



EUROPEAN CENTRAL BANK

EUROSYSTEM

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Discussion of:

***“200 years of
sovereign haircuts
and bond returns”***

by Meyer, Reinhart and Trebesch

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*Views do not necessarily represent those of ECB

Session II: How to resolve the public debt overhang?

- High nominal growth and/or fiscal consolidation
 - Pascal Jacquinot: Challenging with low potential growth and “austerity fatigue”
- Central bank policy
 - Ricardo Reis: Of limited use, particularly in the euro area
- Sovereign debt default
 - Christoph Trebesch: Debtor economies improve after nominal write-downs

Reinhart and Trebesch (2016): debtor perspective

- Study four episodes of multi-country debt relief
 - 1931, 1934, 1986, 1990
- Large nominal haircuts associated with strong recoveries
 - Average haircut worth 20% of GDP
 - In the five years following such haircuts, GDP grew 20% on average after 1930s haircuts, and 11% after 1990s defaults
- Softer debt restructuring less effective in re-booting economies
 - Suggests limited benefits to a strategy of “kicking the can...”
- Policy implication: nominal haircuts can be a useful policy tool (in extremis)

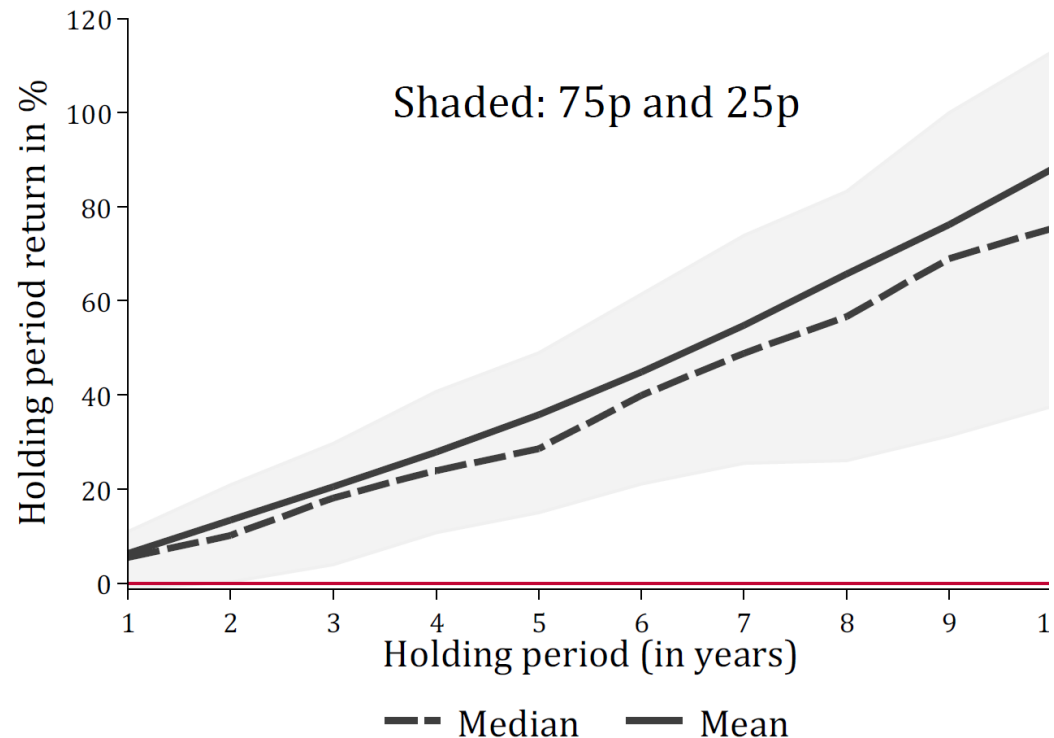
Trebesch et al (2018): creditor perspective

Motivating questions:

- Even if debtors gain from nominal haircuts, surely creditors lose?
- So why would investors buy high-risk sovereign debt?

Trebesch et al's answer:

- Defaulted bonds tend to make ex post market value gains following large NPV reductions
- **“Serial defaults, serial profits”**



Structure of discussion

Summary of Trebesch et al (2018):

- Dataset
- Methodology
- Results

Comments on Trebesch et al (2018):

- More on heterogeneity
- Ex ante vs ex post reward-for-risk

Broader implications:

- What kind of asset is sovereign debt?
- Euro area fiscal framework

Building the dataset

- New dataset expands on previous work by Trebesch and coauthors
- Main sources:
 - Creditor organisations
 - Investor manuals (e.g. Moody's)
 - Other country-level sources
- Sample:
 - Restructured bonds denominated in USD or GBP and traded in NY or London
 - Information on restructuring terms (→ short-run NPV haircuts) and secondary market prices (→ long-run returns)

Promising new dataset on sovereign debt

	Cruces and Trebesch (2013)	Trebesch et al (2018)
Time series	1970-2013	1815-2015
No. of restructurings	187	c.300
No. of defaulted countries	70	c.80
Mean NPV reduction (Sturzenegger-Zettelmeyer)	37.5%	43%

Given the rarity of sovereign debt default, a near-doubling of observations has the potential to greatly improve our knowledge of these events

Methodology to calculate returns

- Literature on sovereign debt default typically focuses on NPV reductions immediately following the event
- Novel focus of this paper is on total real return based on secondary market prices:

$$r_{t+1} = \frac{p_{t+1} + c_{t+1}}{p_t} - 1$$

where p is price and c is coupon & accrued interest (assuming reinvestment of payouts); in default, interest payments c could be zero or partial

- Compute monthly returns at bond-level and build country-level portfolios

Yearly real returns

	Obs.	Mean	Median	SD
Total sample	3,425	6.93	4.45	27.85
Non-defaulters	792	4.48	2.94	18.62
Defaulters	2,633	7.67	4.91	30.04
Safe bonds (UK & USA)	296	2.78	2.00	9.97

Non-defaulters: Australia, Belgium, Canada, Denmark, France, Ireland, Netherlands, New Zealand, Norway, Sweden, Switzerland

Defaulters: Argentina, Austria, Bolivia, Belize, Brazil, Bulgaria, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Finland, Germany, Greece, Guatemala, Haiti, Honduras, Hungary, Italy, Japan, Mexico, Nicaragua, Panama, Paraguay, Peru, Poland, Portugal, Romania, Russia, Spain, Thailand, Turkey, Uruguay, Venezuela, Yugoslavia

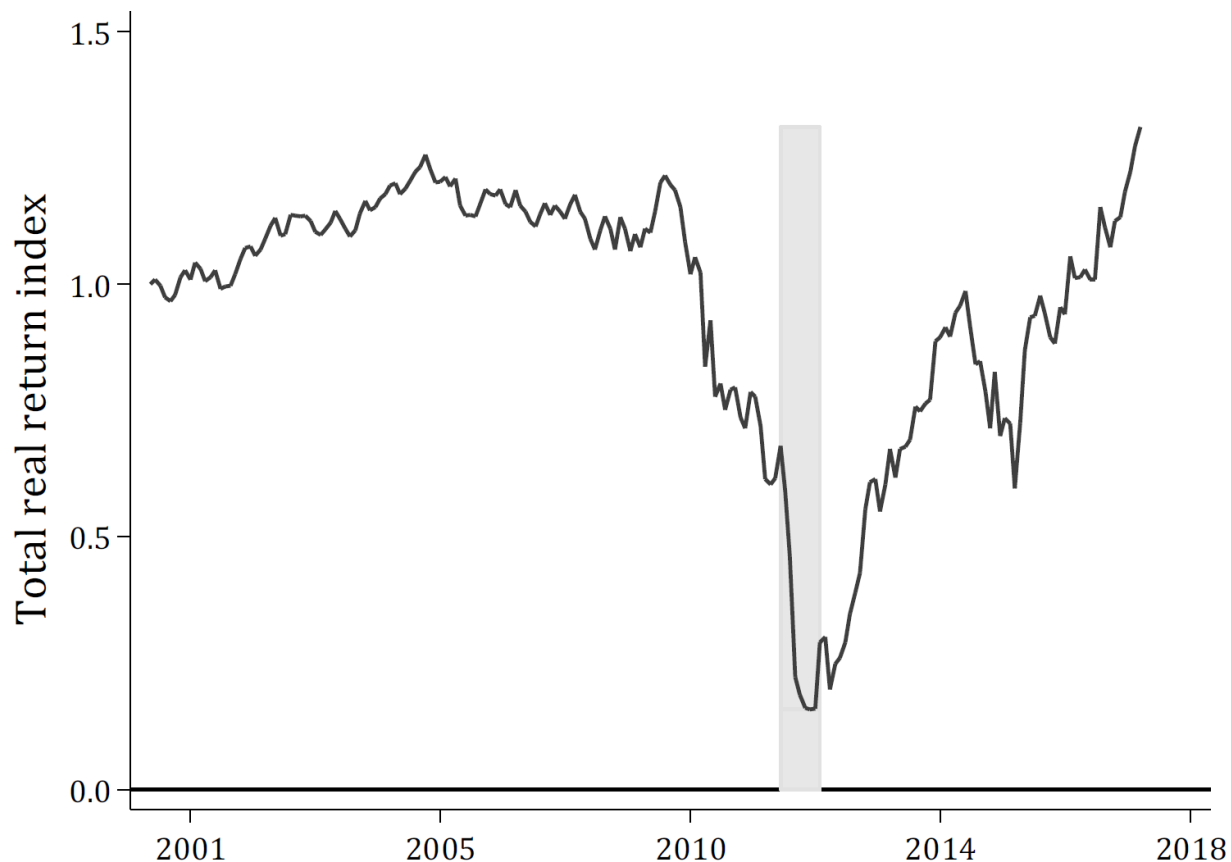
Realised return after default events

Holding period returns

	Quarterly (Q1-Q4)				Yearly --->					
	Q1	Q2	Q3	Q4	2	3	4	5	6	7
Mean	3.0	4.0	5.0	6.0	13.3	21.0	28.9	37.3	45.7	54.8
SD	10.0	13.0	16.7	18.9	30.2	40.9	48.3	55.5	60.9	68.9
p75	5.7	7.8	9.1	11.4	21.5	32.4	42.7	52.8	63.8	75.2
Median	2.1	2.8	3.6	4.7	9.6	15.1	21.7	28.5	34.4	41.3
p25	-0.7	-1.3	-1.4	-1.4	0.3	2.7	5.2	7.8	12.4	14.7
Max	89.0	120.2	158.4	177.0	373.9	598.3	751.8	891.3	988.2	1,109.4
Min	-78.6	-61.7	-79.3	-81.3	-89.4	-93.0	-92.4	-92.2	-91.5	-90.1

Quick recoveries in market value can recoup losses

Greece 2012 (Index 2001=1)



Bond-level heterogeneity?

- Although Trebesch et al (2018) focus on country-level data, raw dataset is at bond-level
 - Bond-level returns are aggregated at country-level by simple averaging
- Richness of dataset provides scope to exploit within-country (cross-bond) heterogeneity:
 - Foreign vs domestic law (Chamon, Schumacher and Trebesch, 2018)
 - Maturity (Asonuma, Niepelt and Rancière, 2018)
 - Investor discrimination (Zettelmeyer, Trebesch and Gulati, 2013)
- Selective default could mitigate the extent to which (some) investors are rewarded for risk

Reward for risk

Asset class	Full sample Sharpe ratio
“Safe” UK/US Treasuries	0
Treasury bonds of countries that experienced default over 1815-2015	0.16
Equities	0.19

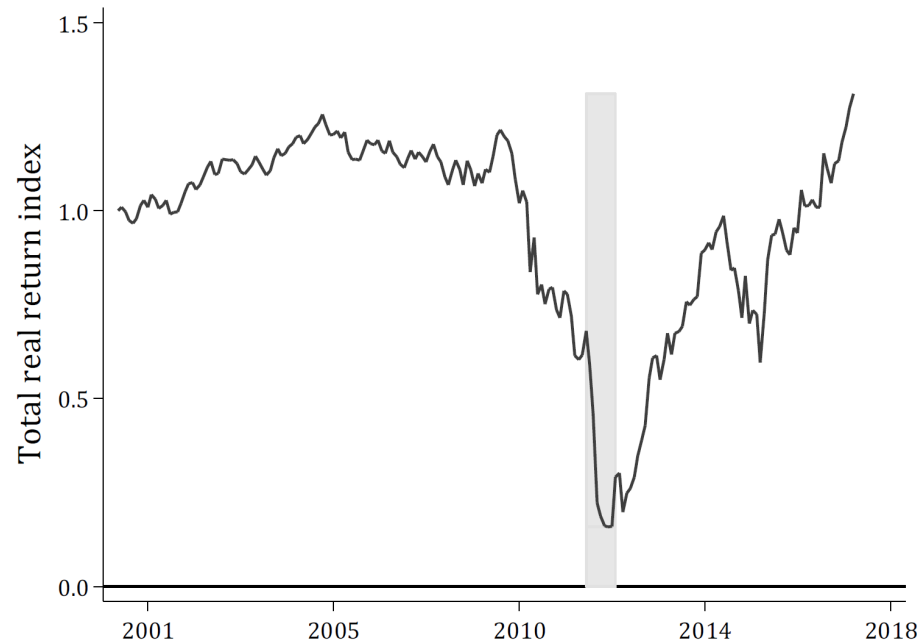
One could cut the data differently:

- “Defaulters” group includes advanced European countries that defaulted on official debt to US/UK in 1930s
 - An alternative dynamic classification would allow countries to jump between groups depending on their time-distance from default
- “Safe” group includes UK, which received massive debt relief on obligations to US in 1934 (NPV reduction: 92%)

Sharpe ratios before vs after default?

Investors are “reasonably” compensated for risk based on full sample realised Sharpe ratios, but what about Sharpe before default?

Greece 2012 (Index 2001=1)



What kind of asset is sovereign debt?

- Trebesch et al: “High-risk sovereigns are a lucrative investment”
 - Sovereign debt carries default risk for which investors require compensation
- Trichet: “Governments need to [...] honour their signature”
 - Low-risk assets are a public good; issuers of sovereign debt should aim for safety properties (low variance, negative beta, high liquidity)
- My view: Euro area framework must embrace both perspectives
 - Acknowledge that sovereign debt is not risk-free;
acknowledge that the euro area needs a “safe” asset

Franco-German reconciliation

- Sovereigns are not risk-free:
 - RTSE reform
 - Accountability bonds
 - Orderly debt restructuring
- Euro area needs “safe” assets:
 - EDIS (safe deposits)
 - Senior SBBS (safe long-term securities)

Reconciling risk sharing with market discipline: A constructive approach to euro area reform

Agnès Bénassy-Quéré, Paris School of Economics and University of Paris I; **Markus Brunnermeier**, Princeton University; **Henrik Enderlein**, Hertie School of Governance and Jacques Delors Institute Berlin; **Emmanuel Farhi**, Harvard University; **Marcel Fratzscher**, DIW and Humboldt University Berlin; **Clemens Fuest**, Ifo Institute and University of Munich; **Pierre-Olivier Gourinchas**, University of California at Berkeley; **Philippe Martin**, Sciences Po, Paris and Conseil d'Analyse Économique; **Jean Pisani-Ferry**, Bruegel, EUI, Hertie School of Governance and Sciences Po; **Hélène Rey**, London Business School; **Isabel Schnabel**, University of Bonn and German Council of Economic Experts; **Nicolas Véron**, Bruegel and Peterson Institute for International Economics; **Beatrice Weder di Mauro**, INSEAD and University of Mainz; and **Jeromin Zettelmeyer**, Peterson Institute for International Economics'

Wrap-up

- Impressive attempt to shed light on historical sovereign defaults
- Richness of dataset allows for additional research agendas
- Lessons for euro area policymakers
 - Sovereign default as a policy tool in extremis cannot be taboo
 - Necessity of a euro “safe” asset also cannot be taboo
- Looking forward to the full paper (and dataset!)