Chile’s Experience with COVID-19 Early Pension System Withdrawals

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Work in progress- please do not cite

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Disclaimer: the views in this presentation are solely those of the authors and do not necessarily represent those of the Pension Regulator
• 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 probe 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 4th withdrawal was rejected in the higher chamber (but may be presented with modifications again)
Withdrawal rule defined a floor and a ceiling

**Withdrawals by savings balance**

- **All savings**
  - USD 1,400; [10 - 100%] of total savings
  - USD 6,200; less than 10% of total savings

**Savings (USD)**

- 0, 4,103, 8,206, 12,310, 16,413, 20,516, 24,620, 28,723, 32,827, 36,930, 41,033, 45,137, 49,240, 53,343, 57,447, 61,550, 65,654, 69,757, 73,860, 77,964, 82,067

**Withdrawals (USD)**

- 1,000, 2,000, 3,000, 4,000, 5,000, 6,000, 7,000
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

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>Zero</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawals (USD)</td>
<td>NA</td>
<td>1,075</td>
<td>3,345</td>
<td>6,206</td>
</tr>
<tr>
<td>Withdrawal (% balance)</td>
<td>NA</td>
<td>87.3</td>
<td>79.8</td>
<td>55.5</td>
</tr>
<tr>
<td>Withdrawal/Wage</td>
<td>NA</td>
<td>1.6</td>
<td>4.9</td>
<td>9.3</td>
</tr>
<tr>
<td>Zero Balance (%)</td>
<td>NA</td>
<td>4.75</td>
<td>14.77</td>
<td>27.4</td>
</tr>
<tr>
<td>( N )</td>
<td>811,103</td>
<td>2,103,720</td>
<td>1,987,455</td>
<td>6,239,312</td>
</tr>
</tbody>
</table>
Who was left with Zero Balance after 1st Withdrawal? (Zero vs. Positive Balance)

Males

Females
Who was left with Zero Balance after 1st Withdrawal? (Zero vs. Positive Balance)

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

<table>
<thead>
<tr>
<th>Wage/density</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension (%)</td>
<td>-24.9</td>
<td>-22.2</td>
<td>-6.7</td>
</tr>
<tr>
<td>Years to recover</td>
<td>5.8</td>
<td>5.2</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension (%)</td>
<td>-26.1</td>
<td>-23.1</td>
<td>-7.0</td>
</tr>
<tr>
<td>Years to recover</td>
<td>5.8</td>
<td>5.2</td>
<td>1.5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>1st Withdrawal (1/0) Withdrawals (0 - 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.0295***</td>
</tr>
<tr>
<td>Age</td>
<td>0.00229***</td>
</tr>
<tr>
<td>Age²</td>
<td>-6.21e-05***</td>
</tr>
<tr>
<td>Foreign</td>
<td>-0.130***</td>
</tr>
<tr>
<td>log(Initial balance)</td>
<td>0.0322***</td>
</tr>
<tr>
<td>log(Ave. Wage) (Aug-19-July 20)</td>
<td>0.00699***</td>
</tr>
<tr>
<td>Density (overall)</td>
<td>0.0599***</td>
</tr>
<tr>
<td>Density (Aug 19-July 20)</td>
<td>-0.0741***</td>
</tr>
<tr>
<td>UI controls</td>
<td>Yes</td>
</tr>
<tr>
<td>UI special benefits controls</td>
<td>Yes</td>
</tr>
<tr>
<td>N</td>
<td>10,172,728</td>
</tr>
<tr>
<td>R² (%)</td>
<td>15.5</td>
</tr>
<tr>
<td>Mean dependent variable</td>
<td>0.93</td>
</tr>
</tbody>
</table>
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 probe 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.
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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