

Age of Decision: Pension Savings Withdrawal and Consumption and Debt Responses

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Motivation

- Many countries rely on pension savings to meet individuals' retirement needs
 - Sizable contribution
 - Very illiquid
 - Defined-contribution systems in most countries are extremely illiquid before age 55 (Beshears, et al., 2015)
- Some countries allow early access to pension savings
 - In US, almost half of households eligible to undertake 401(k) loans have withdrawn pension savings to potentially fund current consumption (Beshears, Choi, Laibson and Madrian, 2011; Lu et al., 2014)
 - Nation wide change that allows early access to defined contribution pension in the UK (Budget 2014)

Should Individuals have Early Access Option to Pension Savings?

- Pro—Greater flexibility, generate more savings
- Con—Excessive present consumption
- Generate a lot of debate among policymakers and academics, but evidence is limited on pension saving withdrawal and usage of these funds
- UK Treasury issued a call for evidence on early access to pension savings (December 2010)

“Early access to pension savings is one such option. It could encourage more pension saving, or provide flexibility for individuals facing financial hardship. It could give more choice during the accumulation of pension savings, and so complement the reforms to remove unnecessary restrictions on accessing retirement savings in later life. However, early access also poses potential risks to retirement outcomes, and evidence on the likely impact of early access is currently limited.”

This Paper

Exploit administrative regulation in Singapore that allows individuals to cash out a fraction of their pension savings at age 55

- Questions:
 1. Do consumers take advantage of the access option?
 2. How does it impact the consumption and savings decisions of aging consumers? What do they do with the withdrawn funds?
- Identification: discrete change in consumption and savings in the month turning age 55, with a smooth trend in other covariates around the threshold

CPF (Pension Plan) and Retirement Savings in Singapore

- Comprehensive pension savings system covering retirement, healthcare, home-ownership, family protection and asset enhancement.
- All working Singaporeans and their employers make monthly contributions to the CPF that go into three accounts:
 - Ordinary Account (OA): housing, insurance, investment and education
 - Special Account (SA): investment in retirement-related financial products
 - Medisave Account: hospitalization and approved medical insurance
- Exact CPF contribution rates differ by age and over time
 - Prime-age employees contribute 20% of gross monthly salary and employers contribute 15%.
 - Approximately 15-25% of CPF contribution is credited to the SA exclusively for retirement purposes.
 - The above rates are capped at SG\$5k monthly salary (or SG\$1k in contribution)

CPF (Pension Plan) and Retirement Savings in Singapore

- Upon reaching 55, individuals are entitled to withdraw a portion of their CPF savings based on their available CPF balances.
 - In our sample, individuals could withdraw between **10%-30%** of CPF balances.
- An individual can withdraw **anytime** after turning 55. In addition, if an individual chooses not to withdraw the *full* eligible sum on 55th birthday, they are still eligible to withdraw yearly, on or after their birthday each year.
- It takes **2-10 working days** to withdraw the funds (typically through direct bank transfer).
- Withdrawn funds are **not subject to income taxes**. Part of the remaining CPF balances is used to form a Retirement Account (RA), which typically earns **4%** interest per annum (since 1999). The rest earns a guaranteed interest rate of **2.5%**.
- Remaining CPF balances are disbursed to individuals monthly on reaching age 65 (drawdown age).

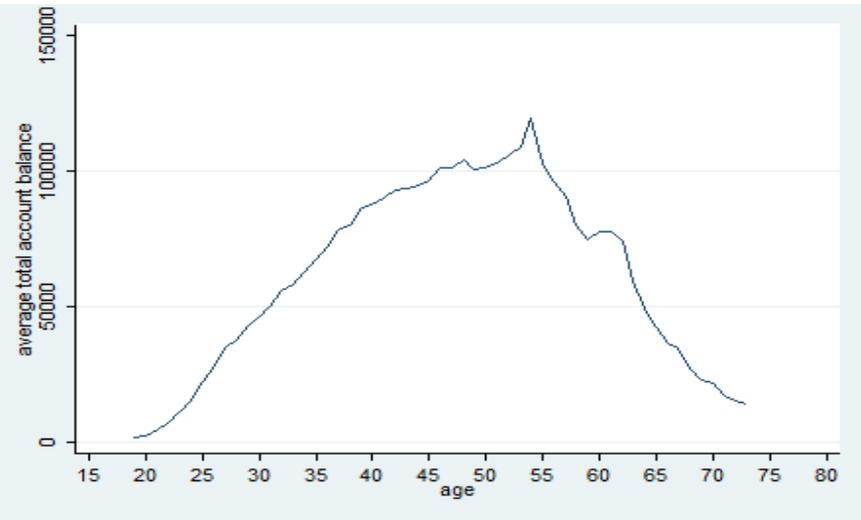
CPF (Pension Plan) and Retirement Savings in Singapore

- Published statistics on CPF government website shows that qualified individuals withdrew a significant amount
 - Total withdrawal amount on average is about **SG\$3 billion per year** in our sample period, almost **1% of GDP** in Singapore in 2011

Micro-data from CPF on withdrawal

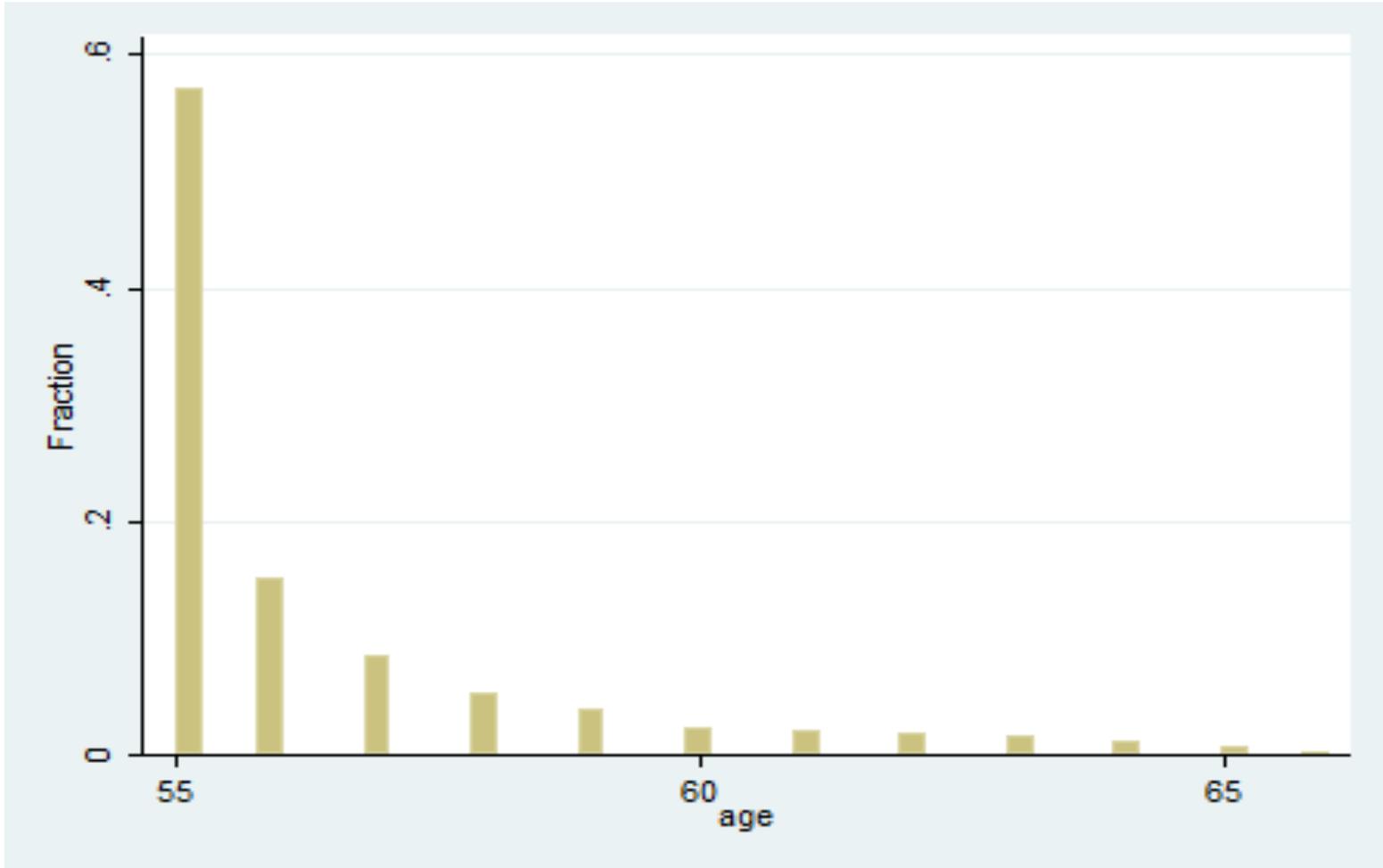


2010



2011

From CPF: Fraction of Withdrawing Individuals



Data

- Proprietary dataset obtained from one leading bank in Singapore
 - Financial transactions between April 2010 and March 2012, of about 180,000 individuals
 - Checking account balance, total debit and credit amount (for checking accounts), spending (for credit and debit cards), and credit limit, payments and debt (for credit cards)
 - Disaggregated transaction-level credit card and debit card spending information
 - Rich set of demographics, e.g. age, gender, income, property type, postal code, nationality, ethnicity and occupation
- Sample restrictions:
 - Singaporeans who turned 55 in sample time frame (March 2010 to April 2012)
 - Exclude dormant/closed accounts that remained inactive - no transactions in at least 6 months
 - Restrict to all Singaporeans who hold all accounts with the bank (checking account, credit card, and debit card) – these consumers more likely to have exclusive relationship with bank
 - Main results robust to sample selection criteria

Empirical Strategy

- At 55, individuals in our sample can withdraw:

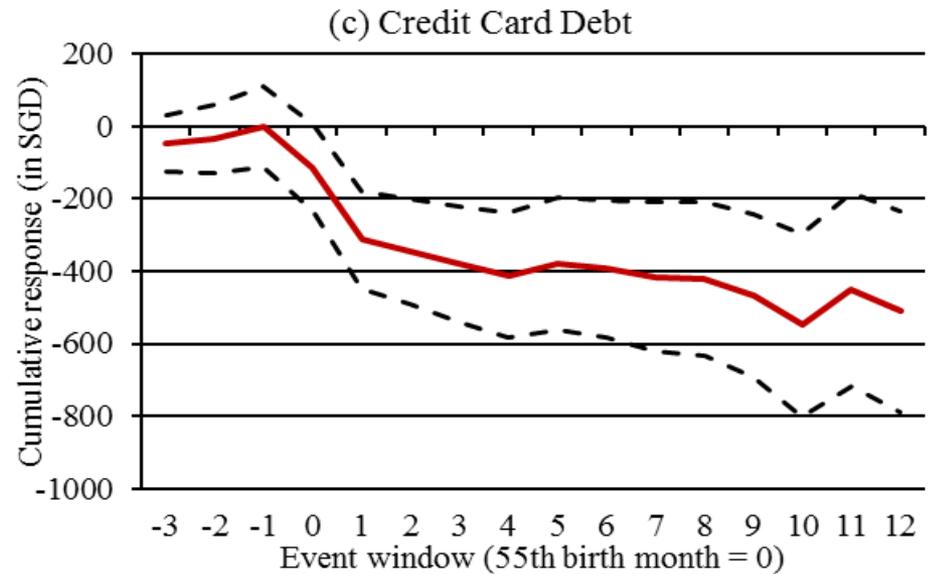
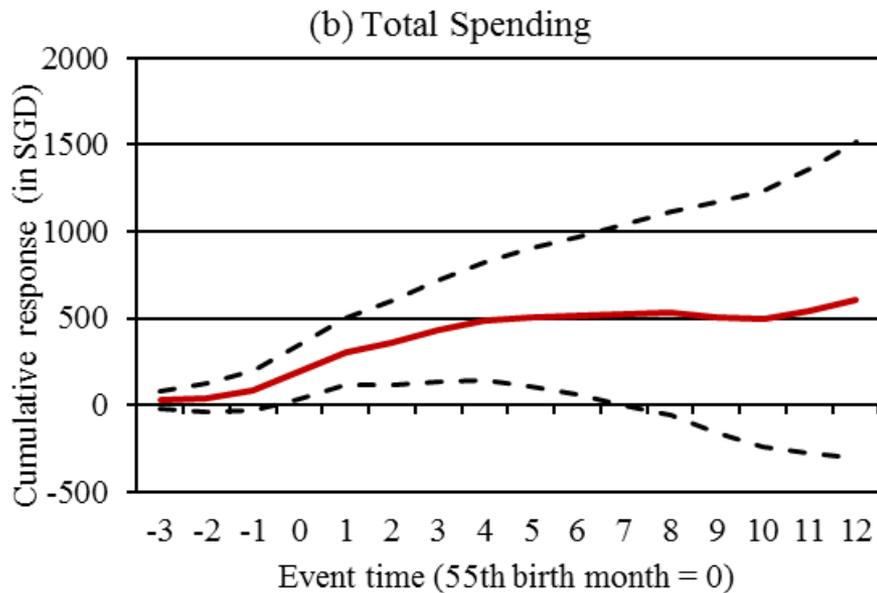
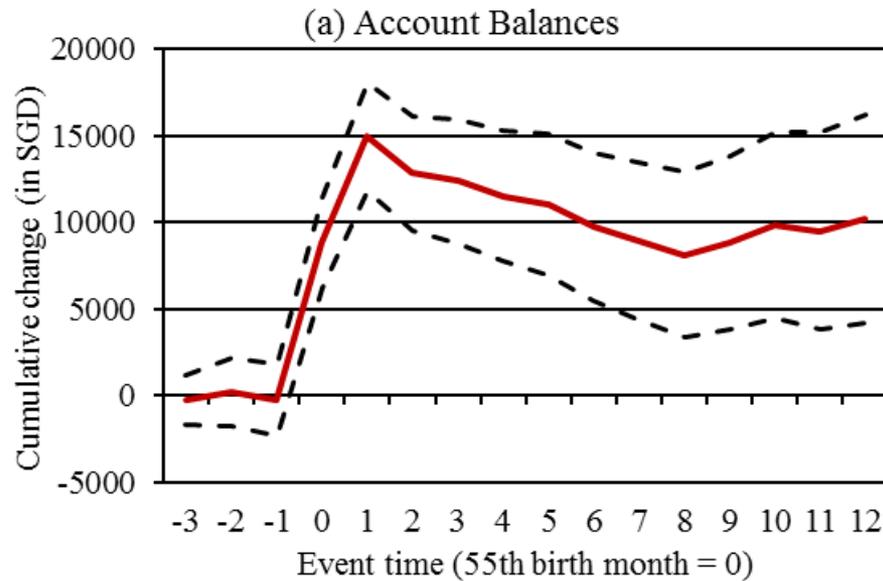
The day you turn 55	Withdrawal of cash balances
1 Jan – 31 Dec 2010	30%
1 Jan – 31 Dec 2011	20%
1 Jan – 31 Dec 2012	10%

- Examine response of checking account balances, credit and debit card spending and debt to reaching withdrawal age
- Empirical strategy exploits monthly individual-level data and the fact that the withdrawal age is birth month-specific.
- Regression specifications

$$Y_{i,t} = \delta_t + \alpha_i + \gamma W_{i,t}(-3m, -1m) + \beta W_{i,t}(0m, 12m) + \epsilon_{i,t}$$

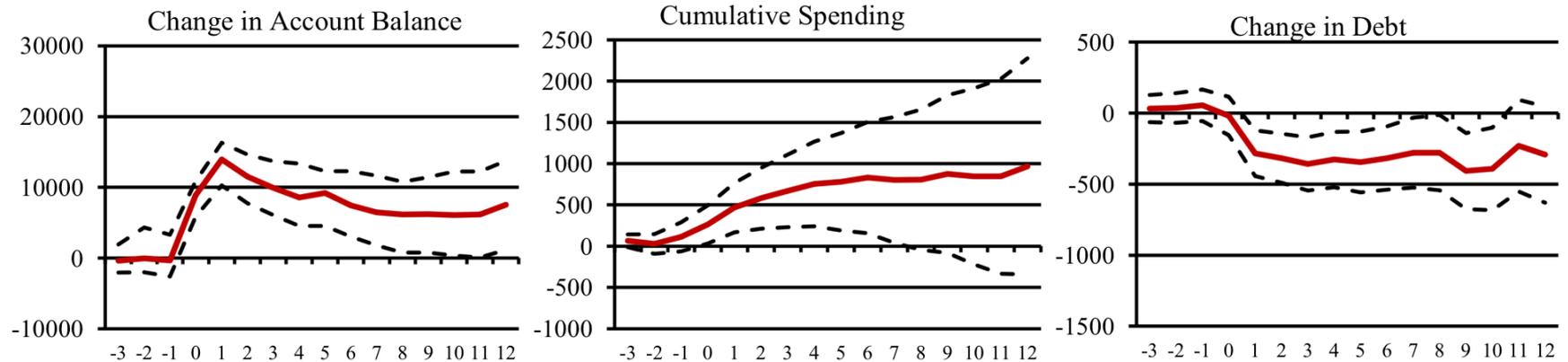
$$Y_{i,t} = \delta_t + \alpha_i + \sum_{s=1}^{13} \gamma_s W_{i,t+s} + \sum_{s=0}^{12} \beta_s W_{i,t-s} + \epsilon_{i,t}$$

- Individual fixed effects control for time-invariant differences in consumption preferences at the individual level, and year-month fixed effects control for seasonal variation in consumption expenditures and concurrent aggregate factors.
- All coefficients are relative to outcomes ≤ 4 months before an individual turns 55.

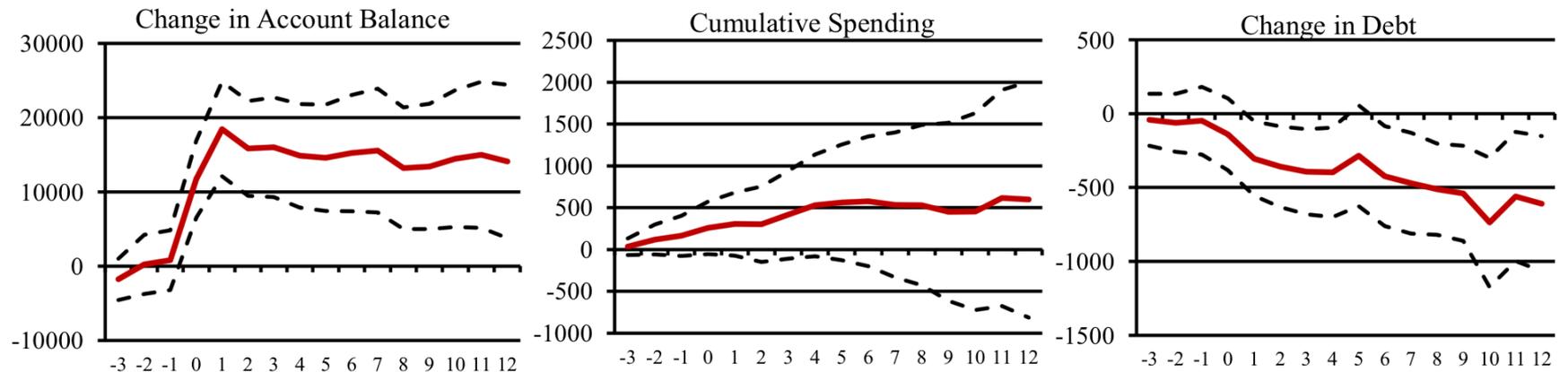


Heterogeneous Responses – By Liquidity Constraints

Low Credit Limit



High Credit Limit



Implication for Savings

- Significant portion of withdrawn funds remained in individuals' checking account balances up to one year after withdrawal.
 - Reassuring for the “excessive” consumption concern
- Why do consumers choose to withdraw pension funds *immediately* upon eligibility and leave it sitting in a low-interest bearing checking account (**below 0.1% interest rate**) at the expense of a higher interest rate (**2.5%-4%**) offered on their retirement account?

Potential Reasons?

- Government policy?
 - Some government policies regarding CPF withdrawal change annually (e.g. Medisave Minimum Sum)
 - However unlikely as the **withdrawal rule is fixed** for each birth cohort
- Restricted withdrawal option?
 - Individuals can only withdraw once a year, incur transaction costs, and this inflexibility is costly especially for consumers with potential emergency needs
 - Also unlikely
 - Withdrawal process is very efficient: **up to 10 working days**
 - CPF savings are **partially liquid** (can tap funds for equity and real estate investment, or use it to offset medical expenses)
 - We observe **similar pattern among less constrained** consumers
- Suggests that households in our sample may be making savings and investment mistakes by failing to exploit arbitrage opportunities (Gross and Souleles, 2002; Choi, Laibson and Madrian, 2011).
 - We find some evidence consistent with this view: more sophisticated and financially literate consumers are less likely to withdraw

Conclusion

- Identify consumers' withdrawal, consumption and saving responses to the early access option.
 - We find that consumers respond strongly to age eligibility by withdrawing sizeable fraction of pension savings.
 - Nevertheless, we find relatively small consumption response, mostly driven by low-liquidity consumers and debit card spending.
- Interestingly, on average, checking account balances remained significantly (\$10,000) higher even at the end of one year.
 - Suggestive evidence that financial sophistication is related to decision to withdraw (and the associated saving decision).
- Policy implications: The major concern of consumer overspending with the withdrawn savings seems unwarranted; early access to pension savings may allow liquidity-constrained consumers to smooth consumption
 - especially informative (and comforting) considering the fact that there are no other social safety nets in Singapore and pension is a significant source of their retirement savings.