

# Chile's Experience with COVID-19 Early Pension System Withdrawals

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## To discuss today

- The Chilean pension system and early withdrawals.
- Descriptive statistics
  - Who took how much and when?
  - Who was left with zero pension account post-withdrawal?
- Multivariate analysis using baseline accounts, earnings, and density as controls.
- Next steps

## Main Results

- Individuals with zero balance after the withdrawals are mainly: females, younger individuals, with lower wages and density of contribution.
- It is likely that the withdrawals' design will imply larger negative impacts on individuals with lower wages & lower contribution density.
- Regression results suggest that having higher labor market participation, as well as received special UI benefits, reduced the probability of making withdrawals.
- If this associations prove to be robust, it implies that the introduction of well-designed “rainy day accounts” or similar measures could reduce the probability of new episodes of pension fund withdrawals.

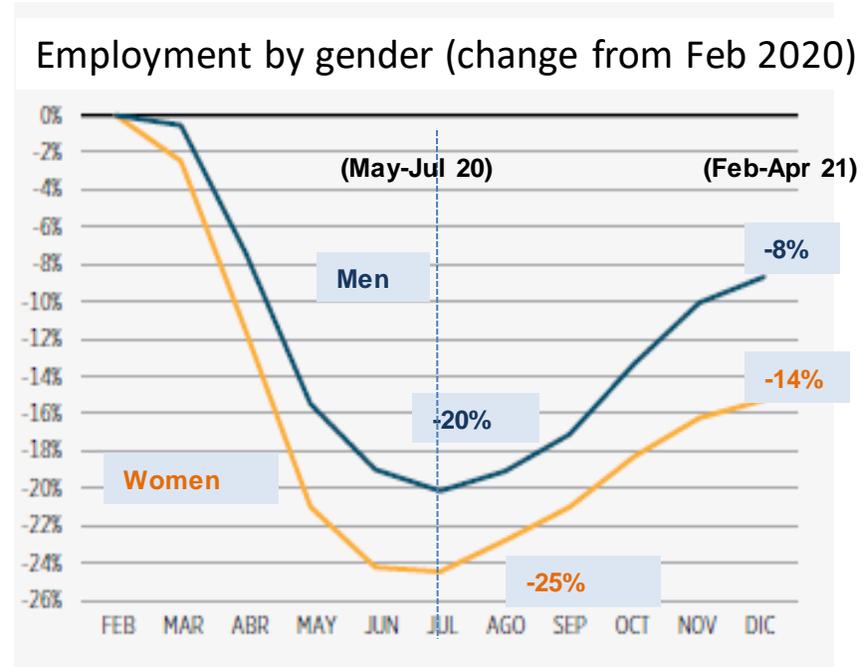
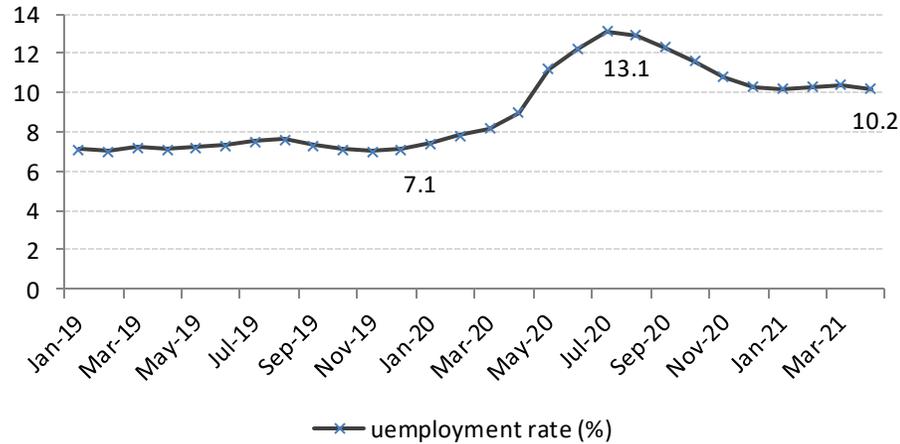
# Overview: Chile's pension system

- Mandatory national funded DC program launched 1981, replacing insolvent DB plans.
- 10% of pay contributed into AFPs (private investment managers); illiquid pension savings.
- AUM USD 200+bn in 06-2020 (82% of GDP); allowed to invest 80% non-domestic.
- Retirement age 60 for women, 65 for men;
- Payouts: phased withdrawal, annuity, or combinations;
- Solidarity benefits for the 60% poorest individuals (means tested);
- Voluntary savings with state-matched incentives and tax-subsidies.



# Covid-19 hit Chile hard

- Unemployment peaked at 13.1%, still higher than pre-COVID level
- Job losses higher for women, also with slower recovery.

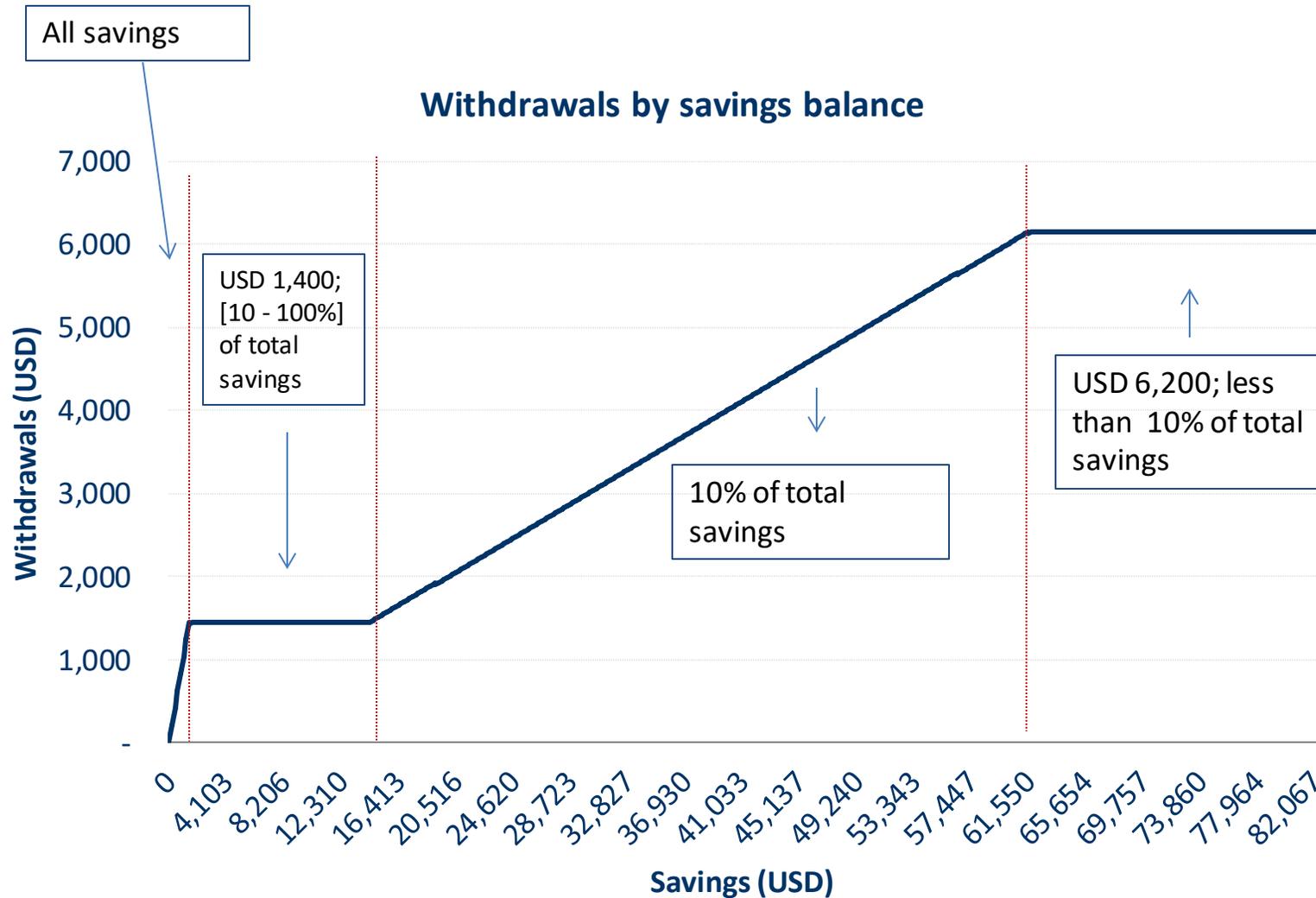


- Large economic impact for women and low-mid income households.
- Through different policies, the government has supported employment and households.
- Government's efforts to help with stimulus: Cash transfers, job retention schemes, increased UI benefits, easing UI requirements (approx. 10% of GDP).

**Nevertheless,  
pressure for  
early  
withdrawals  
grew**

- Three rounds of withdrawals:
  - 1st: July, 2020
  - 2nd: December, 2020
  - 3rd: April, 2021
- Each round in effect for a year.
- **Universal:** Unconditional access, no requirements or restrictions considered
- All affiliates & pensioners allowed to withdraw their savings – including annuitants in the 3rd wave.
- Only the 2nd withdrawal taxed for individuals with earnings > USD 2.100/month
- Recently, a 4<sup>th</sup> withdrawal was rejected in the higher chamber (but may be presented with modifications again)

# Withdrawal rule defined a floor and a ceiling



# Data

- Administrative records for individuals taking early withdrawals, plus administrative records for all affiliates.
- Novel data set:
  - ✓ Overall description of withdrawals: # of people, average amount withdrawn, timing, how much was withdrawn: overall and by # of withdrawal
  - ✓ Who was left with zero pension savings post-withdrawal
  - ✓ Individual characteristics and social economic factors: age, sex, balance, labor market history
  - ✓ Access to UI benefits during 2020 and 2021
- Caveat: No information on other income sources and savings.

# Results: Mean Tests

Variable	Zero	One	Two	Three
Female	0.45	0.59***	0.52***	0.42***
Age	40.58	36.71***	40.37***	43.84***
Foreign	0.32	0.11***	0.15***	0.06***
Balance (USD)	7,463	9,892***	16,167***	20,679***
Density (overall)	0.24	0.32***	0.54***	0.64***
Density (Aug 19 – July 20)	0.1	0.23***	0.47***	0.61***
Monthly Wage (USD)	150	320***	533***	671***
Density (Jan 21 – July 21)	0.16	0.26***	0.49***	0.59***
UI Benefits (USD)	776	368***	382***	438***
UI Special Benefits (USD)	518	470***	427***	478***
Diff. in Equity (%)	4.86	3.64***	3.12***	3.59***

# Results: Withdrawals' Descriptive Statistics

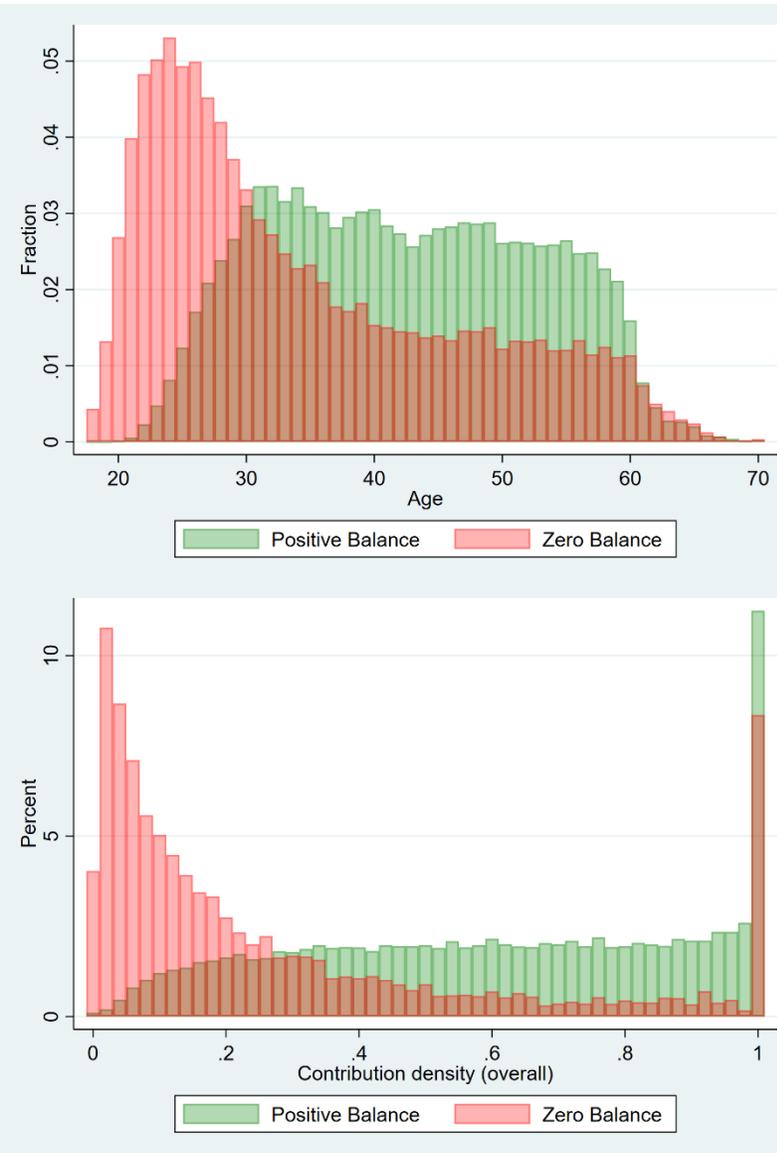
<b>Variable</b>	<b>Zero</b>	<b>One</b>	<b>Two</b>	<b>Three</b>
Withdrawals (USD)	NA	1,075	3,345	6,206
Withdrawal (% balance)	NA	87.3	79.8	55.5
Withdrawal/Wage	NA	1.6	4.9	9.3
Zero Balance (%)	NA	4.75	14.77	27.4
<i>N</i>	811,103	2,103,720	1,987,455	6,239,312

# Who was left with Zero Balance after 1<sup>st</sup> Withdrawal? (Zero vs. Positive Balance)

## Males

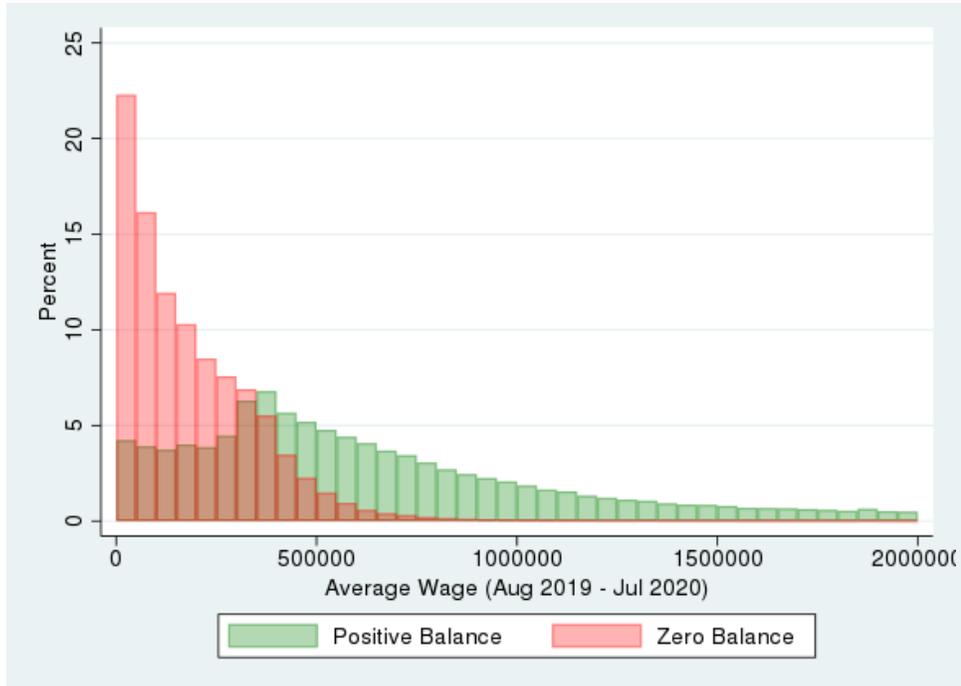


## Females

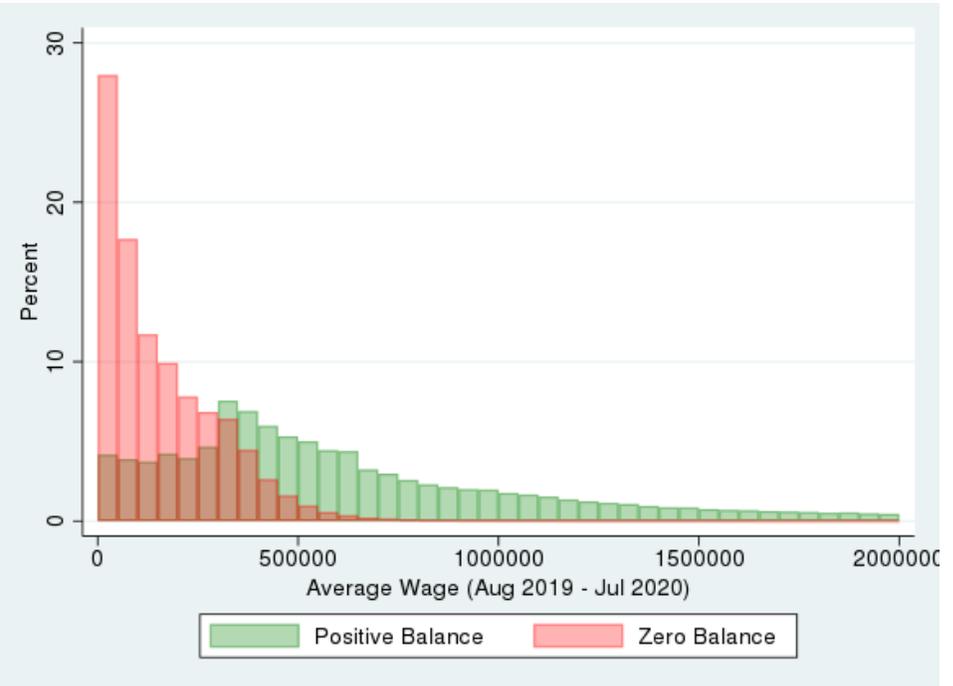


# Who was left with Zero Balance after 1<sup>st</sup> Withdrawal? (Zero vs. Positive Balance)

## Males



## Females



Average wage is expressed in CLP.  
CLP 1,000,000 is equivalent to USD 1,335

# Results: Expected effect on future pension (representative individuals)

- Three representative individuals: low, medium and high wage/contribution density profiles (no change after withdrawals)
- They take all 3 withdrawals
- Age of 1st withdrawal: 26
- Legal retirement age

	Wage/density	Low	Medium	High
<b>Male</b>	Pension (%)	-24.9	-22.2	-6.7
	Years to recover	5.8	5.2	1.5
<b>Female</b>	Pension (%)	-26.1	-23.1	-7.0
	Years to recover	5.8	5.2	1.5

Assumptions:

Real annual return: 4%, contribution rate: 10%, real increase in wages: 0%

Low: minimum wage (USD 480) and lifetime density= 0.3

Medium: monthly wage (USD 1,000) and lifetime density=0.6

High: monthly wage (USD 2,000) and lifetime density=1

# Results: Multivariate analysis

	1st Withdrawal (1/0)	Withdrawals (0 - 3)
Female	0.0295***	-0.00580***
Age	0.00229***	0.0253***
Age <sup>2</sup>	-6.21e-05***	-0.000401***
Foreign	-0.130***	-0.315***
log(Initial balance)	0.0322***	0.256***
log(Ave. Wage) (Aug-19-July 20)	0.00699***	0.0189***
Density (overall)	0.0599***	0.309***
Density (Aug 19-July 20)	-0.0741***	-0.0799***
UI controls	Yes	Yes
UI special benefits controls	Yes	Yes
<i>N</i>	10,172,728	10,172,728
R <sup>2</sup> (%)	15.5	42.7
Mean dependent variable	0.93	2.23

## Significant outflows due to repeated withdrawals rounds

- USD 200 bn AUM pre-withdrawals
- Total early-withdrawals up to date: USD 50bn
  - 25% AUM
  - 20% GDP
- Average withdrawal per round: USD 2,000
- # of people w1: 10.3 MM
- # of people w2: 8.1 MM
- # of people w3: 6.5 MM
- # of people who took all withdrawals: 6.2 MM
- # of people with no withdrawals: 0.8 MM

## Main Results

- Individuals with zero balance after the withdrawals are mainly: females, younger individuals, with lower wages and density of contribution.
- It is likely that the withdrawals' design will imply larger negative impacts on individuals with lower wages & lower contribution density.
- Regression results suggest that having higher labor market participation, as well as received special UI benefits, reduced the probability of making withdrawals.
- If this associations prove to be robust, it implies that the introduction of well-designed “rainy day accounts” or similar measures could reduce the probability of new episodes of pension fund withdrawals.

## Lessons, Implications & the Road Ahead

- We want to understand if the withdrawals have had an impact on labor market participation
- We also want to evaluate potential effects of withdrawals on future pensions, annuity accounts, Solidarity Pillar, SIS, among others.
- What can prevent this from happening again?
  - Emergency saving accounts
  - More financial literacy
  - Rules for early access and repay/part of the balance more liquid
- Comprehensive reform still pending to increase pension adequacy in Chile
- Moreover, the outlook for the pension system remains highly uncertain

# Thanks

## Comments are welcome

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