





## The Sovereign-Bank Diabolic Loop and ESBies

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The sovereign-bank diabolic loop refers to the economic mechanisms through which an increase in the perceived probability of default by a sovereign, lowers the price of sovereign bonds, which causes a loss in the portfolio of bonds held by banks, which in turn leads to cuts in credit and a recession together with an increase in the odds of a bailout. This confirms the inicial fear of sovereign default, and serves as a powerful amplification mechanism, which was at the heart of the Euro crisis because of the large own-sovereign bond holdings by European banks.

This paper puts forward a simple model of the sovereign-bank diabolic loop in order to better understand the conditions under which it arises and how to prevent it. We establish four results. First, the diabolic loop can be avoided by restricting banks domestic sovereign bond exposures relative to their equity. However, this reduces financial intermediation when equity is scarce. Second, domestic sovereign debt can be tranched into a junior and a senior component. Because the senior tranche is safer, equity requirements can be lowered if banks only hold senior domestic sovereign debt. Third, such requirements shrink even further if banks only hold the senior tranche of an internationally diversified sovereign portfolio. This tranche corresponds to the European Safe Bonds proposal, or ESBies in the euro-area context. Finally, we show that ESBies generate more safe assets than domestic debt tranching alone. Moreover, insofar as the diabolic loop is defused, the junior tranche generated by the securitization is itself risk-free because the crisis equilibrium disappears