

"AGING AND DEFLATION FROM A FISCAL PERSPECTIVE": COMMENTS

Giuseppe Fiori

North Carolina State University

"Demographics and the Macroeconomy"

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MAIN RESULTS

IS THERE A LINK BETWEEN DEMOGRAPHICS AND THE RATE OF INFLATION?

- ▶ **Fiscal Theory of the Price Level (FTPL)**
- ▶ **Aging generate a 0.6% drop in inflation**
 - Lower birth rates associated with *higher* inflation
 - Higher longevity associated with *lower* inflation

FRAMEWORK

DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

- ▶ **Overlapping Generations Model: Young and Old**
- ▶ **Endogenous Fiscal Policy**
 - Govt issues bonds and set the tax rate
 - Govt biased toward Old
- ▶ **Redistributive Fiscal Policy**
 - Young obtains *real* income, consume, save and pay taxes
 - Old obtains *nominal* return of an annuity

MAIN MECHANISM

DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

- ▶ **Lower birth rate:** Reduction in the tax base
 - Higher deficit met with higher taxes and prices
 - Political Economy: Redistribution through higher taxes
- ▶ **Increase in longevity:** Lower annuity payments
 - Govt redistributes from the young to the old through lower prices

COMMENT I

DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

▶ **2-period model**

- Who are the young? Who are the old?
- Observational equivalence with retired versus workers?
- Composition of tax menu with savers versus borrowers?

COMMENT II

DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

- ▶ **Quantitative appeal of the model given the lifetime horizon assumed**
- ▶ **Govt bonds are the only asset**
 - Crowding-out of physical capital?

COMMENT III

DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

► **Transitional Dynamics**

- Hard to think about dynamics when one-period is 40 years
- The Govt is in charge for one-period
- Is deflation front-loaded? Back-loaded?
- How about the increase in taxes?
- 5-year age-groups?

COMMENT IV

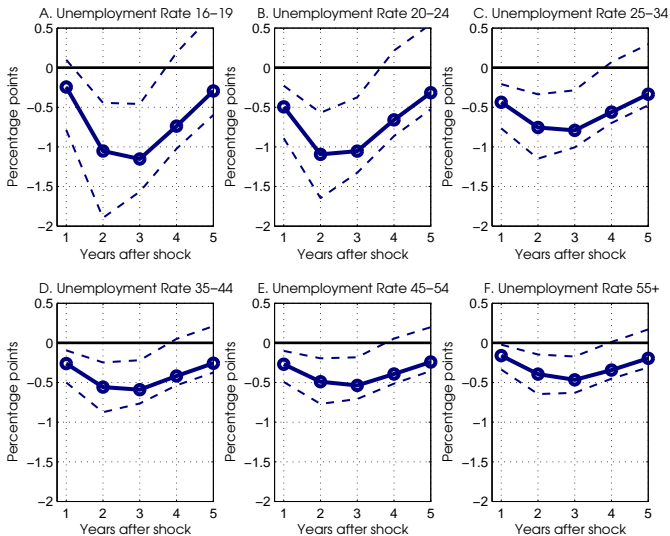
DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

▶ **Intertemporal substitution, taxes and age**

- Theory: Rogerson-Wallenius (AER, 2013)
- Empirical Evidence: Ferraro and Fiori (2016)

TAXES AND DEMOGRAPHICS

U.S. ECONOMY UNEMPLOYMENT: YOUNG MORE RESPONSIVE TO TAXES THAN PRIME-AGE



COMMENT V

DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

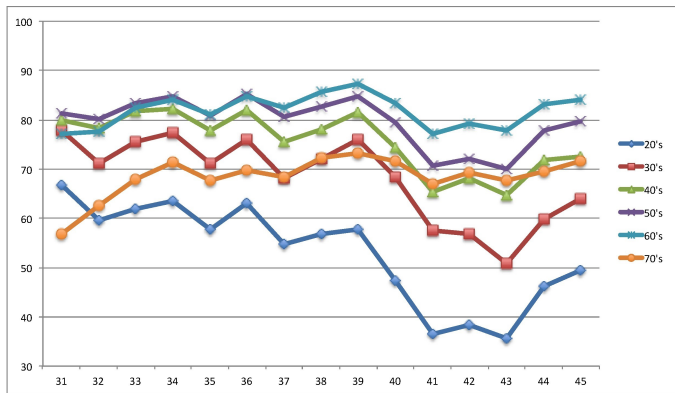
▶ **Maturity structure of debt**

- Longer average maturity delays the feedback on prices (Cochrane, ECMA 2001)
- Japan average maturity from 6.2 years in 2008 to 8.7 years in 2017

COMMENT VI

GOVT POLICIES BIASED TOWARD OLD

► Voter turnout



SUMMARY

DEMOGRAPHICS AND INFLATION IN A FTPL WORLD

- ▶ **Very nice paper!**
- ▶ **Sharpen the quantitative evaluation of the main mechanism**