





## **ESBies: Safety in the tranches**

CFM-DP2016-27

Markus K. Brunnermeier<sup>5</sup>, Sam Langfield<sup>2</sup>, Marco Pagano<sup>6</sup>, Ricardo Reis<sup>1,3</sup>, Stijn Van Nieuwerburgh<sup>4</sup>, Dimitri Vayanos<sup>3</sup>

<sup>1</sup>Centre for Macroeconomics, <sup>2</sup>European Systemic Risk Board, <sup>3</sup>London School of Economics and Political Science, <sup>4</sup>New York University, <sup>5</sup>Princeton University, <sup>6</sup>Università di Napoli Federico II

The euro area does not provide a union-wide safe asset. In its absence, financial stress triggers cross-border capital flights to safety, which exacerbate the initial shock. During sovereign debt crises, a diabolic loop sets in whereby banks holding risky sovereign debt suffer losses to their net worth, causing them to cut back on their lending to the real economy and increasing governments' contingent liabilities. The policy challenge is to create a union-wide safe asset without joint liability among sovereigns. Brunnermeier et al (2011) proposed a design for such an asset, named "European Safe Bonds". ESBies are the senior tranche of a diversified portfolio of euro area sovereign bonds. Sovereigns remain responsible for their own bonds, which would still be traded at a market price, exerting discipline on borrowing decisions. A sovereign could default on its own obligations without others bearing any bail-out responsibility and without holders of ESBies bearing any losses.

This paper investigates why and how ESBies would contribute to the stability of the euro area. First, we carry out numerical simulations of a stochastic model of default to gauge ESBies' safety. In the benchmark scenario, we find that ESBies with a 30% subordination level would be as safe as German bunds. If the underlying portfolio had a face value of €6tn, equivalent to 60% of GDP, ESBies would amount to €4.8tn − approximately double the current supply of euro safe assets. The remaining €1.8tn of the securitization would comprise moderately risky EJBies, which would be attractive to high-yield investors owing to their embedded leverage. Moreover, EJBies could be further securitized to cater to various investor groups.

The numerical simulations of ESBies' properties are conservative, as they assume fixed correlation structures for sovereign defaults. Second, we study the effect of ESBies on the diabolic loop between sovereign risk and bank risk using a model. We show how, when and why the two features of ESBies--diversification and seniority---can weaken the diabolic loop and its diffusion across countries.







Third, we describe the politically feasible steps that policymakers can take to make ESBies a reality. We propose a step-by-step guide on how to create ESBies, starting with limited issuance by public or private-sector entities.

Safe assets are currently inadequately and asymmetrically supplied in the euro area. ESBies are a solution to this quandary. ESBies offer to Europe the benefits that the United States enjoys from federal Treasuries – namely safety, as well as symmetric and abundant supply – without the downside of mutualisation. They would increase the supply of safe assets, preclude distortionary flight-to-safety capital flows across countries and weaken the diabolic loop between sovereigns and banks.