Some Preliminary Ideas for NTA for Italy

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NTA Meeting, Berkeley, Jan 10 2009
What’s relevant of Italy for NTA

Italy is not (yet) a country member of the project, but it is interesting for NTA for some of its features:

- **Demographic context:** -The old-dependency ratio in Italy ($\approx 30\%$) is higher than in any other European countries and it is expected to be so until 2050 ($\approx 66\%$) (source: Eurostat, 2007);
  -One of the lowest fertility rates in Europe ($\approx 1.38$) (UN World Population Prospects, 2006);
  -Very rapid increase in net migration rates

- **Institutional setting:** -Social support tilted towards pensions;
  -‘family’ is a very important center of intergenerational transfers

- **Pension reforms:** the unsustainability of the system led to important reforms of the pension system in the 1990s, with relevant (macro and micro) demographic and economic consequences
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Outline

- Background: the anomaly of the Italian social support?
- The pension reforms of the 1990s and their demographic and economic consequences
- Data availability for NTA
- What’s next?
Expenditure on social protection (as a % of total expenditures, 1999)

<table>
<thead>
<tr>
<th>Country</th>
<th>Pension</th>
<th>Health care</th>
<th>Family</th>
<th>Unempl.</th>
<th>Housing excl.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU – 15</td>
<td>46.0</td>
<td>34.9</td>
<td>8.5</td>
<td>6.8</td>
<td>3.8</td>
<td>100</td>
</tr>
<tr>
<td>Belgique</td>
<td>43.0</td>
<td>33.6</td>
<td>9.1</td>
<td>12.1</td>
<td>2.2</td>
<td>100</td>
</tr>
<tr>
<td>Denmark</td>
<td>38.0</td>
<td>31.7</td>
<td>13.0</td>
<td>11.2</td>
<td>6.1</td>
<td>100</td>
</tr>
<tr>
<td>Germany</td>
<td>42.1</td>
<td>36.0</td>
<td>10.5</td>
<td>8.8</td>
<td>2.6</td>
<td>100</td>
</tr>
<tr>
<td>Greece</td>
<td>50.7</td>
<td>31.0</td>
<td>7.6</td>
<td>5.7</td>
<td>5.0</td>
<td>100</td>
</tr>
<tr>
<td>Spain</td>
<td>46.2</td>
<td>37.0</td>
<td>2.0</td>
<td>12.9</td>
<td>1.9</td>
<td>100</td>
</tr>
<tr>
<td>France</td>
<td>44.2</td>
<td>34.0</td>
<td>9.8</td>
<td>7.4</td>
<td>4.6</td>
<td>100</td>
</tr>
<tr>
<td>Ireland</td>
<td>25.2</td>
<td>45.3</td>
<td>13.0</td>
<td>11.1</td>
<td>5.4</td>
<td>100</td>
</tr>
<tr>
<td>Italy</td>
<td>64.0</td>
<td>29.9</td>
<td>3.7</td>
<td>2.2</td>
<td>0.2</td>
<td>100</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>41.4</td>
<td>39.5</td>
<td>15.5</td>
<td>2.5</td>
<td>1.1</td>
<td>100</td>
</tr>
<tr>
<td>Netherlands</td>
<td>41.5</td>
<td>40.7</td>
<td>4.2</td>
<td>6.2</td>
<td>7.4</td>
<td>100</td>
</tr>
<tr>
<td>Austria</td>
<td>47.4</td>
<td>35.4</td>
<td>10.2</td>
<td>5.4</td>
<td>1.6</td>
<td>100</td>
</tr>
<tr>
<td>Portugal</td>
<td>43.7</td>
<td>45.6</td>
<td>5.2</td>
<td>3.7</td>
<td>1.8</td>
<td>100</td>
</tr>
<tr>
<td>Finland</td>
<td>35.1</td>
<td>37.2</td>
<td>12.7</td>
<td>11.3</td>
<td>3.7</td>
<td>100</td>
</tr>
<tr>
<td>Sweden</td>
<td>39.5</td>
<td>36.9</td>
<td>10.6</td>
<td>8.1</td>
<td>4.9</td>
<td>100</td>
</tr>
<tr>
<td>UK</td>
<td>46.1</td>
<td>34.8</td>
<td>8.9</td>
<td>3.2</td>
<td>7.0</td>
<td>100</td>
</tr>
</tbody>
</table>

## Reasons for leaving a job

### Table 3: Retired males aged 55-64; Main reasons for leaving last job or business, 1995, share of total

<table>
<thead>
<tr>
<th>Reason</th>
<th>Germany</th>
<th>France</th>
<th>Italy</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismissals</td>
<td>9,5</td>
<td>10,7</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>End of a job</td>
<td>0,7</td>
<td>1,5</td>
<td>1,7</td>
<td>3,6</td>
</tr>
<tr>
<td>Personal responsib.</td>
<td>0,6</td>
<td>0,4</td>
<td>1,2</td>
<td>1,6</td>
</tr>
<tr>
<td>Illness or disability</td>
<td>22,9</td>
<td>7,3</td>
<td>5,2</td>
<td>22,8</td>
</tr>
<tr>
<td>Early retirement</td>
<td>33,1</td>
<td>16,9</td>
<td>9,2</td>
<td>14,7</td>
</tr>
<tr>
<td>Normal retirement</td>
<td>10,9</td>
<td>38,6</td>
<td>53,4</td>
<td>4,8</td>
</tr>
<tr>
<td>Other reasons</td>
<td>22,3</td>
<td>24,5</td>
<td>27,5</td>
<td>30,6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


From: Artoni and Casarico (2001)
The Italian pension system and its reforms

- Until 1992 the Italian public pension system was a defined benefit pay-as-you-go system, with a lump-sum transfer (‘TFR’), managed by employers, which complements the pension benefit.
- By the end of the 1980s, the Italian social security spending was extremely large. Pension spending had increased from less than 1% of GDP in 1951, to almost 15% in 1992.
- In the 1990s, there were two important reforms that led to the adoption of a Notional Defined Contribution (NDC) pay-as-you-go system.
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The reforms and their effects

- In the NDC pay-go system, wage earners pay contributions based on a 33% fixed contribution rate until they retire. This money is used to pay the benefits of concurrent retirees. The value of the contribution is accredited to the workers’ notional accounts, which are also indexed with a nominal per capita GDP index. The value of the benefit is then calculated by dividing the value of the account to consider for life expectancy, a real rate of return of 1.5% and an index of annual changes in price.

- Most of the reform measures were introduced according to a transition period, which allowed some generations of workers (i.e., the ones with more years of seniority) to be unaffected.

- The reform design implied large differences in the reduction of social security wealth across workers with different seniorities, as well as across public and private employees, who initially enjoyed different treatment.
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Reforms as natural experiments

The reforms introduced ‘discontinuities’ in the pension wealth of wage earners with different ages and years of contribution. They represent a good natural experiment to evaluate the effect of changing economic incentives and institutional settings on demographic and economic decisions.

- Billari and Galasso (2008) propose an empirical test of two alternative theories of fertility (children as ‘consumption’ good vs. children as ‘old-age security’) using the pension reforms as a policy-induced natural experiment.

- The reforms can be used to evaluate the effect of discontinuities in pension wealth on some macroeconomic quantities. For instance, the ones who were affected the most by the reforms increased their savings (Attanasio and Brugiavini, 2003) and planned to retire later (Bottazzi, Jappelli and Padula, 2006).
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- The SHIW is designed to gather information on household microeconomic behavior.
- Conducted by the Bank of Italy yearly from 1965 to 1987 (except for 1985) and every other year until 1995 and from 1998 on, with a sample size of 8000 households each year.
- Detailed data have been collected continuously on socio-demographic characteristics of household members, their incomes and tangible assets. Data on consumption expenditure have been collected since 1980.
- In the surveys for 1991 and 2002 a special module on intergenerational transfers was included: information on inheritances and gifts received from the previous generation was collected.
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Other data sources

- ISTAT (National Italian Statistical Agency)
  - Family Budget Surveys
  - Labor Income Surveys
  - Time Use Surveys
- EUROSTAT
- SHARE (Survey of Health and Retirement in Europe)
Where to go from here

- Combine the available data sets to estimate life cycle deficits for NTA
- Compute intergenerational transfers of time
- Use reforms as natural experiments
- Any suggestions?
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