European Stability Mechanism

DANGEROUS LIAISONS? DEBT SUPPLY AND CONVENIENCE YIELD SPILLOVERS IN THE EURO AREA

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MOTIVATION – WHAT MATTERS FOR LOW SOVEREIGN YIELDS?

- Low sovereign interest rates are key for fiscal sustainability

- When a country issues more sovereign bonds, its interest rate increases
  - Investors demand a higher return for buying additional bonds

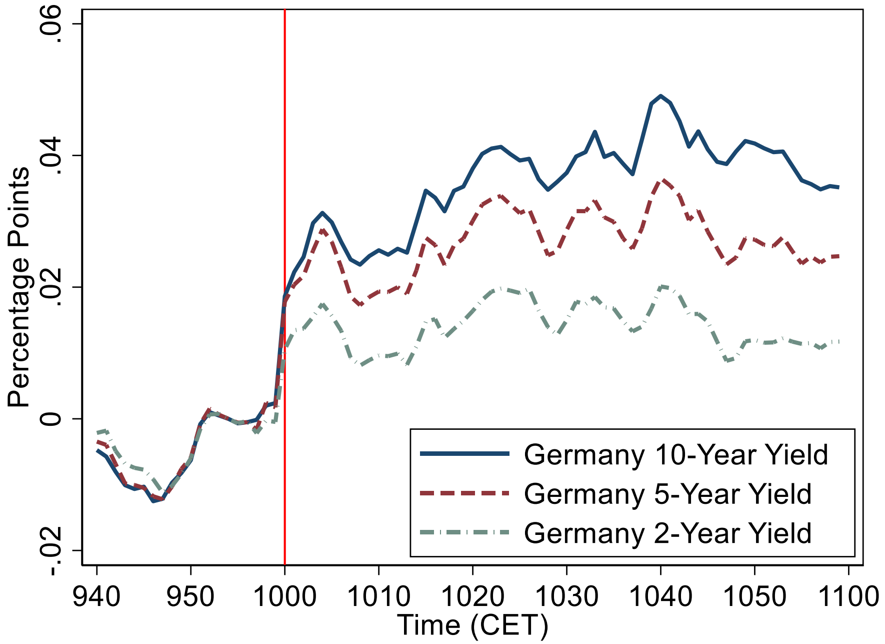
- Does a country's interest rate also change when another country issues more bonds?
  - If investors buy more bonds from one country, do they buy fewer bonds from others?

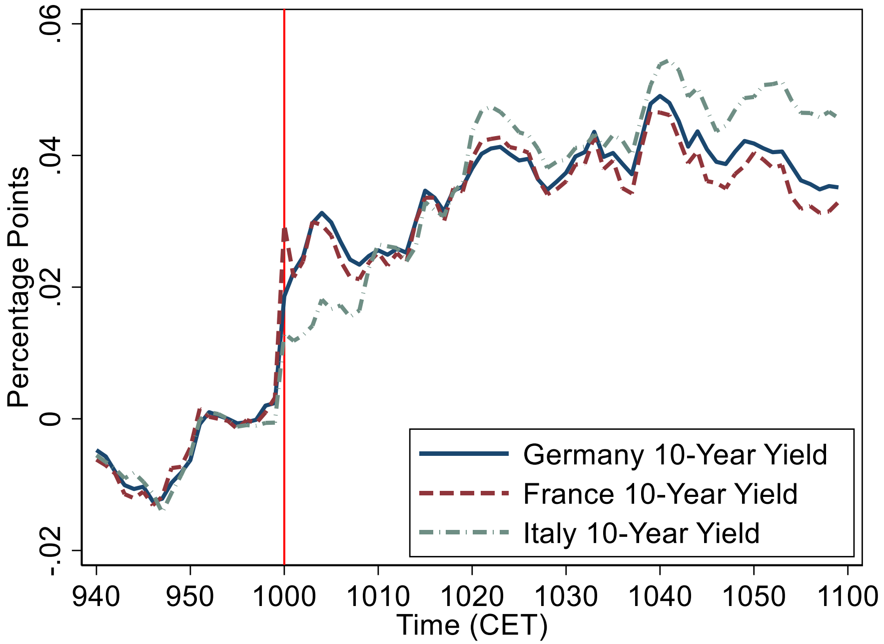
MAIN RESULT: A NEW TYPE OF SPILLOVER!

- Debt issuance in one ‘safe’ euro area country drives up interest rates in other ‘safe’ countries <u>as much as</u> in the issuing country
  - A new type of fiscal spillover among ‘safe’ (core) euro area countries
- Non-core countries are less exposed to debt issuance spillovers from core countries
- These spillovers highlight the need for EU fiscal rules, not only to avert crises, but also to avoid disproportionate fiscal burdens in non-crisis times

SPILLOVERS FROM NEWS ABOUT GERMAN DEBT ISSUANCE

- On 14 December 2022 at 10:00 CET, the German debt management office („Deutsche Finanzagentur”) published its debt issuance plan for 2023
- Market commentary suggests that the total amount exceeded expectations





SPILLOVERS TO CORE VS. NON-CORE EURO AREA COUNTRIES

- Spillovers from Germany to other core countries are almost 1-for-1, but smaller to non-core countries

TABLE 4: Daily Yield Spillovers - German Debt Supply Shocks

	(1) ΔY_{FR}	(2) ΔY_{NL}	(3) ΔY_{FI}	(4) ΔY_{AT}	(5) ΔY_{BE}	(6) ΔY_{IT}	(7) ΔY_{ES}	(8) ΔY_{PT}
ΔY_{DE}	0.989***	0.984***	1.088***	1.034***	1.175***	0.529	0.557	0.883
	(0.116)	(0.072)	(0.090)	(0.112)	(0.288)	(0.474)	(0.373)	(0.650)
Cons.	0.004	0.001	0.003	0.002	0.006	0.015*	0.009	0.016
	(0.003)	(0.002)	(0.002)	(0.003)	(0.006)	(0.008)	(0.008)	(0.012)
Obs.	44	44	44	44	44	44	44	44
R^2	0.830	0.958	0.938	0.849	0.470	0.288	0.335	0.150

Notes: Each column displays coefficients from a separate regression: $\Delta Y_{receiving} = \beta_0 + \beta_1 * \Delta Y_{DE} + \epsilon$, where the daily change in the German yield is instrumented with the 30-minute change. Standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

SIMILAR SPILLOVERS FROM FRENCH DEBT ISSUANCE

- Spillovers from France have a similar pattern: almost 1-for-1 to other core countries, but smaller to non-core countries

TABLE 7: Convenience yield spillovers from French supply shocks using the RS estimator

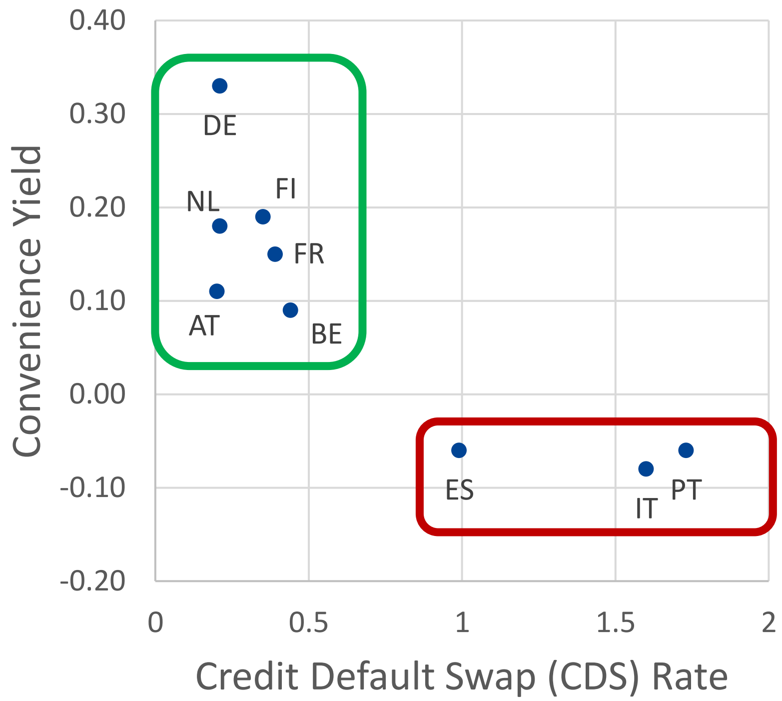
	(1) ΔCY_{DE}	(2) ΔCY_{NL}	(3) ΔCY_{FI}	(4) ΔCY_{AT}	(5) ΔCY_{BE}	(6) ΔCY_{IT}	(7) ΔCY_{ES}	(8) ΔCY_{PT}
ΔCY_{FR}	1.259***	0.852**	0.772*	0.906***	0.949***	-0.192	0.735	1.664
	(0.388)	(0.350)	(0.430)	(0.272)	(0.307)	(0.542)	(0.636)	(4.142)
Constant	0.001	0.002	-0.001	-0.001	-0.001	0.003	0.003	0.017
	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.006)	(0.005)	(0.018)
N	44	44	44	44	44	44	44	44
Weak IV	4.576	5.131	3.926	3.950	4.848	3.969	3.991	7.614
Overid.	0.235	0.755	0.482	0.455	0.743	0.830	0.793	0.236

Notes: This table report coefficient estimates of equation $\Delta CY_{receiving} = \alpha + \beta \Delta CY_{FR} + \varepsilon$ using the RS estimator described in Section 4.4. Each column corresponds to a different receiving country.

CONVENIENCE YIELDS IN THE EURO AREA

- Core countries' bonds earn a premium – the *convenience yield* – because these bonds provide not only a cash flow but also "convenient" services
  - These bonds are reliably liquid, remain valuable in recessions, and are insulated from risk contagion effects

- Not just one, but several euro area countries' bonds offer these services
  - Investors wanting to buy a safe asset can buy bonds from different sovereigns, which can be treated as substitutes



BOND SUBSTITUTION & CONVENIENCE YIELD SPILLOVERS

- Because core bonds are substitutes, issuance by one country diverts demand from other core countries
  - This explains spillovers among convenience yields and thus sovereign interest rates
- Issuance by core countries does not divert demand from non-core countries
  - Their bonds are imperfect substitutes for core bonds with different risk profiles, no flight-to-safety
- Our analyses show that spillovers among sovereign interest rates are indeed driven by convenience yields, not by monetary policy expectations or sovereign risk premia.

POLICY IMPLICATIONS

- If core euro area sovereign bonds are treated by investors as substitutes, then for maintaining low sovereign interest rates in the euro area …
  - … it matters **how much debt is issued in total**
  - … it matters **less who issues it** (DE, FR, …)

- This underscores the importance of coordinating national fiscal policies
  - Excessive debt issuance can not only lead to crises, but also to disproportionate fiscal burdens in non-crisis times
  - EU fiscal rules can address negative externalities of debt issuance

ESM Working Paper & ESM Blog will be published on 8 November!