

## Comments on "IESS: an overwiew of the main objectives and findings"

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ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA

IL PRESENTE MATERIALE È RISERVATO AL PERSONALE DELL'UNIVERSITÀ DI BOLOGNA E NON PUÒ ESSERE UTILIZZATO AI TERMINI DI LEGGE DA ALTRE PERSONE O PER FINI NON ISTITUZIONALI



Three kind of models to evaluate sustainability adequacy and distributive properties of Social Security System in an ageing population

# REPRESENTATIVE INDIVIDUALS CELL BASED MODELS HETEROGENEOUS POPULATION

Each of one has advantages and disadvantages

Probably better to use all of them, even if this may be costly (in human and financial terms)

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#### REPRESENTIVE INDIVIDUALS

- Very precise normative description (+)
- Difficult to consider any kind of interaction (-)

#### CELL BASED

- Macroeconomic forecasts in the medium and long term seem reliable (+)
- Difficult to show and analyse distributive features of the social security system



#### POPULATION BASED

- Powerful in analysing distributive features and adequacy (+)
- They need to be anchored to "some" external macroeconomic link to give plausible results (-)
- Not easy to disentangle noise from real heterogeneity in data (-)



- In general: long term forecasts or projections?
  - Current and past data are used to predict future behaviour (labour market, lifetime earnigs, educational choices, etc)
    - What about for example: relative earnings (between young and old workers; between low and high educated) today and in the future ?
  - Behavioural rules important but complex to introduce (retirement, consumption/saving, educational choices, etc.)



- Why are these models useful (but also potentially hazardous)?
- They offer to the policy maker different scenarios for the future in order to decide today's policies.
- Do they always work well?
  - Expected migration?
  - Macroeconomic shock?



- Merging administrative and survey data is a very interesting experiment
  - Useful because you have real information (example seniority at work) on past behaviour.
  - Did you check representativity of ITSILC?
  - Heterogeneity question (noise vs real)?
  - Not easy to understand results



- Behavioural rules: are there any?
  - Retirement
  - Education
- Offer more intuiton on the distributive features of the population and use also intertemporal indicators



- Calibration of the model: is there any?
  - -Example g = m + n + mn
  - Alternative 1
    - LABOUR AND DEMOGRAPHIC MODULES DETERMINE ENDOGENOUSLY "n"; EARNINGS PROFILES DETERMINE "m": g is ENDOGENOUS
  - Alternative 2
    - FIX EXOGENOUSLY "g" (say 1.5%); LET "n" TO BE DETERMINED BY THE MODEL. THEN YOU HAVE TO "ADJUST" "m" TO MAKE THE MODEL'S RESULT TO BE CONSISTENT



- Are alternative 1 and 2 neutral on distributive results?
- Not for sure.
- For example in NDC system IRR and RR depend both on g and on the relation between m and g!!

### Some general observations wrt results

- Distributive results: NDC less dispersed distribution (high pensions decrease)
- Do you compare NDC with DB or with the current (mixed) results?
- In this second case is not surprising that NDC is more "equal"!!



- RR from 63% for cohorts 1950-59 to 50% for cohorts 1980-89
- Pension/assegno sociale from 3.6 to 3 for the same cohorts
- Puzling result: better compare average pension and average earnings.
- Do results depends on g (which probably determine growth of assegno)? See then calibration



- Retirement choices are important. How are they simulated?
- In the long run women retire later than men. Does it depend on the 2.8 vs 1.5 constraint?
- Is this socially / politically sustainable?