PENSION REFORMS IN SPAIN:
THE UGLY, THE UGLIER, AND THE UGLIEST

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Outline

➤ The Ugly: The Spanish Demography is Scarier than You Think
➤ The Uglier: The Spanish PAYG Pension System is Crazier than You Think
➤ The Ugliest: The Reforms, Three Simulations, and No Plan B
➤ Some concluding comments

The Ugly: Spanish Demography is Scarier than You Think
### The Spanish Demographic Transition

<table>
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<tr>
<th>21–65</th>
<th>1980</th>
<th>2015</th>
<th>2050</th>
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<tbody>
<tr>
<td></td>
<td>53.5</td>
<td>61.8</td>
<td>48.6</td>
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<table>
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<tr>
<th>66+</th>
<th>10.5</th>
<th>17.4</th>
<th>35.4</th>
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<tbody>
<tr>
<td>RATIOS</td>
<td>5.1</td>
<td>3.5</td>
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#### Retirement Age That Restores the 2015 Dependency Ratio

77 years and 1 month

#### Retirement Ages That Preserve the 2015 Dependency Ratio

<table>
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<tr>
<th>2020</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
<th>2040</th>
<th>2045</th>
<th>2050</th>
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<td>68</td>
<td>70</td>
<td>72</td>
<td>74</td>
<td>75</td>
<td>77</td>
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#### Employment Age That Restores the 2015 Dependency Ratio

125%
EMPLOYMENT RATES THAT PRESERVE THE 2015 DEPENDENCY RATIO

IMMIGRANTS THAT RESTORE THE 2015 DEPENDENCY RATIO

36.1M
1.002.857 every year between 2015 and 2050

IMMIGRATION THAT PRESERVES THE 2015 DEPENDENCY RATIO

CHILDREN THAT RESTORE THE 2015 DEPENDENCY RATIO

9.3
children per woman from now on

Born to work
Children and immigrants that preserve the 2015 dependency ratio

Workers, children, and immigrants that preserve the 2015 dependency ratio

VAT tax rate needed to finance pensions in 2050

Could the Spanish government do something else?
Plan to Encourage Spaniards to die at 75

The Uglier: The Spanish PAYG Pension System is Crazier than You Think

Many Picturesque Regimes
- Social Security General Regime
  - Special Regime for Artists
  - Special Regime for Bullfighting Professionals
  - Special System for Employees in Agriculture
  - Special System for Household Employees
  - Special System for Handlers and Packers of fresh tomatoes for export
  - Special System for permanent discontinuous workers employed by market research and public opinion studies companies
  - Special System for permanent discontinuous workers employed by movie theatres, dancing halls, night-clubs, and discos
  - Special Regime for extraordinary services in the hospitality industry
  - Special Regime for the resin industry
  - Special System for the Fruits, Vegetables and Canned Vegetables Industries
- Special Regime for Self-Employed Workers
- Special Regime for Coal Mining
- Special Regime for Sea Workers
Million workers get to choose their contributions

Million workers earn more than the payroll tax cap

Recent Reforms of the Spanish PAYG System

- **1985**: Increase from 2 to 8 in the number of years of contributions taken into account to compute pensions and increase from 10 to 15 years in the minimum contribution period
- **1997**: Increase from 8 to 15 years in the number of years of contributions taken into account to compute pensions
- **2003**: Delay from 60 to 61 years in the early retirement age with 30 years of contributions; incentives for delayed retirement (+65 years): 2% or 3% discount, delays in the minimum partial retirement ages
- **2011**: Increase from 15 to 25 years the number of years of contributions taken into account to compute pensions; delay from 61 to 63 years old and from 65 to 67 years in the retirement ages; closure of the special pension system for public employees
- **2013**: Pension revaluation according to a bounded pension revaluation index (PRI); demographic sustainability factor (FS) to be included in the computation of first pensions operative in 2019; delay from 63 to 65 years of the early retirement age
- **2018**: Reversal to pension revaluation according to the CPI
Three Simulations

The Model Economy

- General equilibrium, multi-period, overlapping generations model economy populated by heterogeneous households.
- The households differ exogenously in age, education and employment status.
- The households decide optimally how much to work, consume, and save and when to retire.
- The households differ endogenously in consumption, savings, labor, leisure, and, consequently, in income, wealth, pension rights, and pensions.
- Production is carried out by a neoclassical representative firm that behaves competitively in its product and factor markets.
- The government runs a fully explicit and detailed pay-as-you-go pension system financed with payroll taxes, and uses consumption, capital and income taxes to finance exogenous sequences.

Self References


The Pension System Finances
Concluding Comments

➤ The contributivity, solidarity, progressivity, and generosity of pensions should be the result of a political discussion
➤ Pension system design and the sustainability and the security of the system should be the result of a technical discussion
➤ Transparency of the intergenerational pact and flexibility of the system are key
➤ Notional Accounts are a superset of Point Systems and they are the most transparent way to combine DC and DB benefits
➤ Mixed PAYG and Automatic-Enrolment Funded Systems (such as NEST with perhaps and Austrian backpack) combine the best properties of both systems
➤ Given the uncertainty about productivity in the future what should our planning horizon be?
➤ How do pensions integrate with Basic Income schemes?
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