

Financial Crises and Central Banks' "Lender of Last Resort" Function

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*Remarks at the Executive Forum Hosted by the World Bank
"Impact of the financial crises on central bank functions"*

Hiroshi Nakaso

Deputy Governor of the Bank of Japan

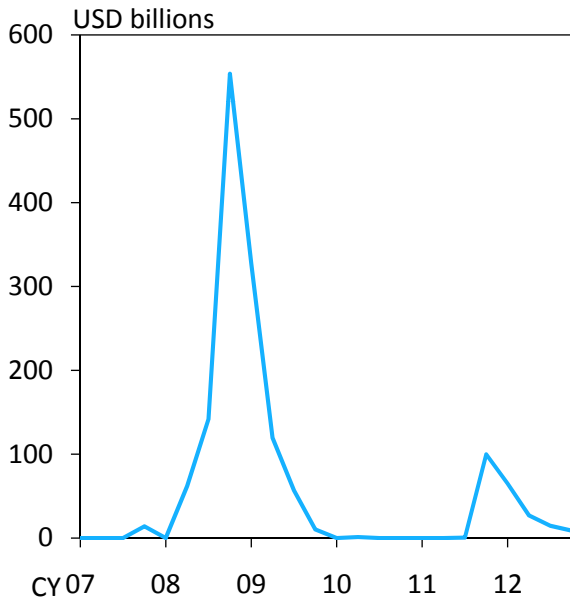
Chart 1

Market Maker of Last Resort

Transmission Channels of Systemic Risk and the Role of the Central Bank

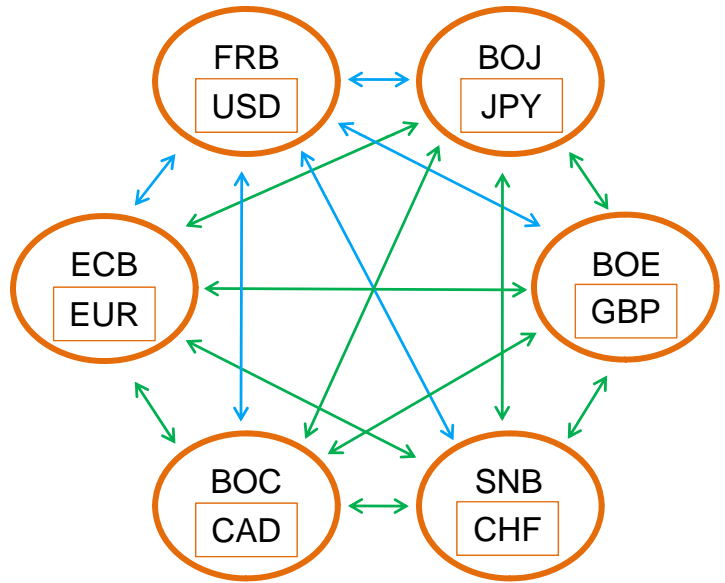
	Bank run	Market run
Contraction of liquidity	Contraction of funding liquidity at banks caused by coordination failures among depositors	Contraction of market liquidity caused by coordination failures among market participants
Transmission mechanism	Psychological contagion due to homogeneity of deposits Contagion through interbank transactions	Contagion to all participants in money and capital markets due to synergistic contraction of market and funding liquidity
Identification of problems	Relatively easy to identify which bank has a liquidity problem	Difficult to identify who has a liquidity problem given a wide range of market participants
Role of the central bank	LLR	MMLR

Provision of U.S. Dollars via Swap Arrangements between FRB and Other Central Banks



Source: FRB.

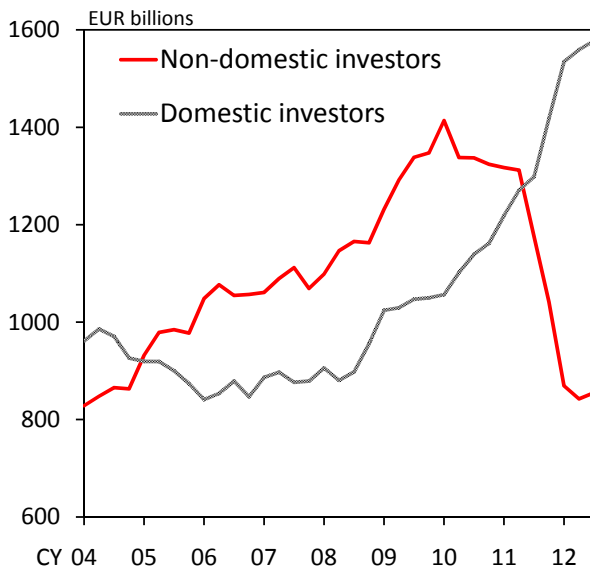
Swap Network by Six Central Banks



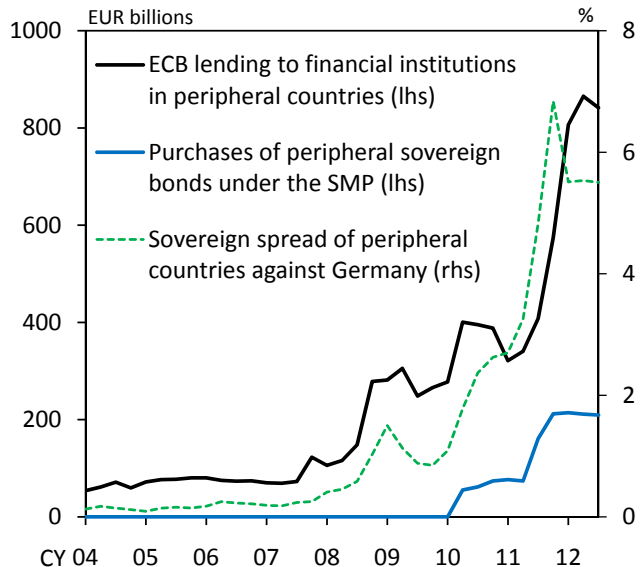
The six major central banks established bilateral liquidity swap arrangements in 2011, so that liquidity could be provided in any of their currencies.

Sovereign Bond Markets in Peripheral European Countries and ECB's Liquidity Provision

Holdings of Peripheral Countries' Government Bond by Investor Type



ECB's Liquidity Provision and Government Bond Yields



Notes: 1. Peripheral countries consist of Greece, Ireland, Italy, Portugal, and Spain.

2. Holdings of peripheral countries' government bond by investor type are based on the estimates reported in Arslanalp and Tsuda (2012).

3. The sovereign spread of peripheral countries against Germany is calculated as the weighted average of 10-year peripheral government bond yields, with the outstanding government debt of each country used as weight, minus the 10-year German government bond yield.

4. ECB lending to financial institutions in peripheral countries excludes the purchases of peripheral sovereign bonds under the SMP.

Sources: ECB; NCBs; Haver Analytics;

Serkan Arslanalp and Takahiro Tsuda, "Tracking Global Demand for Advanced Economy Sovereign Debt," IMF Working Paper, December 2012.

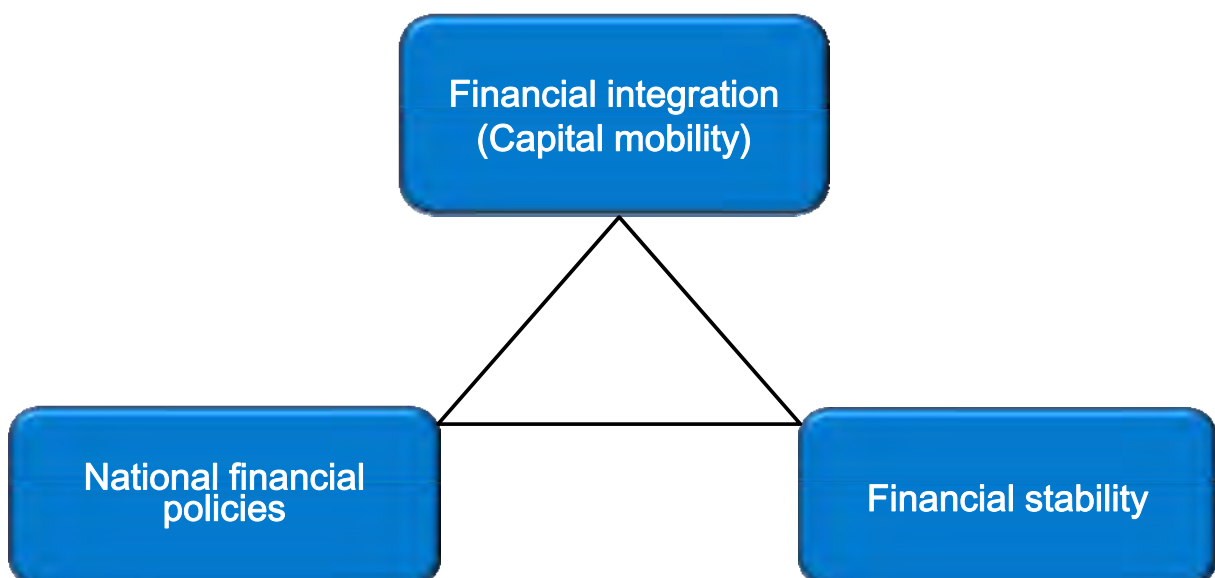
■ How far the central bank is prepared to go as MMLR

Not only will the central bank's actions affect the stability of the financial system and the effectiveness of monetary policy, but they will also endogenously influence the bank's own financial soundness

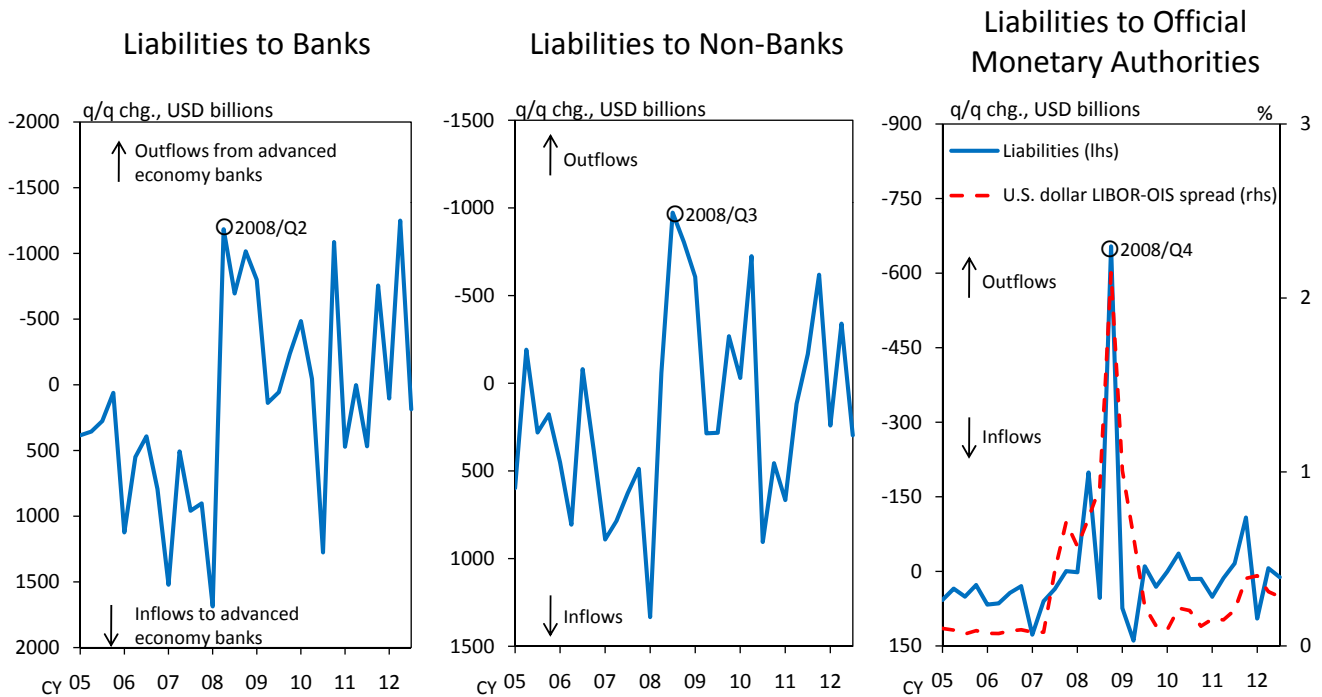
■ MMLR and *quasi*-fiscal measures

- Impinging upon micro-level resource allocation
- Losses incurred by the central bank would hurt taxpayers as transfers to the government are reduced

Schoenmaker's Financial Trilemma

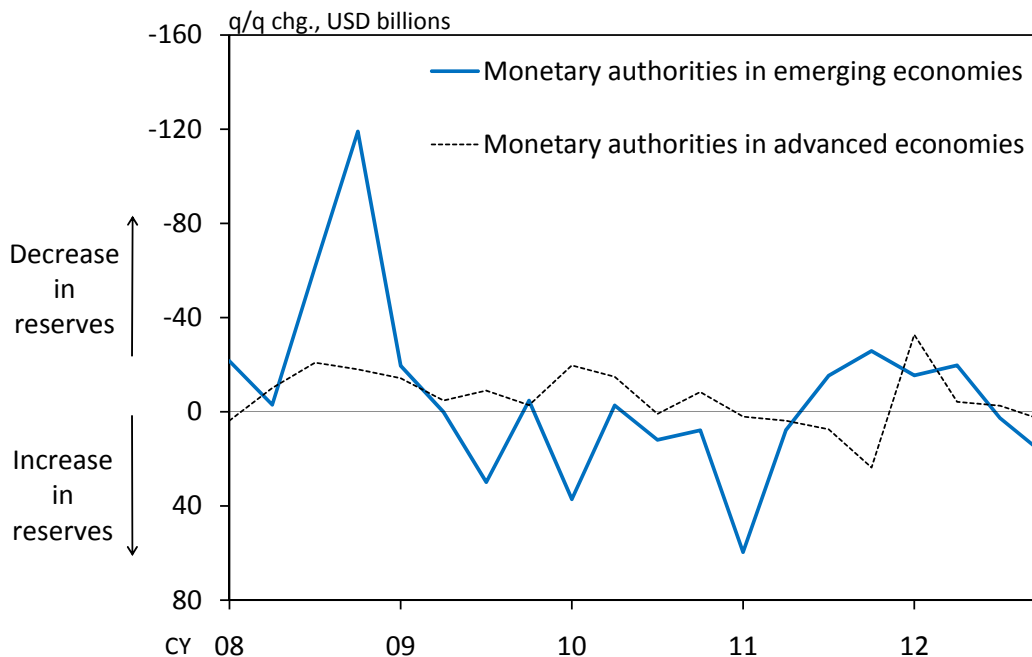


Change in Liabilities of Advanced Economy Banks



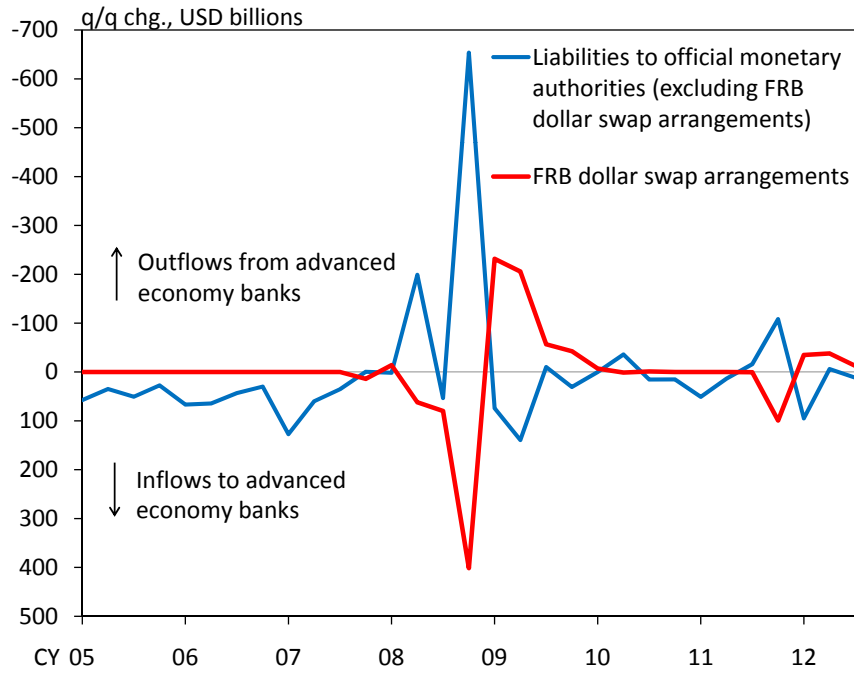
Note: Liabilities are the sum of cross-border liabilities in all currencies and local liabilities in foreign currencies. Liabilities to official monetary authorities exclude U.S. dollar funds under the FRB dollar swap arrangements.
Sources: BIS; FRB; Bloomberg.

Foreign Currency Reserves Classified as Currency and Deposits



Notes: 1. Currency and deposits are those in foreign currencies parked in commercial banks, foreign central banks, the BIS, etc.
2. Monetary authorities in emerging economies consist of 26 countries. Those in advanced economies consist of 14 countries and the ECB.
Source: Haver Analytics.

Change in Liabilities of Advanced Economy Banks to Official Monetary Authorities



Note: Liabilities to official monetary authorities (excluding FRB dollar swap arrangements) are the sum of cross-border liabilities in all currencies and local liabilities in foreign currencies.
Sources: BIS; FRB.

Monetary Authorities Face Double Trilemmas

