash investments [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwcain hwcaini

Domain or Concept / Question or measure	Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Equity investments [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hweqinv hweq
Total bank accounts [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwtbank hwtbani
Life insurance [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwinsur hwinsui
Retirees superannuation [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwsuprt hwsupri
Non-retirees superannuation [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwsupwk hwsupwi
Total superannuation [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwsuper hwsupei
Home: Apportioned value [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwhmval hwhmvai
Other property: Apportioned value [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwopval hwopvai
Total property: Apportioned value [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwtpval hwtpvi
Home: Apportioned debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwhmdt hwhmdti
Other property: Apportioned debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwopdt hwopdti
Total property: Apportioned debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwtpdt hwtpdi
Home: Apportioned equity [positive values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwhmeqp hwhmeip
Home: Apportioned equity [negative values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwhmeqn hwhmein
Other property: Apportioned equity [positive values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwopeqp hwopeip

Domain or Concept / Question or measure	Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Other property: Apportioned equity [negative values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwopeqn hwopein
Total property: Apportioned equity [positive values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwtpeqp hwtpeip
Total property: Apportioned equity [negative values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwtpeqn hwtpein
Business: Value [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwbusva hwbusvi
Business: Debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwbusdt hwbusdi
Business: Equity [positive values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwbusep hwbeip
Business: Equity [negative values] [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwbusen hwbein
Vehicles: Value [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwvech hwvechi
Collectibles and other assets [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwcoll hwcolli
Joint credit card debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwjccdt hwjccdi
Own credit card debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwoccdt hwoccdi
Total credit card debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwccdt hwccdti
HECS debt [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwhecdt hwhecdi
Other debt: Car loans/Investment loans/Personal loans/Hire purchase/Overdue bills [Imputed value]		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwothdt hwothdi
Overdue household bills [Imputed value]		—	—	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwobdt hwobdti

Domain or Concept / Question or measure	Waves 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Household Financial Assets [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwfin hwfini
Household Non-Financial Assets [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwnfin hwnfii
Household Total Assets [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwasset hwassei
Household Debt [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwdebt hwdebti
Household Net Worth [positive values] [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwnetwp hwnwip
Household Net Worth [negative values] [Imputed value]	—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	hwnetwn hwnwin
Household annual expenditure																		
Groceries [Imputed value]	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	hxygroc hxygrci
Alcohol [Imputed value]	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	hxyalc hxyalci
Cigarettes and tobacco [Imputed value]	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	hxycig hxycigi
Public transport and taxis [Imputed value]	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	hxypubt hxypbti
Meals eaten out [Imputed value]	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	hxymeal hxymli
Motor vehicle fuel [Imputed value]	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	hxymvf hxymvfi
Children’s clothing and footwear [Imputed value]	—	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	hxyccf hxyccfi
Education fees [Imputed value]	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	hxyeduc hxyedci
Major life events																		
Life events in past year: Major improvement in finances	—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	lefni

Domain or Concept / Question or measure	Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Life events in past year: Major worsening in finances		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	lefnw
Life opinions																			
Satisfaction - Your financial situation		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	losatfs
Material deprivation																			
Do you, and can you afford to: Get together with friends or family for a drink or meal at least once a month		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhgt
Do you, and can you afford to: Get medical treatment when needed		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhmt mdhamt
Do you, and can you afford to: Have furniture in reasonable condition		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhfu mdhafu
Do you, and can you afford to: Have a decent and secure home		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhsh mdhash
Do you, and can you afford to: Get medicines when prescribed by a doctor		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhpm mdhapm
Do you, and can you afford to: Have warm clothes and bedding, if it is cold		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhwc mdhawc
Do you, and can you afford to: Have a television		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhtv mdhatv
Do you, and can you afford to: Have a substantial meal at least once a day		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhsm mdhasm
Do you, and can you afford to: A week's holiday away from home each year		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhwh mdhawh
Do you, and can you afford to: Have a roof and gutters that do not leak		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhrg mdharg
Do you, and can you afford to: Have a telephone (landline or mobile)		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhph mdhaph
Do you, and can you afford to: Have home contents insurance		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhhci mdhahci
Do you, and can you afford to: Have a washing machine		—	—	—	—	—	—	—	—	—	—	—	—	—	X	—	—	—	mdhhwm mdhawm

Domain or Concept / Question or measure	Waves 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Do you, and can you afford to: Have access to the internet at home	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhai mdhaai
Do you, and can you afford to: Have a motor vehicle	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhmv mdhamv
Do you, and can you afford to: Have comprehensive motor vehicle insurance	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhmvi mdhamvi
Do you, and can you afford to: Have at least $500 in savings for an emergency	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhsa mdhasa
Do you, and can you afford to: A home with doors and windows that are secure	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhsl mdhasl
Do you, and can you afford to: Get dental treatment when needed	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhdt mdhadt
Do you, and can you afford to: Buy presents for immediate family members or close friends at least once a year	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhbp mdhabp
Do you, and can you afford to: When it is cold, keep at least one room of the house adequately warm	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhhaw mdhahaw
Does each child have, and can you afford them to: have a separate bed	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhcsb mdhacsb
Does each child have, and can you afford them to: have a yearly dental check up	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhcdc mdhacdc
Does each child have, and can you afford them to: have a hobby or regular leisure activity	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhcho mdhacho
Do any of the children living in this household go to school	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhcgs
Does each child have, and can you afford for them: new school clothes every year	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhcbk mdhacbk
Does each child have, and can you afford them to: participate in school trips and school events that cost money	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–	–	mdhhcst mdhacst
Motor vehicles																		
Own any group 1 vehicles	–	X	–	–	–	X	–	–	–	X	–	–	–	X	–	–	–	mvcown
Current worth of vehicles	–	X	–	–	–	X	–	–	–	X	–	–	–	X	–	–	–	mvcval
Personal wealth																		

Domain or Concept / Question or measure	Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Own bank accounts		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwobank
Joint bank accounts		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwjbank
Superannuation, retirees		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwsuprt
Superannuation, non-retirees		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwsupwk
Own credit card debt		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwoccdt
Joint credit card debt		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwjccdt
HECS debt		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwhecdt
Other Debt: Car loans/Investment loans/Personal loans/Hire purchase/Overdue bills		—	X	—	—	—	X	—	—	—	X	—	—	—	X	—	—	—	pwothdt
Child support																			
Parent pays or receives everyday financial support - Resident child 0001		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcrfs1
Parent pays or receives everyday financial support - Resident child 0002		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcrfs2
Parent pays or receives everyday financial support - Resident child 0003		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcrfs3
Parent pays or receives everyday financial support - Resident child 0004		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcrfs4
Parent pays or receives other financial support - Resident child 0001		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcafs1
Parent pays or receives other financial support - Resident child 0002		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcafs2
Parent pays or receives other financial support - Resident child 0003		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcafs3
Parent pays or receives other financial support - Resident child 0004		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcafs4
Expected to provide/receive financial support for resident children		—	—	—	—	—	—	—	—	X	X	X	X	X	X	X	X	X	rcexs
Amount of expected financial support for resident children		—	—	—	—	—	—	—	—	X	X	X	X	X	X	X	X	X	rcexsa
Period covered expected financial support for resident children		—	—	—	—	—	—	—	—	X	X	X	X	X	X	X	X	X	rcexspc
Pay or receive amount at G20a		—	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	rcafspr
Wage and salaries																			
Current weekly gross wages & salary - all jobs [imputed]		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	wscei
Current weekly gross wages & salary - main job [imputed]		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	wscmei
Financial year gross wages & salary [imputed][inc salary sacrifice]		—	—	—	—	—	—	—	—	—	X	X	X	X	X	X	X	X	wsfes
Household expenditure																			
Household weekly expenditure on all groceries		X	—	X	X	X	—	—	—	—	—	X	X	X	X	X	X	X	xpgroc
Household weekly expenditure on groceries for food and drink		X	—	X	X	X	—	—	—	—	—	X	X	X	X	X	X	X	xpfood
Household weekly expenditure on meals outside the home		X	—	X	X	X	—	—	—	—	—	X	X	X	X	X	X	X	xposml

Domain or Concept / Question or measure	Waves	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Var. ID
Weekly household expenditure - Alcohol [Any spend] [Amount]		—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	xpalc xpalca
Weekly household expenditure - Cigarettes and tobacco [Any spend] [Amount]		—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	xpcig xpciga
Weekly household expenditure - Groceries [Any spend] [Amount]		—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	xpgrocs xpgroca
Has responsibility for payment of household bills		—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	xpresp
Weekly household expenditure - Meals eaten out [Any spend] [Amount]		—	—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	xpwmeo xpwmeoa
Annual household expenditure - person level - Groceries		—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	xpygroc
Annual household expenditure - person level - Alcohol		—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	xpyalc
Annual household expenditure - person level - Cigarettes and tobacco		—	—	—	—	X	X	X	X	X	X	X	X	X	X	X	X	X	xpycig

Table notes: The X's indicate that the item noted in the first column is asked in the corresponding wave.

Source: Melbourne Institute: Applied Economic & Social Research. (2019). *HILDA Online Data Dictionary Release 17.0*. Melbourne: MI <https://www.online.fbe.unimelb.edu.au/HILDAodd/Default.aspx, accessed 5 July 2019>.

Appendix Table A4. Household Financial Outcome Measures in the Survey of Income and Housing: Household Expenditures Survey

Question or measure	2003	2009	2015	Values	Variable ID
Whether could not pay gas/electricity/telephone bill on time due to shortage of money	X	X	X	Yes/No	bh_cfelectr
Sought financial help from friends/family due to a shortage of money	X	X	X	Yes/No	bh_cffamily
Unable to heat home due to shortage of money	X	X	X	Yes/No	bh_cfnoheat
Went without meals due to shortage of money	X	X	X	Yes/No	bh_cfnomeal
Pawned or sold something due to shortage of money	X	X	X	Yes/No	bh_cfpawnso
Whether could not pay registration/insurance on time due to shortage of money	X	X	X	Yes/No	bh_cfregoin
Number of indicators of financial stress experienced in last 12 months	—	—	X	Yes/No	bh_cfstrss
Number of missing out experiences in last 12 months	—	—	X	Yes/No	bh_cfstssmo
Assistance sought from welfare/community organisations due to shortage of money	X	X	X	Yes/No	bh_cfwelfar
Would use loan from bank/building society/credit union as source of emergency money	X	X	X	Yes/No	bh_lnbankbs
Would use loan on credit card as source of emergency money	X	X	X	Yes/No	bh_lncredca
Would use loan from family/friends as source of emergency money	X	X	X	Yes/No	bh_lnfamily
Would use high interest loan from finance company as source of emergency money	X	X	X	Yes/No	bh_lnfinanc
Would use loan from welfare/ community organisation as source of emergency money	X	X	X	Yes/No	bh_lnwelfar
Would sell something for emergency money	X	X	X	Yes/No	bh_sellsome
Would use other source for emergency money	X	X	X	Yes/No	bh_othersrc
Would use own savings as source of emergency money	X	X	X	Yes/No	bh_ownsavin
Financial stress respondent flag	X	X	X	Who	bp_fstr
Reason household members do not spend time on leisure or hobby activities	X	X	X	Don't want it/Can't afford it/Other reason	bh_rnohobs

Question or measure	2003	2009	2015	Values	Variable ID
Reason household does not have a holiday away from home for at least one week a year	X	X	X	Don't want it/Can't afford it/Other reason	bh_rnohols
Reason household does not have friends or family over for a meal once a month	X	X	X	Don't want it/Can't afford it/Other reason	bh_rnomeal
Reason household does not have a night out once a fortnight	X	X	X	Don't want it/Can't afford it/Other reason	bh_rnonits
Reason household does not have a special meal once a week	X	X	X	Don't want it/Can't afford it/Other reason	bh_rnospml
Reason household members buy second hand clothes most of the time	X	X	X	Don't want it/Can't afford it/Other reason	bh_rsndclth
Ability of household to raise emergency money	X	X	X	Yes/No	bh_emgmoney
Main source of household emergency money	X	X	X	Own savings/Loan bank/Loan finance company/Loan credit card/Loan family or friends/Loan welfare or community org/Sell something/ Other sources	bh_msrcmney
Management of household income	X	X	X	NA/Spend more money than we get/ Just break even most weeks/Able to save money most weeks	bh_manhinc
Weekly household GST on meals out and fast food (FIS)	X	X	X	Amount	bh_meagst

Table notes: The X's indicate that the item noted in the first column is asked in the respective year 2003, 2009, 2015. Most indicators are asked at the household or income-unit level, and apply to all household members. This is indicated by the "bh" prefix of each variable ID with "h" referring to the household level. Possible responses/values of the item are listed in the fifth column.

Sources: Australian Bureau of Statistics. (2016). *6503.0 - Household Expenditure Survey and Survey of Income and Housing: User Guide, 2003-04*. Canberra: ABS <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6503.02003-04, accessed 5 July 2019>.

Australian Bureau of Statistics. (2016). *6503.0 - Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2009-10*. Canberra: ABS < https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6503.02009-10, accessed 5 July 2019>.

Australian Bureau of Statistics. (2016). *6503.0 - Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015-16*. Canberra: ABS < https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6503.02015-16, accessed 5 July 2019>.

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