Responses to increases in the superannuation preservation age

Marc Chan[a], Cain Polidano[b], Lan Tong[c], Ha Vu[c], Roger Wilkins[b], Justin Holland[d] and Son Nguyen[d]

[a]Department of Economics, University of Melbourne
[b] Melbourne Institute, University of Melbourne
[c] Department of Economics, Deakin University
[d]The Australian Tax Office

Extended abstract

Background

To deal with the fiscal pressure of population aging, most governments are placing a greater emphasis on private retirement pensions, as a pillar for the retirement income system. Private pensions are characterized by: (1) illiquidity, whereby individuals cannot access the funds until reaching a withdrawal/access age; and (2) preferential tax treatment of contributions and accrued earnings aimed at boosting retirement savings.

The literature to date has primarily paid attention on preferential tax treatment, especially on how it promotes retirement savings and whether it is effective in reducing fiscal pressure, given that tax concessions can reduce income tax revenues. Very little work has been done to understand the impact of illiquidity and how it influences individual decisions in contributions, draw-downs and employment. Understanding these implications is very important for the debate of whether the access age should increase against a backdrop of increases in life expectancy, as has been the case with public pensions.

In this paper, we aim to address this gap in the literature by studying increases of the Australian superannuation preservation age from 55 to 60 through stepwise increases that were announced in 1997 and began in July 2015. In principle, such changes can induce people to work longer and increase superannuation balances, but in practice, this is highly uncertain. Theoretical models suggest that people save because of a preference to smooth consumption over the life-cycle. Delaying access to private pension benefits will limit individuals' ability to smooth consumption, which may reduce voluntary superannuation contributions and retirement savings. In our study, we examine the effects of superannuation preservation (access) age increases on superannuation contributions, employment, drawdown of savings, and long-run impacts on retirement income and welfare.

Our study contributes to the international literature by being the first to estimate the impacts of restricting the *deaccumulation* of *private pension* benefits and test an important life-cycle model prediction, which will inform private pension design. Previous studies on private pensions have focused on other design features besides age of access, including impacts of eligibility on savings (Gerber 2011; Porterba et al. 1995); the role of financial incentives to contribute including tax-favored treatment of contributions (Chetty et al. 2014; Fadlon et al. 2016) and government matching payments (Duflo et al. 2006, Duflo et al. 2007, Ramnath 2013, Chan et al. 2020); and impacts of defined benefit versus defined contribution arrangements on early retirement (Blundell et al. 2002; Friedberg and Webb 2005; Meghir and Whitehouse 1997).

Policy setting and conceptual framework

Australian superannuation is a mandatory private pension scheme for almost all employees, allowing individuals to make concessional contributions (taxed at a flat 15% rate) and non-concessional contributions. As is typical for private pensions, there is a minimum age for access to superannuation,

initially set at the age of 55. Benefits are paid as either a lump-sum or as an income stream. If the latter option is taken, there are requirements for minimum rates of drawdown. Prior to July 2007, benefits paid as an annuity were taxed at personal income tax rates less a 15% tax offset, and those paid as a lump sum were taxed at 15%. Since 1 July 2007, benefits withdrawn from the fund in the retirement phase have been tax free, as have been returns accrued during this phase.

The government decided to increase the preservation age (access age) from 55 to 60 and the changes were announced in the 1997 budget. The aim of the change was to prevent people from maximizing their super contribution to reduce their tax burden, accessing superannuation to fund their early retirement, and then subsequently relying on social security (the Age Pension). The implementation of the changes was stepwise as outlined in Table 1. The government expects this change to have a positive impact on national saving and reduce the fiscal burden of social security. Note that the government still allows for the withdrawal of super prior to the preservation age in exceptional cases such as loss of job or severe hardship. Also of relevance is that, under the Transition to Retirement Scheme introduced in 2005, people who reach the preservation age can start accessing superannuation without retiring from workforce.

Table 1: Phased Increase in Preservation Age

Date of birth	Preservation age (years)	Date at which reach preservation age
Before July 1960	55	Before 30 June 2015
1 July 1960-30 June 1961	56	1 July 2016-30 June 2017
1 July 1961-30 June 1962	57	1 July 2018-30 June 2019
1 July 1962-30 June 1963	58	1 July 2020-30 June 2021
1 July 1963-30 June 1964	59	1 July 2022-30 June 2023
From 1 July 1964	60	After 1 July 2024

Our conceptual framework will involve a lifecycle model, in which people decide how much to work, how much to save and how to allocate their saving between private pension wealth (superannuation)and more liquid savings. In our model, private pension wealth consists of two components: (1) compulsory savings due to the Superannuation Guarantee (contributed as a proportion of earnings); and (2) voluntary superannuation contributions. The model highlights the trade-off between saving for retirement through pension contributions (which receive preferential tax treatment up to a cap) and more liquid forms of savings, and the constraints that forced savings have on consumption and asset allocation.

We test the following hypotheses:

1. Liquidity hypothesis: The preservation age affects the liquidity of superannuation: raising it will reduce its liquidity and act to reduce contributions pre-preservation age and thus lower superannuation balances pre- and post-preservation age.
2. Forced saving hypothesis: Compulsory employer contributions to superannuation may result in forced savings above what an individual would voluntarily save (especially if there are not other forms of saving that can be reduced and the individual is unable to borrow against retirement wealth). This can lead to later retirement (for those who would otherwise have retired prior to the (increased) preservation age). Superannuation balances will increase at the ages newly below the preservation age (and also after reaching the preservation age given optimal smoothing of consumption in retirement).
3. Commitment hypothesis: Increasing the preservation age increases the strength of superannuation (an illiquid form of wealth) as a commitment device for saving for retirement. This will increase contributions prior to reaching the preservation age, and thus increase superannuation balances both before and after reaching the preservation age.

Methods

Data

Our principal data source is the Australian Longitudinal Information Files (ALife), a 10% random sample of tax records of Australian tax filers from the Australian Tax Office for the 1990/1991 to 2016/2018 tax years. This data set is longitudinal, allowing us to track individuals over time (as long as they submit tax returns). There are several strengths of this data. First, the data contains all information collected by tax returns and complete information on contributions towards superannuation (pre- and post-tax) and the balance of all superannuants (from 2013), allowing us to examine the effects of reaching preservation age on contribution and draw-down behaviours.

Empirical strategy

An important feature of the reform is that the preservation age takes stepwise jumps around cut-off thresholds of birth dates, creating exogenous variation in the preservation age for identification. We use two estimation methods, Regression Discontinuity Design (RDD) and differences-in-differences. The RDD exploits discrete changes in the policy environment, by comparing the behaviours of people who were born just before or after the cut-off birth date. Assuming that both groups are similar in other characteristics (which is plausible given the small differences in birth dates), the treatment status is effectively random and we can estimate the causal impact of the reform.

Results

Our estimates reveal several substantive results. First, consistent with the forced saving hypothesis, we find that preservation age increases trigger higher employment in the affected ages (56-57). Second, at odds with both the liquidity and commitment hypotheses, we do not find any impact on contributions prior to preservation age that may reflect substitution to more liquid forms of wealth (that is, decreases in contributions) or strengthening of commitment (that is, increases in contributions).

Third, we find a significant proportion of individuals draw down immediately once they become eligible to do so, especially among low-income individuals who may be credit constrained. This is potentially consistent with the forced saving hypothesis. That contribution behaviours are inelastic with respect to the access age also supports the forced saving hypothesis.

Finally, we find large reductions in drawdowns and small positive effects on contributions at affected ages—that is, ages newly under the preservation age due to the policy change. This reflects the fact that many middle to low-income earners take a large lump-sum withdrawal in the year they reach their preservation age.

Our results have several policy implications. With pre-preservation age contributions unaffected by increases in the preservation age and drawdowns decreasing and contributions increasing at affected ages, increasing the preservation age on average results in later retirement and increases superannuation balances. The reform therefore has the average effects intended by the policy makers. Our results also highlight the heterogeneous effects of this reform through the liquidity and forced saving channels. For example, low-income individuals would prefer to channel the funds into alternative portfolios once they are able to access funds, whereas for high income individuals, increases in liquidity promote greater contributions into retirement savings. Finally, it is important to note that, in other countries, individuals typically have pension wealth with features similar to the forced saving component of the Australian system, in the sense that it is automatically linked to their earnings. As a result, our results may apply in other policy contexts.

References

Chan, M. and Polidano, C., Vu, H., Wilkins, R., Carter, A., To, H. How Effective are Matching Schemes in Enticing Low-income Earners to Save More for Retirement? Evidence from a National

Scheme (December 3, 2020). Melbourne Institute Working Paper No. 27/20, https://ssrn.com/abstract=3742439.

Chetty, R., Friedman, J.N., Leth-Petersen, S., Nielsen, T.H. and Olsen, T., (2014). Active vs. passive decisions and crowd-out in retirement savings accounts: Evidence from Denmark. *The Quarterly Journal of Economics*, 129(3): 1141-1219.

Duflo E, G. W, Liebman J, Orszag P, Saez E. (2006). Saving incentives for low-and middle-income families: Evidence from a field experiment with H&R Block. *The Quarterly Journal of Economics*, 121 (4): 1311-46.

Duflo, E., G., W., Liebman, J., Orszag, P. and Saez, E. (2007). Savings incentives for low-and moderate-income families in the United States: why is the saver's credit not more effective? *Journal of the European Economic Association*, 5 (2-3): 647-661.

Fadlon, I., Laird, J. and Nielsen, T. H. (2016). Do employer pension contributions reflect employee preferences? Evidence from a retirement savings reform in Denmark, *American Economic Journal: Applied Economics* 8(3): 196-216.

Gale, W.G. and Scholz, J.K., (1994). Intergenerational transfers and the accumulation of wealth. *The Journal of Economic Perspectives*, 8(4), pp.145-160.

Gelber, A. (2011). How do 401(k)s affect saving? Evidence from changes in 401(k) eligibility. *American Economic Journal: Economic Policy* 3(4): 103-22.

Poterba, J., Venti, S. and Wise, D. (1995). Do 401(k) contributions crowd out other personal saving? *Journal of Public Economics* 58:1-32.

Ramnath, S., (2013). Taxpayers' responses to tax-based incentives for retirement savings: Evidence from the Saver's Credit notch. *Journal of Public Economics*, 101: 77-93.