

# Fiscal union: Theoretical and empirical issues - Discussion

# Livio Stracca European Central Bank

ECB-IMF Conference "Reforming EU Fiscal Governance"

13 December 2012

#### The key topics on the table

- Do we need more fiscal rules (than already in the six-pack, two-pack, fiscal compact)?
- Do we need a fiscal backstop for the banking union?
- Does the euro area need a fiscal capacity?
- Let's have a look at the individual papers first. Then some general considerations mainly on the need to have a euro area fiscal capacity

#### Furceri and Zdzienicka

- Follows the GDP decomposition approach by Asdrubali et al. (1996) and applies it to 15 euro area countries in 1979-2010
- Channels of adjustment to idiosyncratic shocks:
- international transfers of income,
- capital depreciation
- net international tax and transfers
- consumption smoothing via saving an borrowing
- Main findings
- only operative risk sharing mechanism in the euro area is consumption smoothing, especially private saving (but less so in financial crises and downturns)
- EU budget smaller insurance than federal transfers in US and Germany
- as a result 70% of country specific income shocks are <u>not</u> smoothed in the euro area. Moreover, the percentage of un-smoothed shocks goes up during the EMU period

#### Furceri and Zdzienicka: policy implications

- The authors propose a supranational fiscal stabilization mechanism to insure countries against income shocks
- Paid conditional on uncorrelated idiosyncratic shocks (each quarter?)
- They show that the required contribution necessary to achieve full stabilisation is relatively small (3-4% of GDP)
- However,
  - the authors are adamant that a proper analysis would require counterfactuals and hence a theoretical model
  - Lucas critique
  - In the US, risk sharing happens mainly through private markets. See recent vox.eu column by Hoffman and Sorensen. Why should the EA be different, once we have the banking union in place?
- Nice, innovative paper. Must have been hard to put the data together. But not straightforward as an argument a EA fiscal capacity

#### Fahri and Werning

- DSGE model. Common monetary policy reduces the possibility to correct idiosyncratic shocks creating distortions in the optimal price setting (labour wedge at country level) – standard rationale for monetary policy in New Keynesian models
- This also creates a discrepancy between individual and social utility functions (only the government cares about the price distortion and may want to insure itself against it)
- In the model, fiscal policy cannot be used for the same purpose. →
  no "fiscal devaluation" possible (other work by Emmanuel)
- Hence, in a monetary union <u>countries</u> (not individuals) have incentive to insure themselves against shocks moving the labour wedge, because only govts internalise the general equilibrium effect
- However, insurance does not mean fiscal capacity necessarily
- Nice, neat paper. But conclusions depend heavily on assumptions.

### Allard (slides)

- Nice survey of the key issues.
- Main conclusions:
  - We need a fiscal backstop for the banking union
  - An insurance scheme against country-specific shocks would help and be feasible
  - Because the adjustment to country-specific shocks does not work well in the EA for well-known reasons (price and wage rigidity, lack of labour mobility)
  - Better governance needed and tightly linked to risk sharing

#### My take, all in all

We need a fiscal backstop for the banking union Yes, but it should really be a backstop (only used as a last resort) and best located with the ESM

An insurance scheme against country-specific shocks would help and be feasible It would indeed help but there would be significant practical complications and I see no clear evidence that it would be vital for EMU

Because the adjustment to country-specific shocks does not work well in the EA for well-known reasons (price and wage rigidity, lack of labour mobility) Evidence is not that clear-cut

Better governance needed and tightly linked to risk sharing Can't agree more. However, we first need to see how the recently introduced institutional changes (6-pack, 2-pack, fiscal compact, European Semester) work in practice

#### Insurance vs fiscal capacity

- Insurance markets for macro risks have been long advocated (Caballero, Shiller, etc.) but have not taken hold so far
- In theory, a shrewd government could insure itself simply by purchasing a financial asset which is negatively correlated with the idiosyncratic shock
- For example, the Greek government could have insured itself ex ante by loading up on German Bunds..
- Ireland and Spain could have shorted financial stocks...
- But just how realistic does this seem?
- If we are serious about insurance, a euro area fiscal capacity seems the most realistic option in the short to medium term. However, are we really convinced that insurance is necessary for EMU?

## Fiscal capacity in the van Rumpoy report

The implementation of contractual arrangements and the associated incentives would support a convergence process, leading in stage 3 to the establishment of a <u>fiscal capacity</u> to facilitate adjustment to economic shocks. This <u>could</u> take the form of an insurance-type mechanism between euro area countries to buffer large country-specific economic shocks. Such a function would ensure a form of fiscal solidarity exercised over economic cycles, improving the resilience of the euro area as a whole and reducing the financial and output costs associated with macroeconomic adjustments.

By contributing to macroeconomic stability, it would usefully <u>complement</u> the crisis management framework based on the European Stability Mechanism. Since a well-functioning shock absorption function would require a further degree of convergence between economic structures and policies of the Member States, the two objectives of supporting growthenhancing structural reforms and cushioning country-specific economic shocks are complementary and mutually reinforcing.

#### The sceptic's view: where is the evidence?

- Apart from theoretical considerations (hard to dispute with Fahri and Werning's paper from this standpoint), is there <u>actual evidence</u> of a problem?
- Is there evidence that euro area countries suffer more from idiosyncratic disequilibria in the labour wedge?
- Hard to measure. But one could at least look at the size and persistence of other indicators of boom and busts: output gap and asset prices, in deviation from a long term trend
- For example, is the output gap more persistent in EA countries?
   Are there more booms and busts in house and equity prices than elsewhere?
- Let's look at some evidence

#### Let's have a bit of "diff in diff"

- In the following, I compare outcomes in 12 euro area countries and 12 non-euro area countries (control group – EU non-EA and other OECD countries) using quarterly data from 1980 to 2012
- Diff in diff: EA countries against own past as well as against a control group (being in the EA as a "treatment")
- Applied this approach in a recent paper (loannou and Stracca 2012) to fiscal behaviour, finding that being in the euro area (and hence subject to the SGP) has made basically <u>no</u> difference
- In the following I show results for the output gap and asset price (house, stock and RER) gaps computing them by removing a recursive linear trend or a one-sided HP filter
- The key question is, are euro area countries (because they belong to a monetary union) more subject to booms and busts, so that insurance would be particularly valuable for them?

#### What we may want to test

$$R_t = \rho_\pi \pi_t + \rho_y y_t + \rho_\pi' \pi_t E A_t + \rho_y' y_t E A_t + \gamma E A_t + \delta_i + \lambda_t$$
 participation **constrain**

(I) Does EA monetary policy?

$$||y_t|| = \beta E A_t + \delta_i + \lambda_t$$

(2) As a result, are output gaps bigger in absolute terms? And what about house, stock price and REER gaps?

$$y_t = \alpha y_{t-1} + \beta y_{t-1} E A_t + \gamma E A_t + \delta_i + \lambda_t$$

(3) Are output gaps **more** persistent?

$$y_t = \alpha y_{t-1} + \beta y_{t-1} E A_t + \beta_d y_{t-1} d_t E A_t + \gamma E A_t + \mu d_t + \delta_i + \lambda_t$$

(3)' Especially when the output gap is negative?

# (I) Yes it constrains!

	(1)	(2)
Inflation, t-1	1.10***	1.15***
	(0.07)	(0.07)
Output gap (linear trend), t-1	0.22***	
	(0.02)	
Inflation, t-1*Euro area dummy	-0.79***	-0.86***
	(0.11)	(0.12)
Output gap (linear trend), t-1*Euro area dummy	-0.12***	
	(0.02)	
Dummy for euro area country	0.00*	0.00**
	(0.00)	(0.00)
Output gap (One sided HP filter), t-1	` ,	-0.09***
		(0.03)
Output gap (One sided HP filter), t-1*Euro area dummy		0.04
		(0.05)
Observations	1,966	1,966
Number of countries	24	24
R2	0.804	0.782

#### (2) But effect on boom-bust behaviour unclear

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Output	House	Equity	REER gap	Output gap	House price	Equity	REER gap
	gap	price gap	price gap	(linear),	(HP),	gap (HP),	price gap	(HP),
	(linear),	(linear),	(linear),	absolute	absolute	absolute	(HP),	absolute
	absolute	absolute	absolute	value	value	value	absolute	value
	value	value	value				value	
Dummy for euro area country	-0.00	0.03***	0.03*	-0.02***	0.00***	-0.00	-0.00	-0.00
	(0.00)	(0.01)	(0.02)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Observations	2,060	2,456	1,389	2,460	2,060	2,456	1,389	2,460
Number of	24	24	14	23	24	24	14	23
countries R2	0.452	0.167	0.511	0.165	0.412	0.175	0.552	0.187

# (3) Output gaps also not more persistent

(1)

(2)

(3)

(4)

Output gap (linear trend), t-1	0.94***		0.90***		
	(0.01)		(0.01)		
Output gap (linear trend), t-1*Euro area dummy	-0.01		-0.14***		
	(0.01)		(0.04)		
Dummy for euro area country	-0.00	-0.00	0.00*	-0.00	
	(0.00)	(0.00)	(0.00)	(0.00)	
Output gap (One sided HP filter), t-1		0.76***		0.73***	
		(0.02)		(0.02)	
Output gap (One sided HP filter), t-1*Euro area dummy		0.03		-0.07	
		(0.03)		(0.06)	
Output gap (linear trend), t-1*Euro area dummy*Output gap $<$ 0			0.16***		
			(0.05)		
Output gap<0			-0.01***	-0.00***	
			(0.00)	(0.00)	
Output gap (One sided HP filter), t-1*Euro area dummy*Output gap<0				0.12*	
				(0.07)	
Observations	2,036	2,036	2,036	2,036	
Number of country	24	24	24	24	
R2	0.94 <b>≩</b> ∪R	OPPARICE	NT PA946 AN	ık 0.798	15

#### Overall then?

- We certainly don't want to take this evidence too seriously we need more sophisticated analysis
- But it highlights a point: Where is the empirical evidence that we have a macro stabilisation problem in the euro area?
- Giannone et al. (2009): "Contrary to the conjecture of the pessimists and to that of the optimists, the feature of euro area business cycles have <u>hardly</u> changed since the beginning of the EMU."
- I see no "smoking gun" that countryspecific shocks are a particular problem in the euro area



#### What could a EA fiscal capacity have prevented?

- Greece? In which way?
- Spain and Ireland? To some extent maybe, but macro-prudential policies seem to be the right tool to prevent (ex ante) and address (ex post) this type of boom-bust behaviour
- Sure we all have doubts about macro-prudential policies but give them a chance at least
- Italy? Its GDP per capita is the same as in 1999...
- These cases also show that moral hazard would have been an issue, in each of them

#### Conclusions

- On better fiscal rules and the need of a fiscal backstop for the banking union we all agree, though maybe not on all details
- The theoretical case for the insurance against country-specific shocks is there
- However, I still see no "smoking gun" empirically that it would address a key problem for EMU
- Macro-prudential instruments seem better suited to address boom-bust behaviour at country level
- Quite apart from the operational problems, moral hazard, and so on, which I have not really addressed here