Discussion of “Fiscal Unions" by Emmanuel Farhi and Ivan Werning

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ADEMU Workshop on Risk-Sharing Mechanisms for the European Union, May 2017

The Paper

- Farhi-Werning study a model that has the following key features:
  - Some prices are sticky (do not react to local shocks).
  - Markets may or may not be complete.
- The paper concludes that:
  - Even if markets are complete there is a role for a fiscal union (taxes to correct "externalities")
  - If financial markets are incomplete a fiscal union that transfers income across countries can attain efficient allocations.

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- Evidence from actual fiscal unions (U.S.)
- Some design issues.

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  - If the Union has a “better technology” to raise a (useful) tax ... then there is a role for the Union.
- The “better technology” approach applies to incomplete markets as well: If markets are incomplete (does it matter why?) and there is an institution with a technology to complete them we should use it.

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  - Second Tier: National Governments (benevolent): Can choose their taxes but not other countries' taxes and cannot transfer income across countries.
  - Third Tier: Individuals (boring): They optimize.

National Governments Can Tax Non-Traded Goods

- If markets are complete and the union **does not** care about redistribution then it should do nothing (my interpretation of (KP)):

$$\int D^i(s)Q(s)\pi(s)ds \leq \underbrace{\int \hat{T}^i(s)Q(s)\pi(s)ds}_{\text{No Redistribution } \rightarrow \, =0} \text{ (with transfers)},$$

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- If markets are incomplete the Fiscal Union just mimics the complete markets allocation.

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- When markets are complete there is no need for portfolio taxes (and there are no transfers). The relevant condition is with $\tau_D^i(s) = 0$ (but the National Government could have chosen to be different from zero)

$$\frac{U^i_{C_T}(s)}{U^i_{C_T}(s')} = \underbrace{\frac{Q(s)P_T(s)}{Q(s')P_T(s')}}_{\text{Same all countries}} \times \underbrace{\frac{1+\tau_D^i(s)}{1+\tau_D^i(s')}}_{\text{Set }=1} = \frac{U^{i'}_{C_T}(s)}{U^{i'}_{C_T}(s')}.$$

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- Thus, when the National Government **can** tax non-traded goods

$$\frac{U^i_{C_T}(s)}{U^i_{C_T}(s')} = \frac{U^{i'}_{C_T}(s)}{U^{i'}_{C_T}(s')}.$$

National Governments Cannot Tax Non-Traded Goods: Complete Markets

- Formally, the National Government is restricted to $\tau^i_{NT}(s) = 0$. It faces an additional constraint of the form.

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  The problem solved by the National Government has **changed**. The solution will change as well.
- From standard optimal taxation exercises we know that, in general, the government will choose to distort **every margin**. In particular, it is not obvious that the National Government will choose zero taxes on portfolios in every state. Thus, it does not follow that

$$\frac{U^i_{C_T}(s)}{U^i_{C_T}(s')} = \frac{U^{i'}_{C_T}(s)}{U^{i'}_{C_T}(s')}.$$

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- FW show that constrained efficiency requires

$$\frac{U^i_{C_T}(s)}{U^i_{C_T}(s')} \times \frac{\left[1 + \frac{\alpha^i(s)}{p^i(s)}\tau^i(s)\right]}{\left[1 + \frac{\alpha^i(s')}{p^i(s')}\tau^i(s')\right]} = \frac{U^{i'}_{C_T}(s)}{U^{i'}_{C_T}(s')} \times \frac{\left[1 + \frac{\alpha^i(s)}{p^i(s)}\tau^i(s)\right]}{\left[1 + \frac{\alpha^i(s')}{p^i(s')}\tau^i(s')\right]}$$

and "if portfolio taxes are not employed" then

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- However the National Government will choose to distort all margins ... and it can levy portfolio taxes ... so

$$\frac{U^i_{C_T}(s)}{U^i_{C_T}(s')} \times \underbrace{\frac{1+\tau^i_D(s')}{1+\tau^i_D(s)}}_{\text{Choose this optimally}} = \underbrace{\frac{Q(s)P_T(s)}{Q(s')P_T(s')}}_{\text{Same all countries}}$$

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- If the National Government is benevolent and has access to portfolio taxes then there is a Nash Equilibrium in which it chooses domestic portfolio taxes so as to implement the no-redistribution constrained efficient allocation (Kehoe-Pastorino).

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- The result does no hold if the Fiscal Union wants to redistribute income.

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  - Restrictions on taxes. (The union has a better technology.)
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  - The union can implement an income redistribution program.

Fiscal Unions in Practice: United States

- There are some goods and transfers provided by the Federal government (e.g. Defense, Transportation Infrastructure, Pensions, Medicare, Medicaid, some educational expenses) that are unrelated to shocks.
- There are some transfers that depend on choices about harmonization (e.g. subsidies to special needs children).
- Almost no transfers to the states before the mid 1930s ... and in the middle of that period there was a civil war (and the gold standard).
- Unemployment benefits are determined (and financed) locally.
  - When a state runs out of money on its unemployment fund it has to borrow from the Federal government and repay with interest.
  - Extended unemployment benefits. Partially financed by the Federal government and triggered by large shocks (often economy wide).
- These are transfers that are targeted to individuals and not States.

Fiscal Unions in Practice: United States

- State National Guard: Mostly financed by the Federal government. When activated by the state (can act as a police force) the costs are paid for by the state.
- Disaster aid (FEMA): Transfers contingent on occurrence of a natural disaster but not clear they are zero net present value.
- Subsidized insurance (flood, hurricane, crop): Transfers are not zero net present value.
- Overall:
  - Not easy to “see” the type of state contingent transfers from the Federal Government to the States in the data.
  - Identification: If some transfers were not provided by the Federal Government what markets would develop? (e.g. FEMA)

Transfers and Governance: Data

- Story: Citizens face weak incentives to monitor governments that are funded by transfers (relative to taxes).
- U.S.: Ratio of (marginal) state spending from grants significantly higher than spending relative to state income.
- Transfer dependent local governments face weaker incentives to increase taxes to provide valuable public goods (e.g. Russia, India, Mexico).
- Positive correlation between transfer-dependent state in the U.S. and number of convictions of public employees for abuse of public office.
- Transfer dependent provinces in Argentina display higher level of corruption and lower levels of "democratic contestation."

Grants and Governance: Causality?

- In the U.S. (somewhat exogenous changes) in educational grants seem to crowd out local taxation in a short period.
- In Brazil (using discontinuities in the allocation) studies find that higher transfers are associated with reelection of the mayor's party and reduced efficiency in the collection of municipal taxes.
- Evidence is not strong (identification is a serious problem) but suggestive that moral hazard should be one element to take into account in the design of transfers.

Some Design Issues

- Best candidate for a union-wide transfer is unemployment insurance (although not clearly related to a monetary union). This is a case of missing markets.
- In the design of the U.S. unemployment insurance there is a hint that the Federal Government is concerned about moral hazard on the part of the State Governments!
- I suspect that when thinking about a Fiscal Union concerns about:
  - Moral hazard are very important.
  - Strategic behavior (large and small countries) should also play a role.