Comments on "'Unfunded Liabilities' and Uncertain Fiscal Financing" (by *Troy Davig, Eric M. Leeper, and Todd B. Walker*)

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Interactions between monetary and fiscal policies

Banco de España

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What the paper does

- **The starting point:** Projected US federal expenditures on health care public provision (Medicare, Medicaid) and Social Security put total spending on an unsustainable path with explosive debt dynamics.

- **The contribution**: Explore the current and future macroeconomic consequences of the uncertainty produced by uninformative policy institutions (i.e. uncertain policy-regime switching).

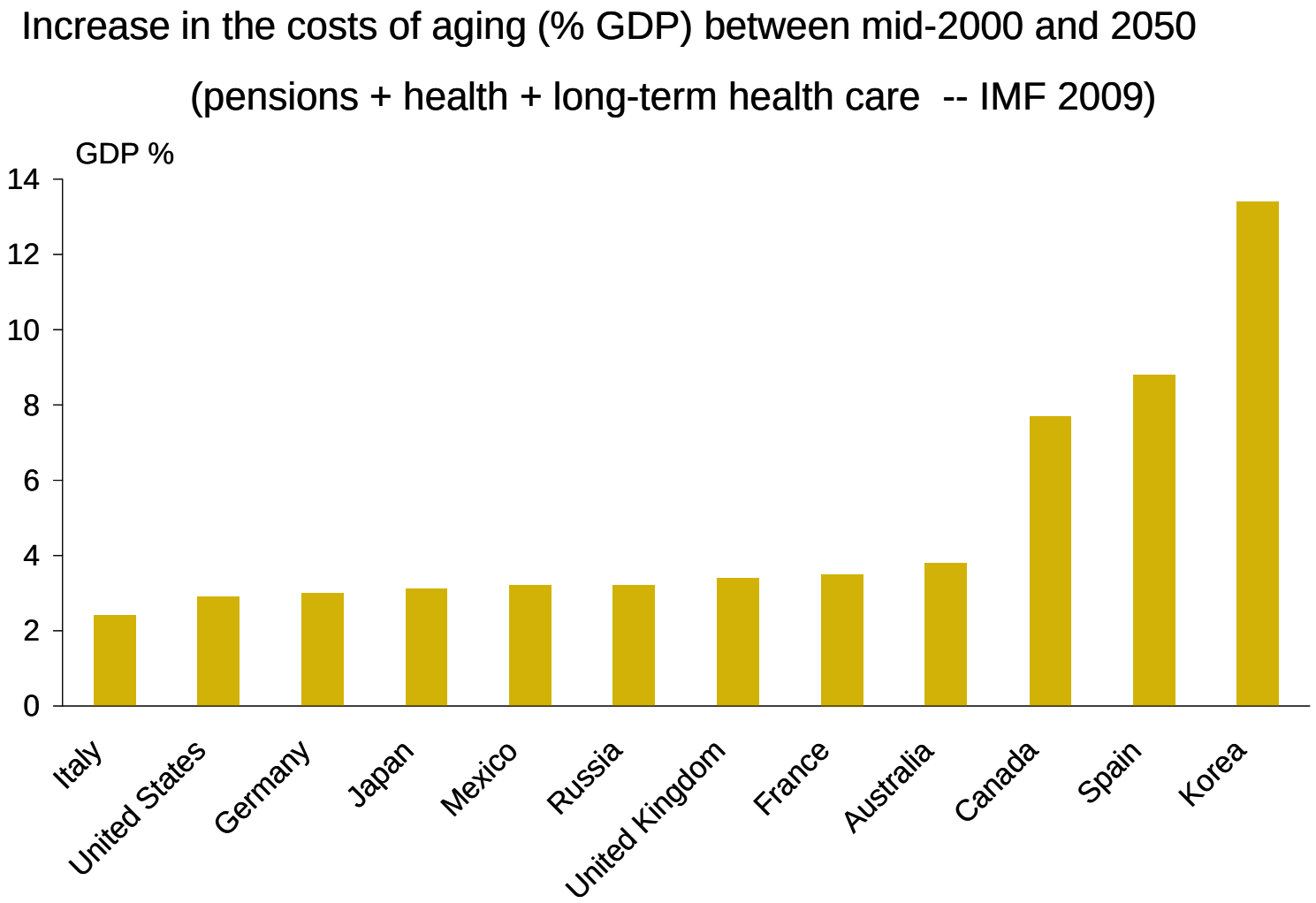
- **The main conclusion**: Uncertainty about future policy imply:
  - uncertainty about the complete dynamic path of the main macro-variables
  - SPECIALLY: that inflation-targeting cannot successfully anchor expected inflation;

Comments on the paper's topic

- Hardly to find a more relevant topic:
  - The first economy in the world is right now on an unsustainable fiscal trajectory.....
  - ....but investors everywhere maintain strong faith on the quality of US debt...
  - ....which suggest that there is an expectation of a fully certain fiscal reform....
  - ....although much uncertainty remains around its implementation (timing and composition).

Comments on the paper's topic (cont'd)

- Moreover, the same story applies to many advanced economies:

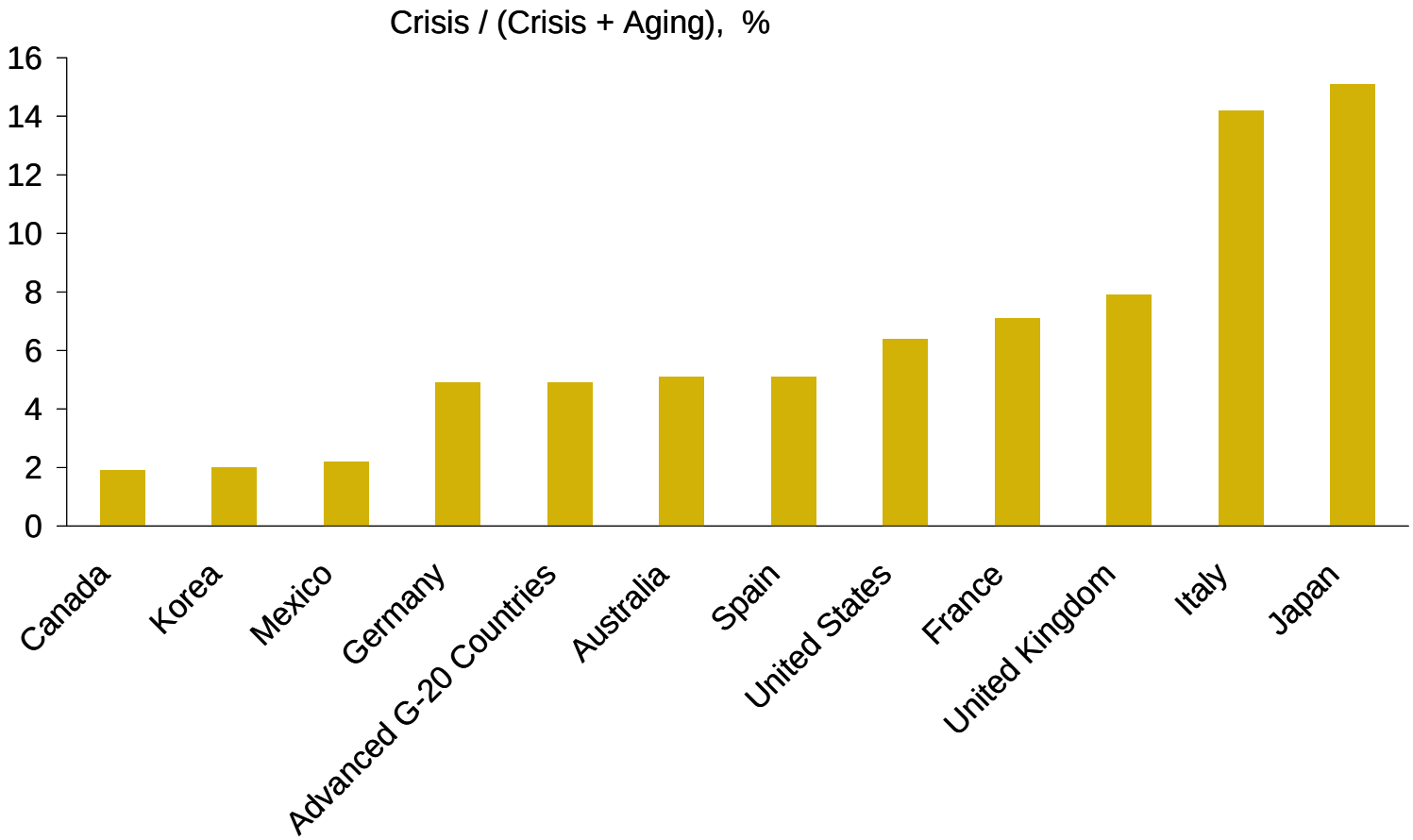


(1)

Comments on the paper's topic (cont'd)

- To put it under the right perspective.....

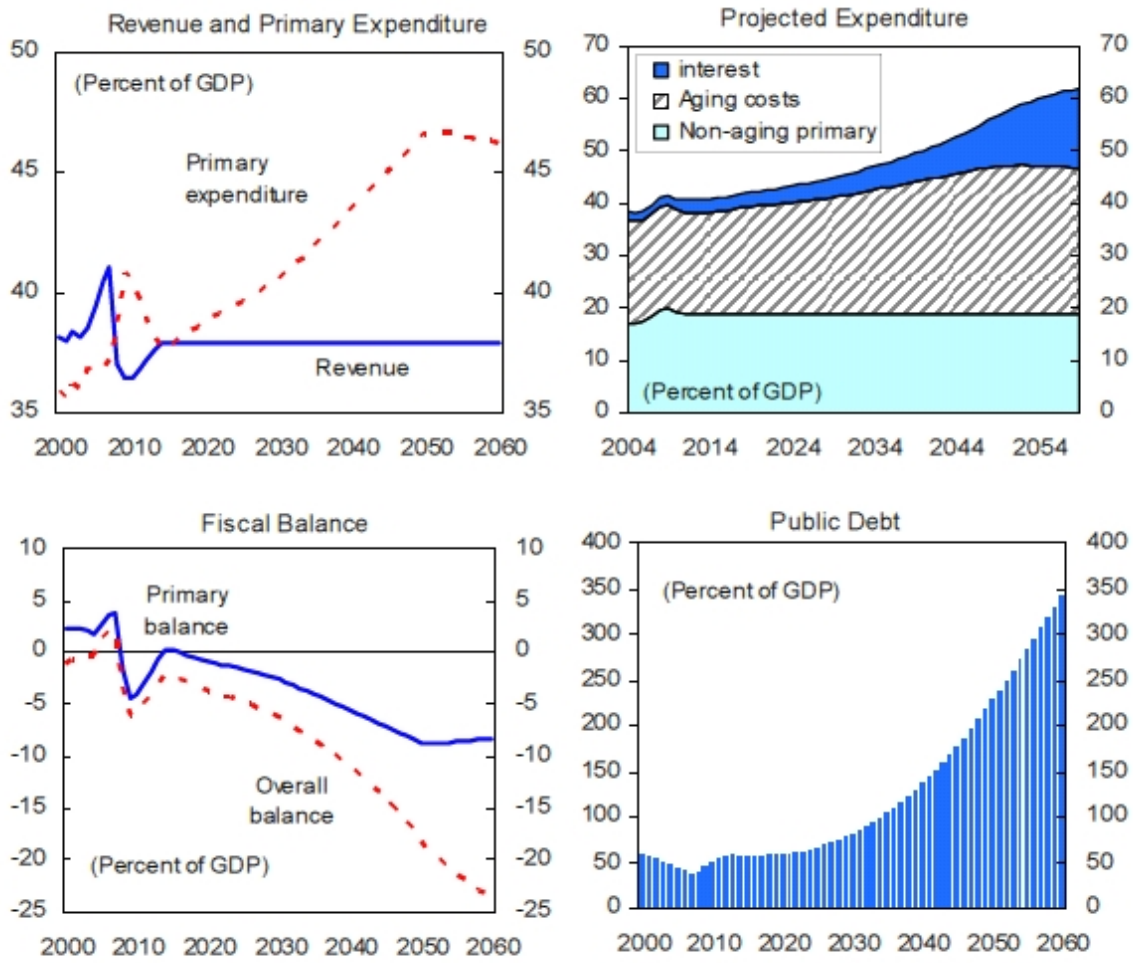
Net present value impact on fiscal deficits of Crisis and Age-related spending (IMF 2009)



Comments on the paper's topic (cont'd)

- A quick view on Spain:

PROJECTIONS ON AGING-RELATED COSTS, SPAIN (IMF 2009)



The model

- DSGE Representative & infinitely-lived households: not the most suitable one to deal with some issues around aging-economics.
- Yet the model is perfectly helpful to think about the link between policy uncertainty and inflation (reduced version most welcomed¡).
- However, the Ricardian structure plus the difficulty to calibrate some parameters (e.g. probabilities of regime switching) call for extreme caution when interpreting the numerical results.

The argument (I): Regime switching

- At a random date, transfers enter a (conditional) explosive process.
- Then, rising taxes is not enough to meet transfer commitments (there is an upper limit on taxes, $\tau^{\max}$).
- If $\tau^{\max}$ is reached, then the gov must either:
  - renege on its promised transfers (*monetarist regime - MR*) or,
  - abandon its monetary policy (*fiscalist regime - FR*).
- Assumption 1: Before reaching $\tau^{\max}$ a MR is in place.
- Assumption 2: Outright default on gov debt is ruled out.
- Assumption 3: If fiscal limit ever reached, the economy remains on it forever, moving from *MR* to *FR* and *vice versa* randomly.

The argument (II): Regime characterization

- Key object: Gov Intertemporal BC / Valuation equation:

$$\frac{R_{t-1}B_{t-1}}{P_t} = E_t \sum_{j=0}^{\infty} \beta^j s_{t+j}, \quad \text{where } s_{t+j} = \tau_{t+j} - z_{t+j} \qquad \text{(GIBC)}$$

- *Monetarist regime*: (AM/PF) The Taylor principle holds. If *MR* maintained forever then:
  - in the unique SS, $E_{t-1}(\pi_t) = \pi^*$, i.e. the CB controls inflation expectations.
  - monetary policy (MP) determines π_t and P_t. Given P_t and $R_{t-1}B_{t-1}$, the gov sets $\{s_{t+j}\}_{j=0}^{\infty}$ to satisfy (GIBC).
- *Fiscalist regime*: (PM/AF), gov sets $\{s_{t+j}\}_{j=0}^{\infty}$at an arbitrary level. Given $R_{t-1}B_{t-1}$ and $\{s_{t+j}\}_{j=0}^{\infty}$, then P_t adjusts to satisfy (GIBC). In this case:
  - MP must become passive (e.g. interest rate peg).
  - MP still determines $E_{t-1}(\pi_t)$, but neither P_t nor π_t.

The argument (III): Regime switching

- Uncertainty on the future regime, fiscalist or monetarist, implies uncertainty on P_T (on how it is determined and on its level).
- Under the FR, P_T and π_T will jump (debt revaluation).
- A familiar backward induction argument: *higher future inflation means higher current inflation*:
  "Because MP loses control of inflation after the fiscal limit is reached, forward looking behavior implies it also loses control of inflation before the fiscal limit is hit".
- As a result, $E_{t-1}(\pi_t) > \pi^*$ over the $MR \Rightarrow$ But notice that the CB is not committing to a MP consistent with the target$_i$

Some questions (I)

- Sargent and Wallace (1981) already studied the effects of future changes in monetary policy on current inflation, with a similar central message:
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  - SW focus on seigniorage (rather than debt erosion) as the main monetary contribution to the gov budget.
  - SW focus on monetary rules implemented through quantities rather than interest rates, etc.

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- .....is there any new result in this paper on the links between MP-future inflation-current inflation?
- What does the distinction between AM/PF vs PM/AM buy as opposed to M-Dominant vs F-Dominant Regime?

Some questions (II)

- SW's "game of chicken" allows us to think in terms of different institutional frameworks:
  - *Monetary dominance regime*: Independent CB $\rightarrow$ fiscal authority must blink.
  - *Fiscal dominance regime*: submissive CB that pursues a seigniorage/debt erosion target.

Some questions (II)

- SW's "game of chicken" allows us to think in terms of different institutional frameworks:
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  - *Fiscal dominance regime*: submissive CB that pursues a seigniorage/debt erosion target.

- Q #2 (practical): what role for CB independence in this paper? Specifically:

"From figure 6 emerges a central message of the paper: in an environment in which fiscal policy is unwilling or unable to stabilize debt, monetary policy cannot successfully target inflation" (p. 21)

- Can fiscal imbalances threaten monetary stability even with a hawkish independent CB?
- My conjecture: NO – so not a great surprise that "monetary policy cannot successfully target inflation".

In sum

- Nice, interesting paper dealing with really important issues.
- My own view of the results: No matter whether you believe in the FTPL or in the standard monetarist doctrine à la Sargent-Wallace, if agents expect a possible subordination of monetary policy to certain fiscal targets in the future, more inflation today will be a natural outcome.