

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

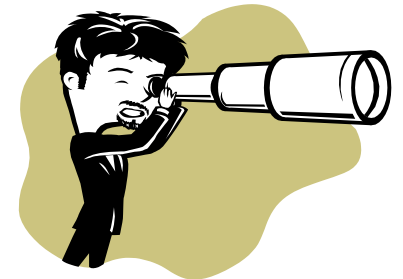
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and Felix Villatoro

IPRA Conference  
Emerging from COVID-19 and beyond  
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# To discuss today

- Introduce 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



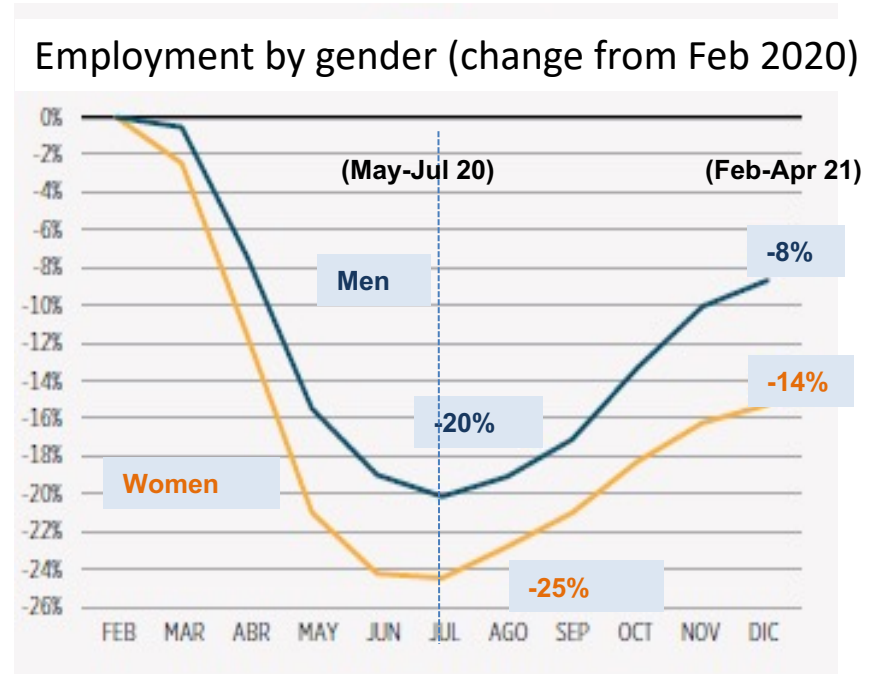
# Overview: Chile's pension system

- 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.

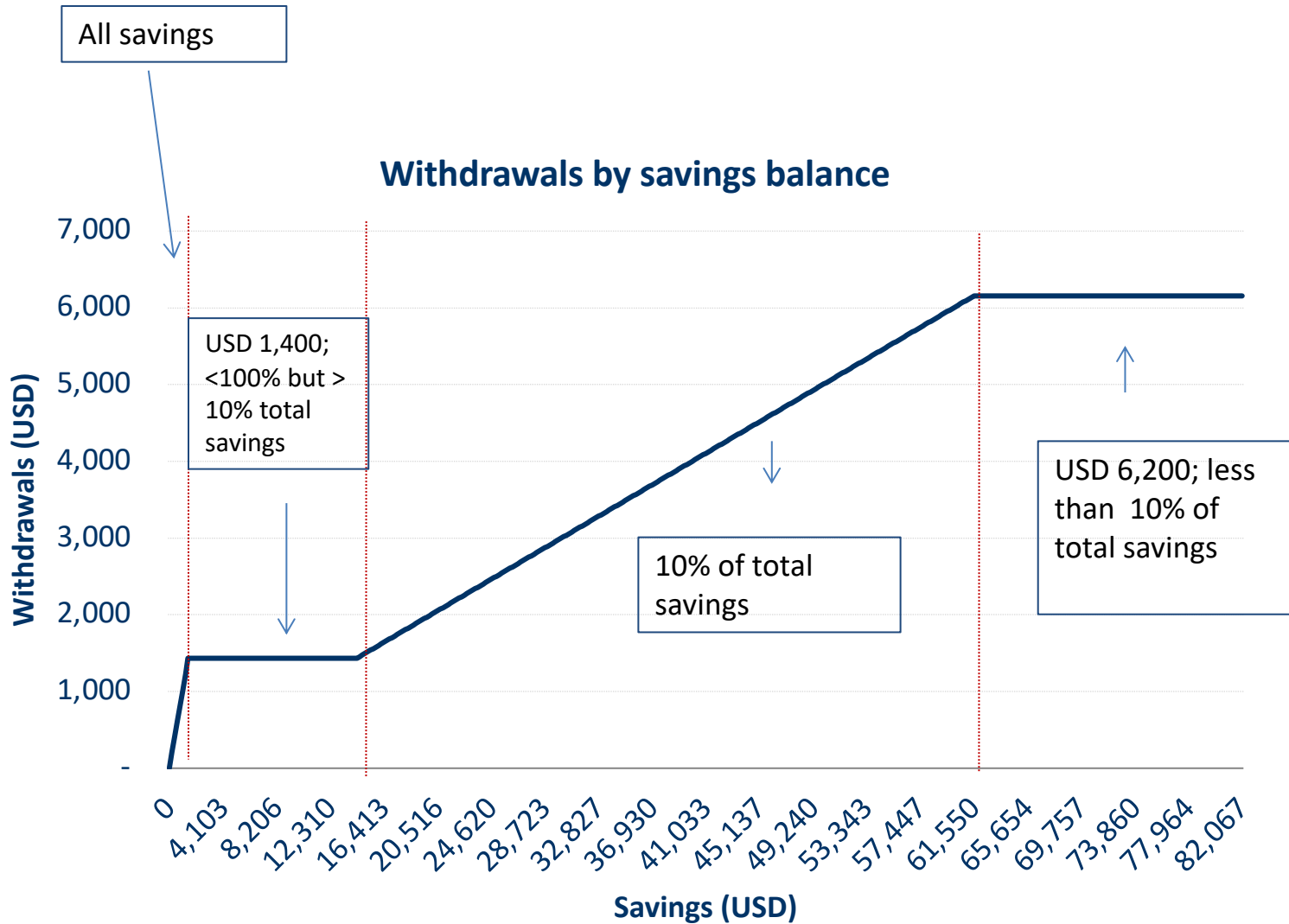


- Large economic impact for women and low-mid income households.
- Through different policies, the government has supported employment and households.
- Govt's efforts to help with stimulus: Cash transfers, job retention schemes, increased UI benefits, easing UI requirements.

# 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

# 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 allow us to have:
  - ✓ 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 account post-withdrawal.
  - ✓ Individual characteristics and social economic factors: age, sex, balance, labor market history
- Caveat: No information on other income sources and savings.

# Results: Mean Tests

Variable	None	One withdrawals	Two withdrawals	Three withdrawals
Female	0.46	0.57***	0.5***	0.41***
Age	39.9	36.7***	39.4***	42.6***
Foreign	0.2887	0.1173***	0.1308***	0.0542***
Balance (USD)	11,917	10,583***	17,015***	19,671***
Density (overall)	0.316	0.355***	0.576***	0.641***
Density (pre 1st withdrawal)	0.16	0.3***	0.5***	0.6***
Wage (USD, pre 1st withdrawal)	279	362***	632***	683***



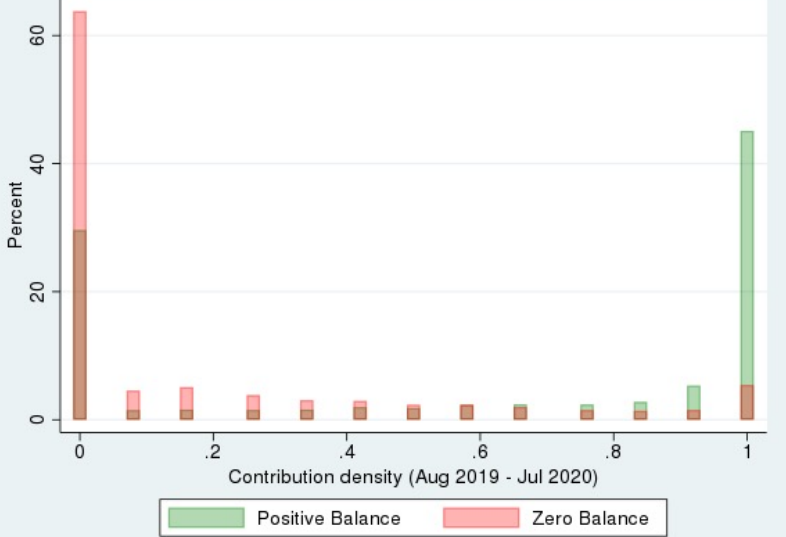
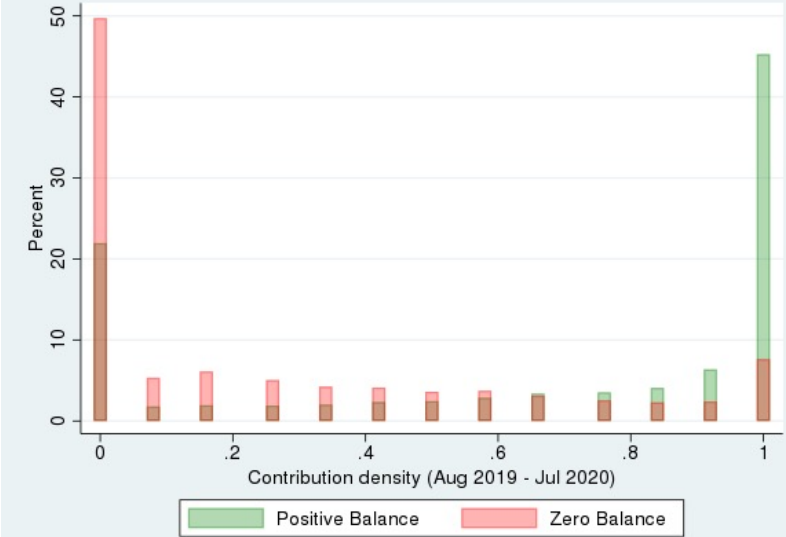
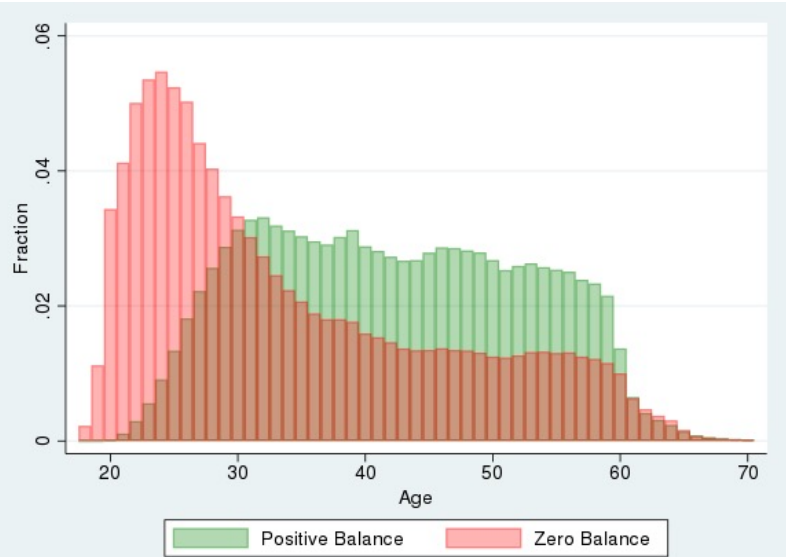
# Results: Descriptive Statistics

	<b>None</b>	<b>One withdrawals</b>	<b>Two withdrawals</b>	<b>Three withdrawals</b>
Withdrawals (USD)	NA	1,168	3,632	6,111
Withdrawals (% Balance)	NA	79.4	62.4	51.4
Withdrawals/Adj. Wage	NA	1.69	5.07	9.03
Withdrawals/PBS	NA	5.16	16.04	26.99
Zero Balance (%)	NA	72%	60%	23%
<i>N</i>	1,149,027	2,321,657	2,329,572	5,369,711

# Distributions after the first withdrawal (Zero vs. Positive Balance)

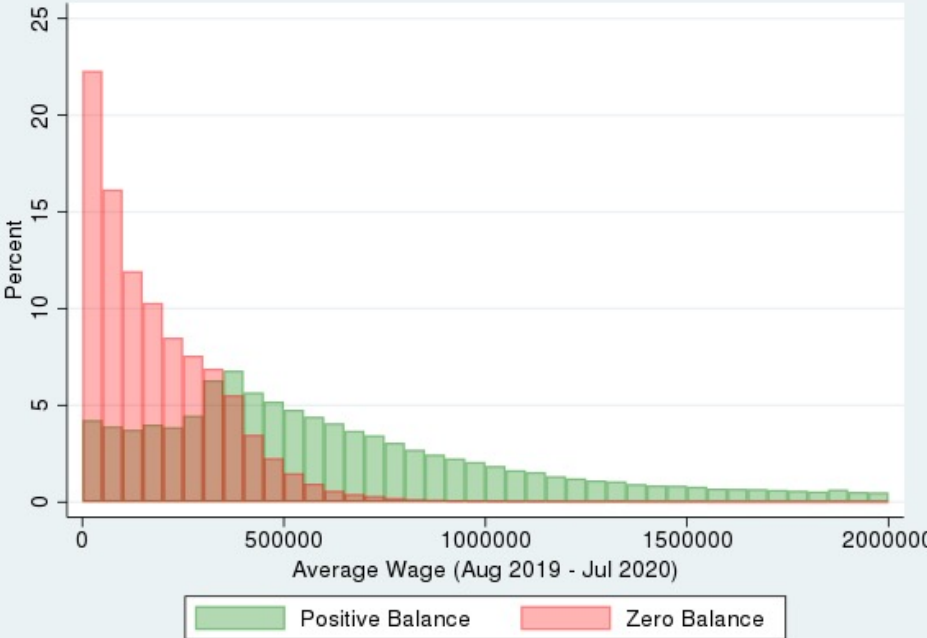
## Males

## Females

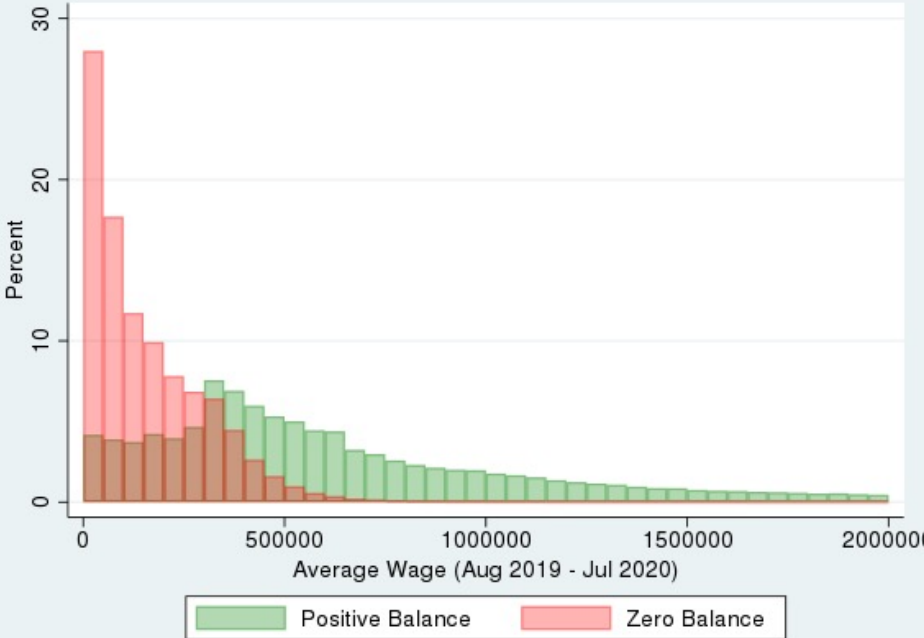


# Distributions after the first withdrawal (Zero vs. Positive Balance)

## Males



## Females



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

# Results: Expected effect on future pension (hypothetical examples)

- Three representative individuals: low, medium and high wage/contribution density profiles
- 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

	Withdrawal (1/0)	Withdrawal/ Initial Balance (%)
Density (overall)	0.057***	-35.315***
Density (Aug 19 / Jul 20)	-0.067***	-10.249***
log(Wage) (Aug 19 / Jul 20)	0.007***	0.716***
Female	0.029***	8.019***
Foreign	-0.143***	20.389***
Age	0.004***	-4.918***
Age <sup>2</sup>	-0.0001***	0.042***
log(Initial Balance)	0.031***	
R2 (%)	12.4	33.0
N	10,628,829	10,764,981

Mean dependent variable:

0.90

60.9

# 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: 10,8 MM
- # of people w2: 8,3 MM
- # of people w3: 6,0 MM

## Lessons & Implications

- Unclear what the future will bring.
- Next: we will evaluate potential effects of withdrawals on future pensions, annuity accounts, Solidarity Pillar, SIS, etc.
- 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.

# Thanks

## Comments are welcome

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