

# The Central Bank from the Viewpoint of “Law and Economics”

Handout for “Special Lecture, Financial Law”  
at the Faculty of Law, the University of Tokyo

Masaaki Shirakawa  
Governor of the Bank of Japan

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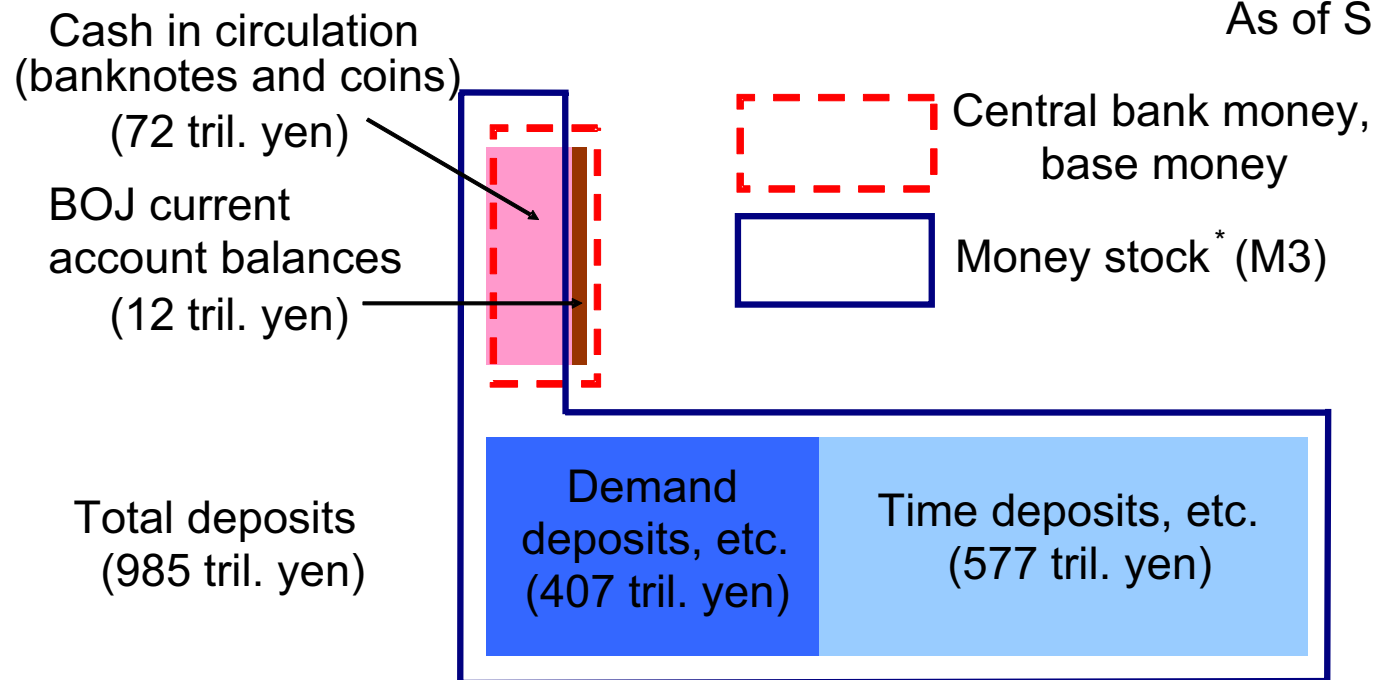
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# I. Introduction

# Classification of “Money”

As of September 2009



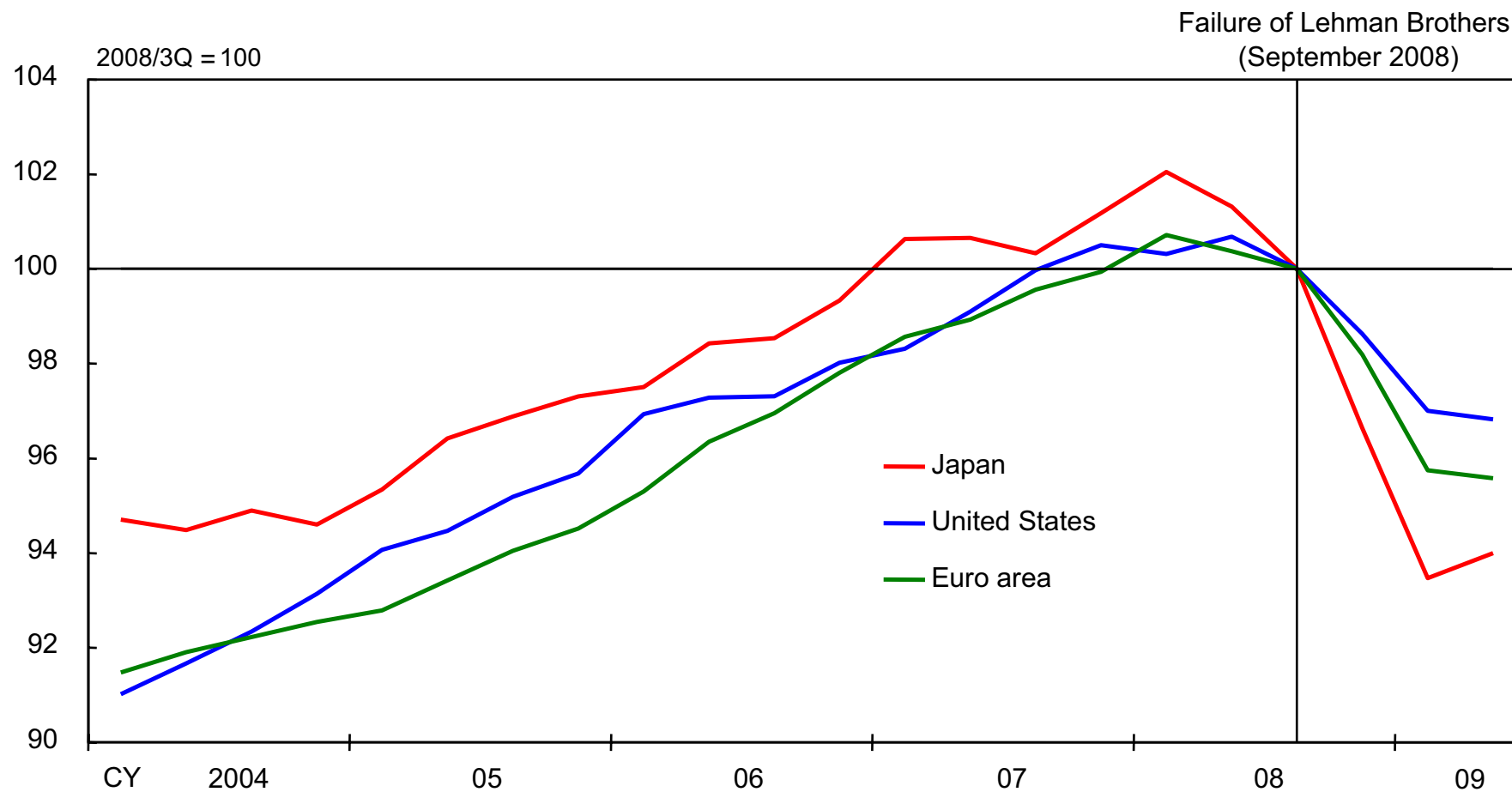
Nominal GDP of Japan in fiscal 2008: 498 tril. yen

\* Money stock is basically defined as the quantity of cash and deposits held by individuals, corporations, etc.

Source: Bank of Japan.

## II. Experience of the Global Financial Crisis

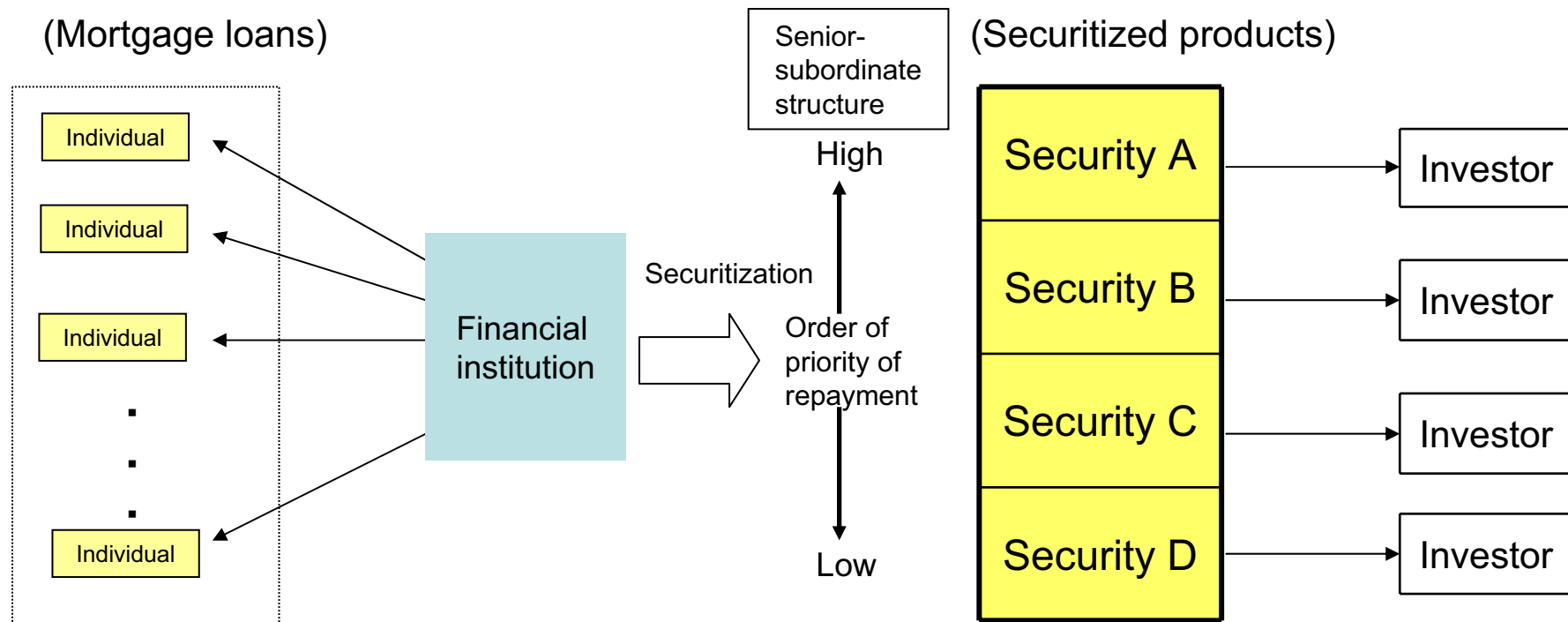
# Real GDP of Major Economies



Sources: Cabinet Office, BEA, EUROSTAT.

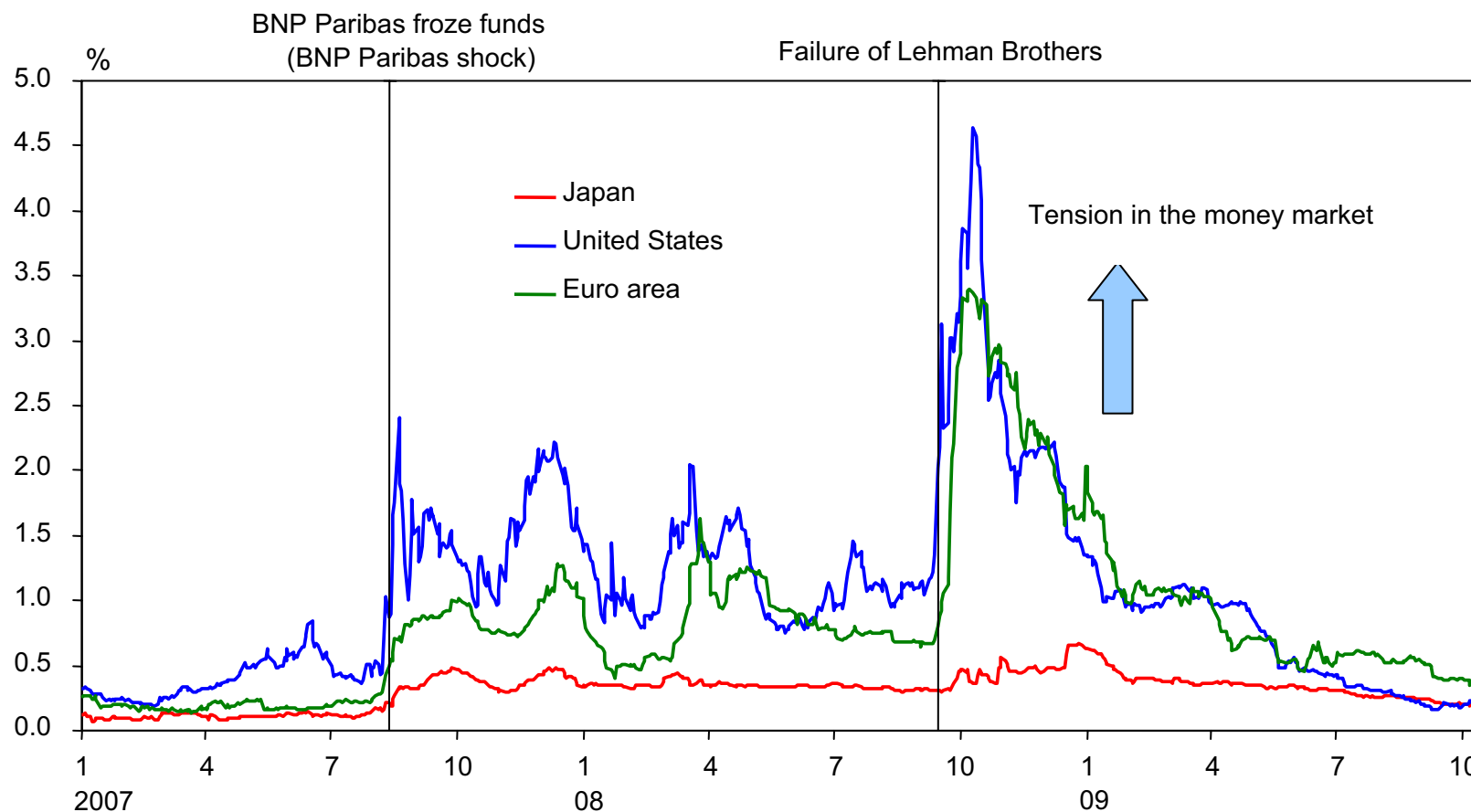
# Structure of Securitized Products

(An example of securitized products backed by mortgages.)



# Global Money Market

The spread between the London Inter-Bank Offered Rate (LIBOR) and the short-term government security (3-month) yield (i.e., the spread between “interest rates at which banks borrow unsecured funds from other banks in the London money market” and “risk-free interest rates”).

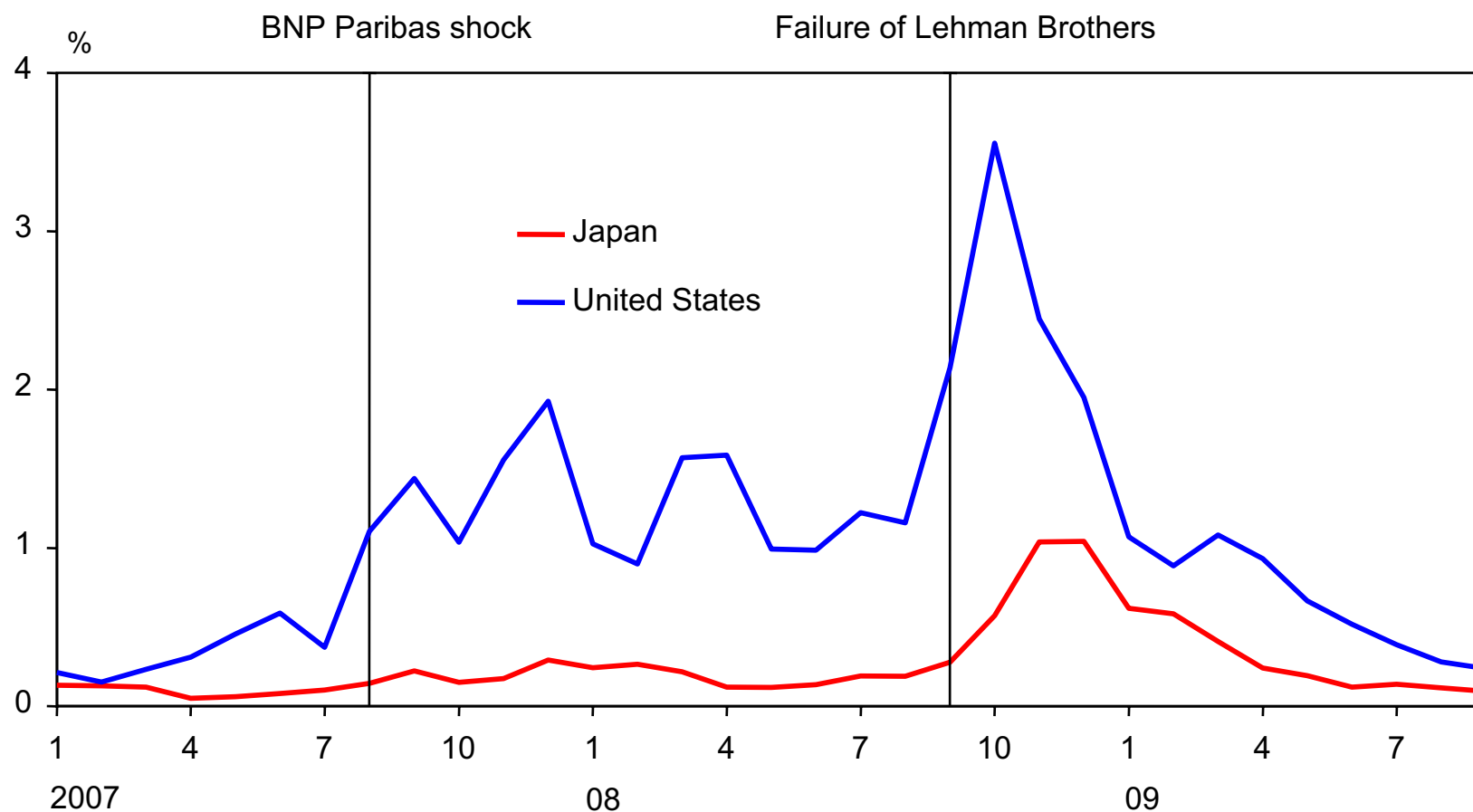


Source: Bloomberg.



# Commercial Paper Market

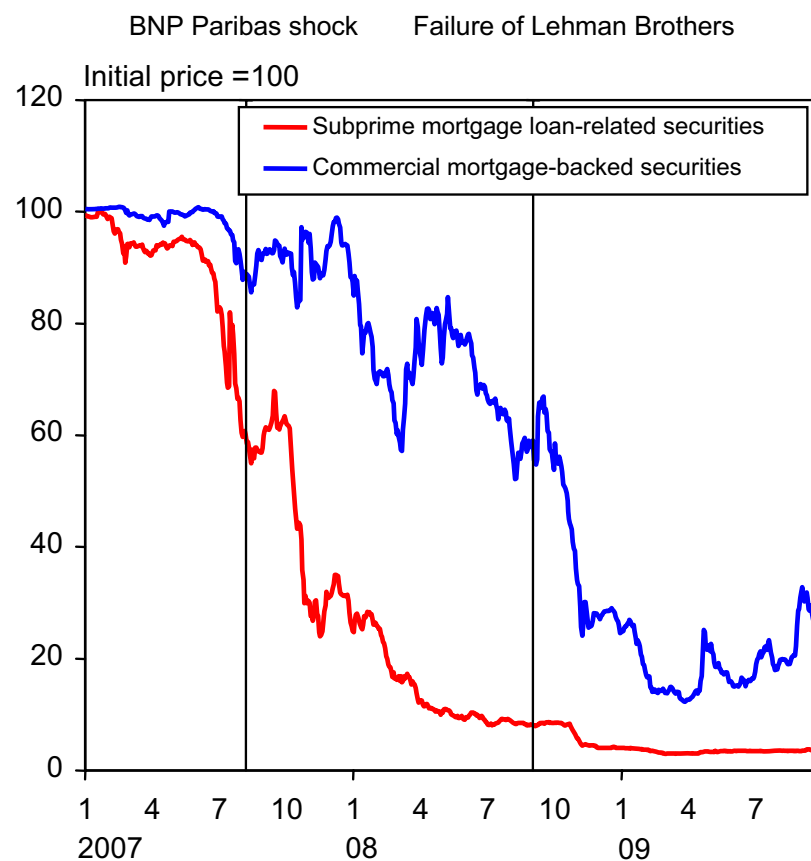
The spread between the average issuance rate of CP (rated a-1) and the short-term government security (3-month) yields.



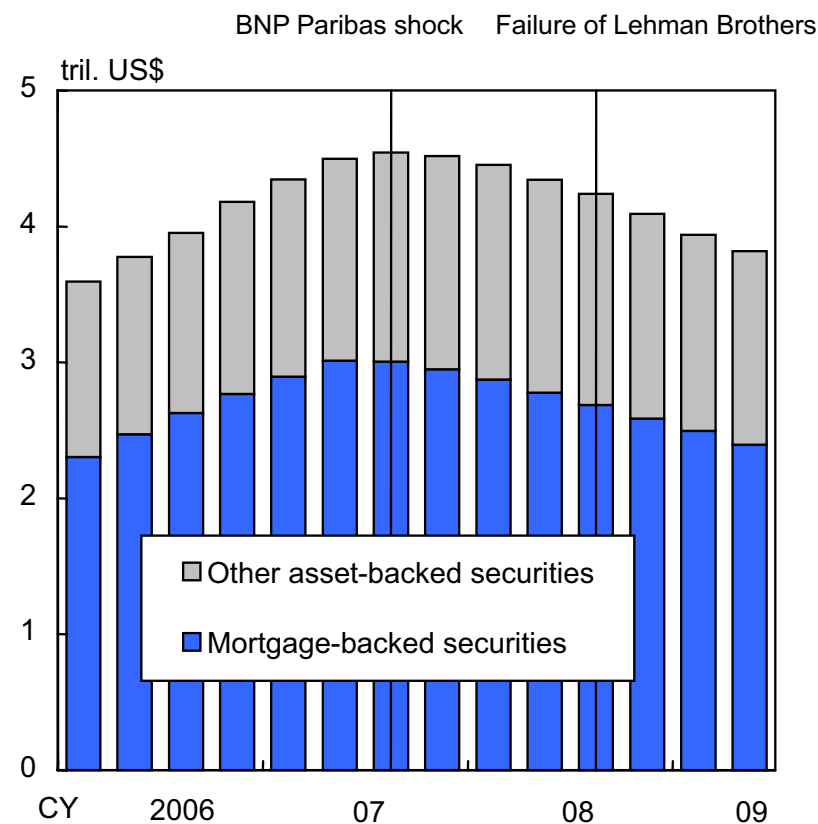
Sources: Bloomberg, Bank of Japan.

# Development of Securitization Markets in the U.S.

Prices of major securitized products (A-rated)



Amount outstanding of private securitized products

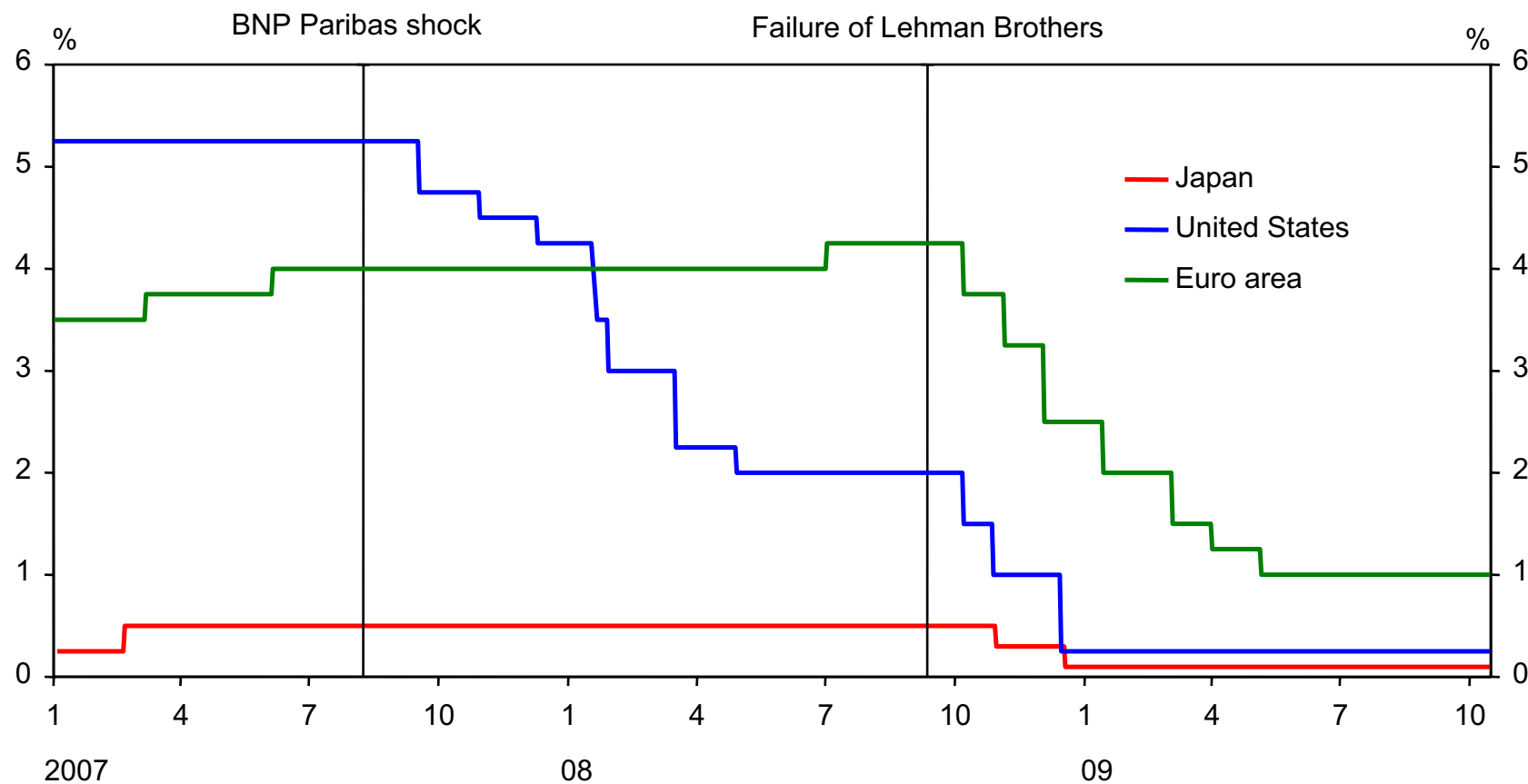


Sources: JP Morgan, FRB.

### III. Measures Taken by the Bank of Japan

- Reductions in the policy interest rate
- Provision of ample liquidity
- Support to malfunctioning capital markets
- Risk reduction measures in the payment and settlement system

# Reductions in the Policy Interest Rate



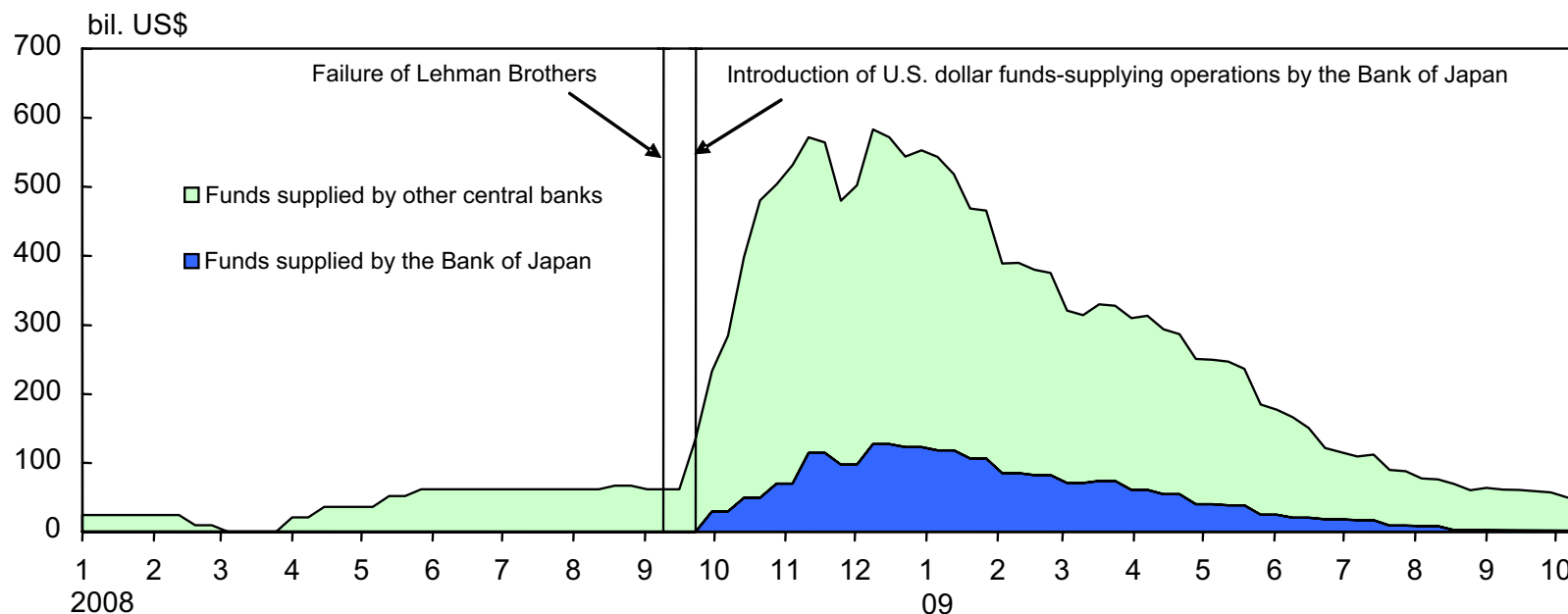
Sources: Central banks.

## Provision of Ample Liquidity (U.S. Dollar Funds-Supplying Operations)

### Outline of U.S. dollar funds-supplying operations against pooled collateral by the Bank of Japan



### Amount outstanding of U.S. dollar funds-supplying operations by major central banks



Sources: Bank of Japan, FRB.

# Collateral Accepted by the Bank of Japan

## (1) Yen-denominated collateral

tril. yen

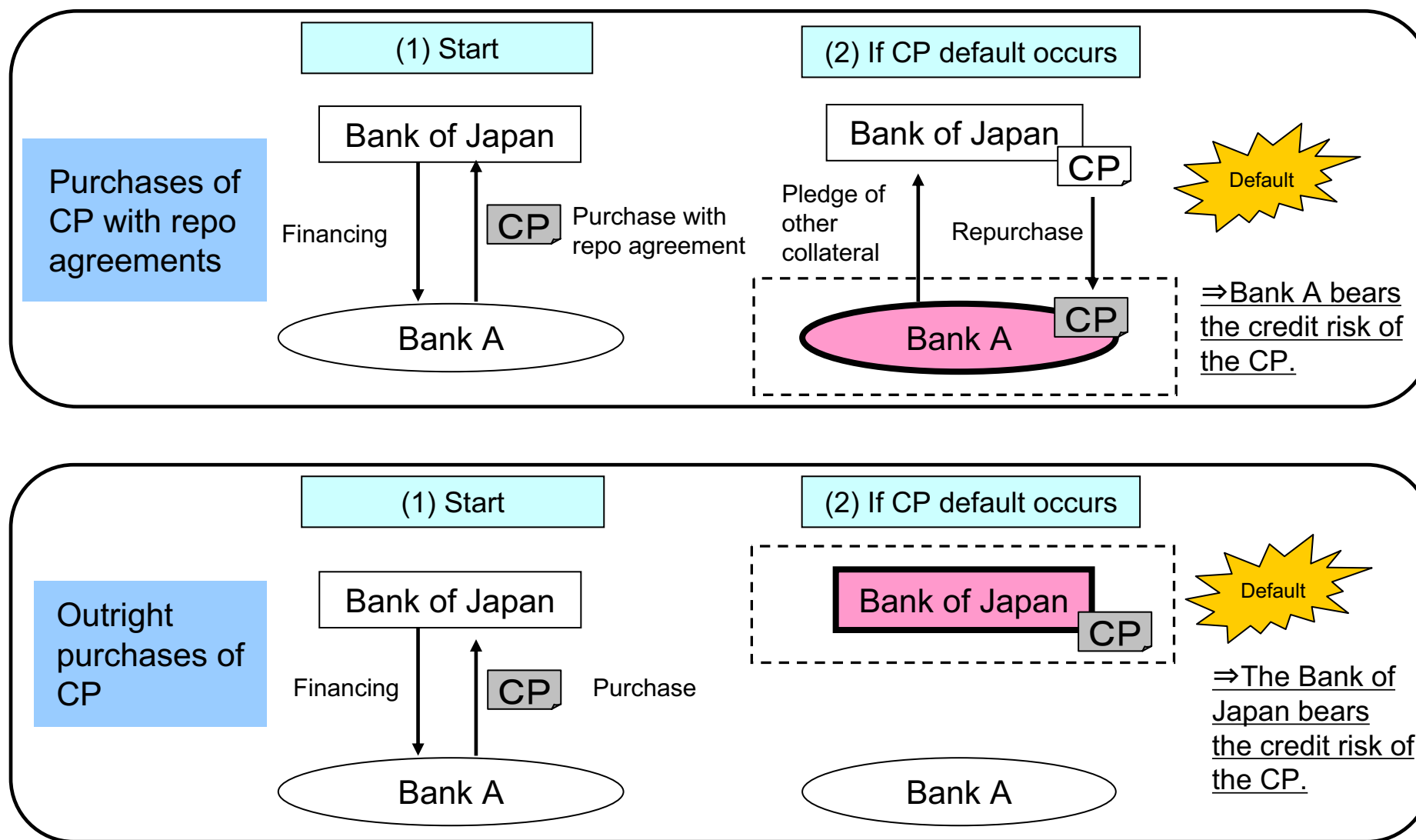
|   | As of September 30,<br>2008 | As of September 30,<br>2009 | Difference |
|---|-----------------------------|-----------------------------|------------|
| Government bonds  | 53.0                        | 67.9                        | +15.0      |
| Municipal bonds, government-guaranteed<br>bonds, Fiscal Investment and Loan Program<br>agency bonds | 5.3                         | 5.8                         | +0.6       |
| Corporate bonds   | 0.7                         | 1.5                         | +0.9       |
| CP  | 2.7                         | 3.0                         | +0.3       |
| Asset-backed securities   | 0.0                         | 0.3                         | +0.3       |
| Bills (excluding CP)  | 0.1                         | 0.7                         | +0.6       |
| Loans on deeds to companies   | 0.4                         | 5.4                         | +5.0       |
| Loans on deeds to the government  | 19.5                        | 20.6                        | +1.1       |
| Total   | 81.7                        | 105.3                       | +23.7      |

## (2) Foreign-denominated collateral

Acceptance of cross-border bonds (i.e., bonds issued by the governments of the United States, the United Kingdom, Germany, and France) as eligible collateral (effective date: July 31, 2009, Bank of Japan Policy Board Decision on May 22, 2009)

Source: Bank of Japan.

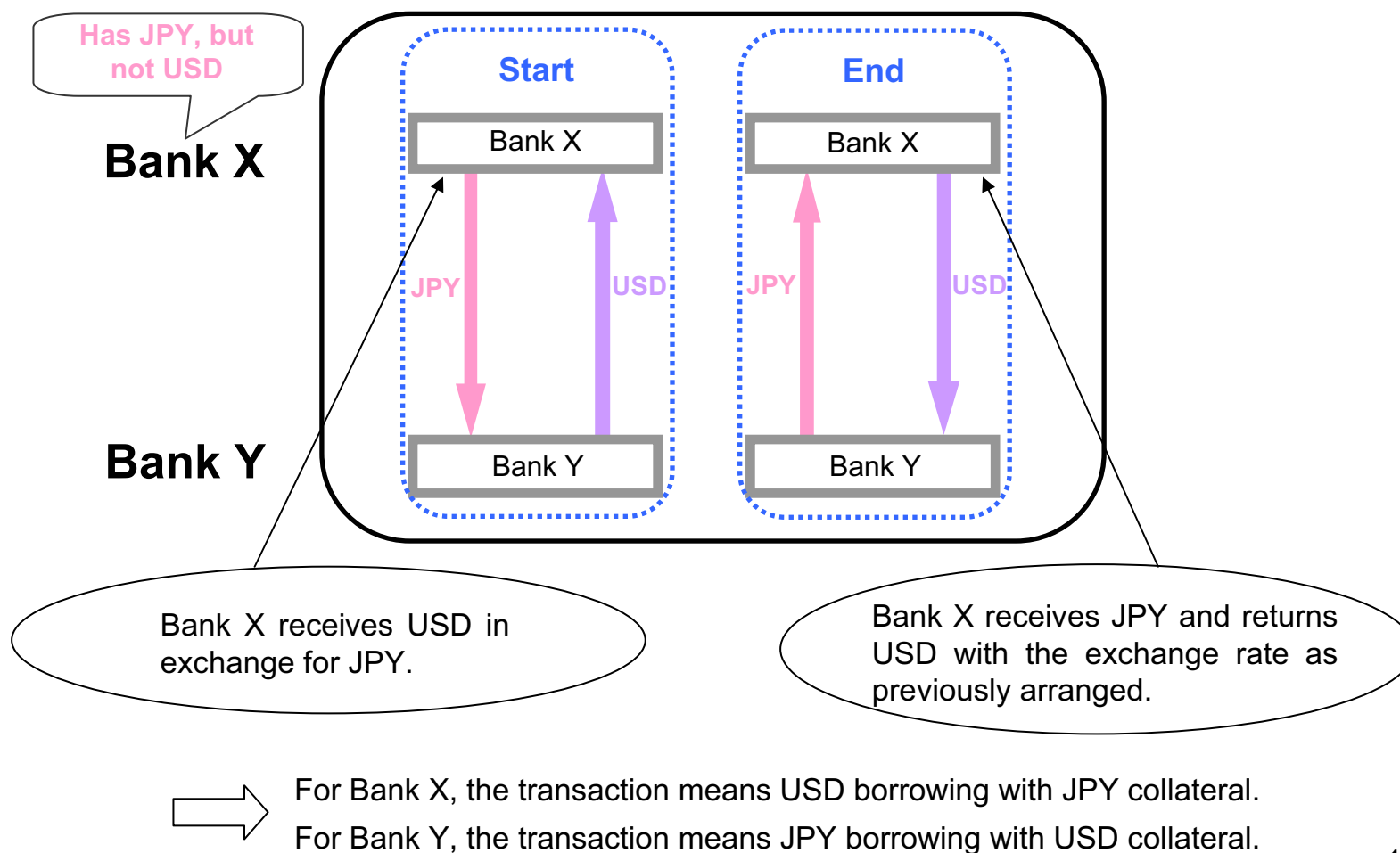
# Scheme of Outright Purchases of CP



Source: Bank of Japan.

# Outline of FX Swap Transaction

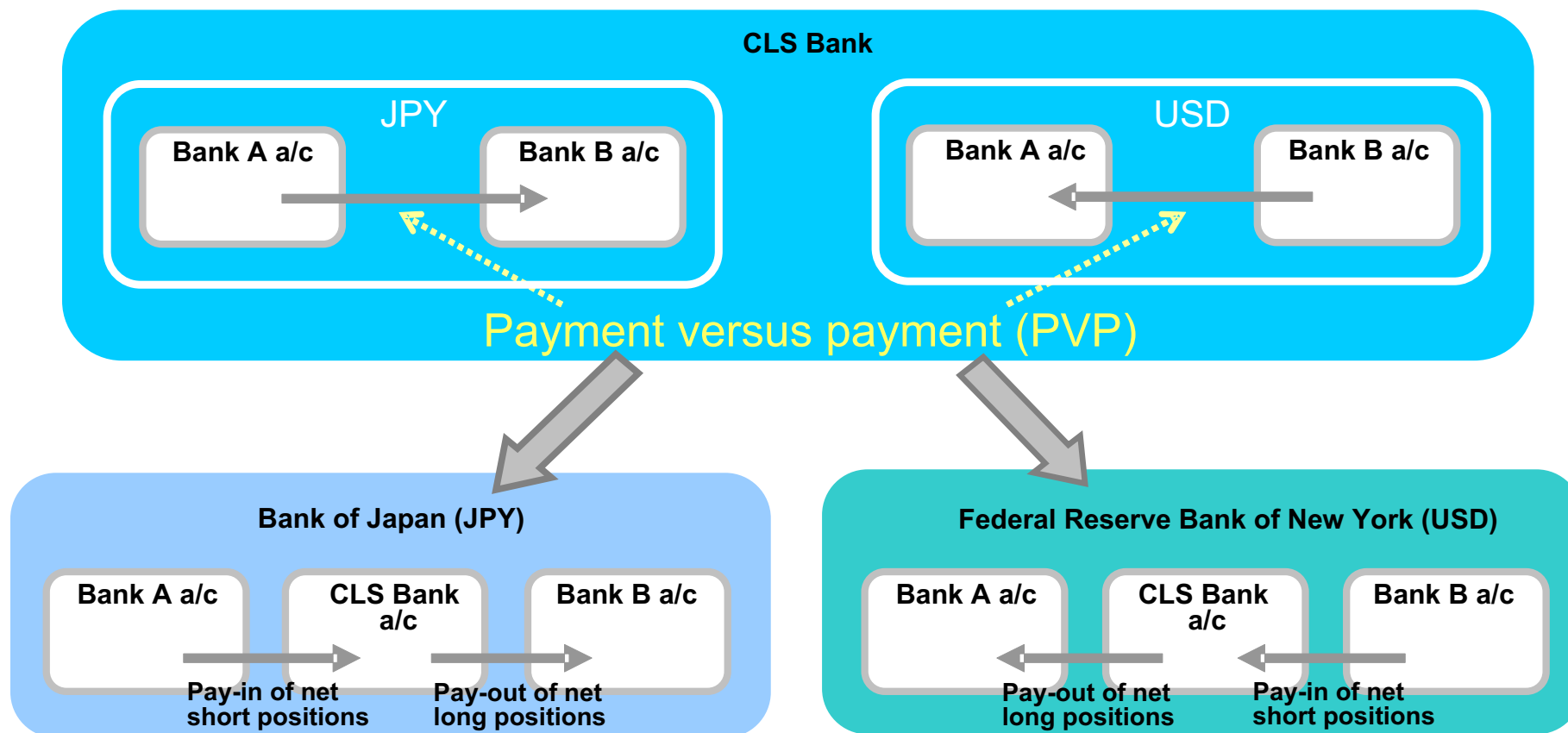
**FX swap transaction:**  
e.g., transaction that exchanges USD and JPY for a specific period





# Outline of CLS (Example of JPY/USD Settlement)

Bank A sells JPY to Bank B in exchange for USD.



After the pay-in of USD from Bank B is confirmed, the pay-out of JPY to Bank B is executed.

After the pay-in of JPY from Bank A is confirmed, the pay-out of USD to Bank A is executed.

Note: CLS means Continuous Linked Settlement.

Source: Bank of Japan.

## IV. The Role of the Central Bank

## Bank of Japan Act (Bank of Japan Notes)

(Issuance of Bank of Japan Notes)

Article 46

- (1) The Bank of Japan shall issue banknotes.
- (2) The banknotes issued by the Bank of Japan (hereinafter referred to as “Bank of Japan notes”) as prescribed in the preceding paragraph shall be legal tender and hence shall be used for payment without limits.

(Reference): Penal Code Chapter 16  
(Crimes of Counterfeiting of Currency)

Article 148

- (1) A person who counterfeits or alters a current coin, bank note or bill for the purpose of uttering shall be punished by imprisonment with work for life or for a definite term of not less than 3 years.
- (2) The same shall apply to a person who utters, or delivers or imports for the purpose of uttering, a counterfeited or altered coin, bank note or bill.

## V. The Role of Law

- Democracy and central bank independence:  
issues from the viewpoint of public law
- Innovation in central banking business:  
issues from the viewpoint of private law
- Financial system stability and international legal  
issues

## Bank of Japan Act (The Principle of Currency and Monetary Control, Autonomy, and Relationship with the Government)

(The Principle of Currency and Monetary Control)

### Article 2

Currency and monetary control by the Bank of Japan shall be aimed at achieving price stability, thereby contributing to the sound development of the national economy.

(Respecting the Autonomy of the Bank of Japan and Ensuring Transparency)

### Article 3

- (1) The Bank of Japan's autonomy regarding currency and monetary control shall be respected.
- (2) The Bank of Japan shall endeavor to clarify to the citizen the content of its decisions, as well as its decision-making process, regarding currency and monetary control.

(Relationship with the Government)

### Article 4

The Bank of Japan shall, taking into account the fact that currency and monetary control is a component of overall economic policy, always maintain close contact with the government and exchange views sufficiently, so that its currency and monetary control and the basic stance of the government's economic policy shall be mutually compatible.

# Outline of Outright Purchases of CP

## 1. CP to be purchased

- CP and asset-backed CP (ABCP) that are eligible as the Bank's collateral, a-1 rated, issued before or on the auction date and with the residual maturity of up to 3 months.

## 2. Amount to be purchased

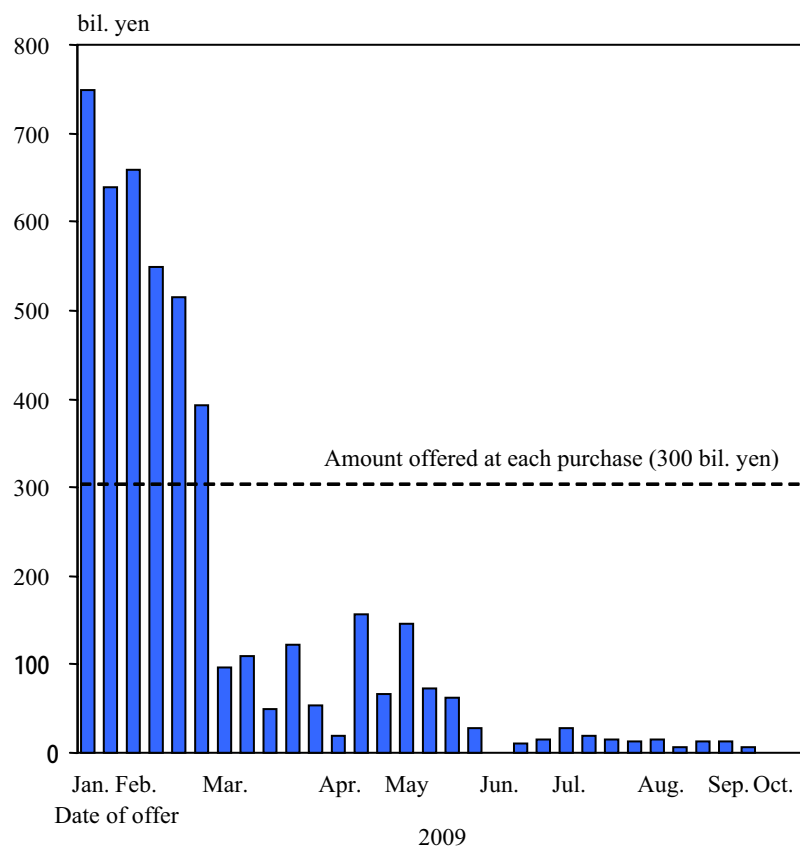
- The outstanding amount of CP (including ABCP) purchased by the Bank shall not exceed 3 trillion yen.
- The outstanding amount of a single issuer's CP (including ABCP) purchased by the Bank shall not exceed 100 billion yen. In addition, if the outstanding amount of a single issuer's CP purchased by the Bank exceeds 25 percent of the "upper limit" (the highest end-of-the-month figure for the CP issued by an issuer between July 2008 and December 2008), the CP would be excluded from the eligible list of CP until the outstanding amount of the issuer's CP purchased by the Bank falls below the upper limit through redemptions.

## 3. Method of auctions

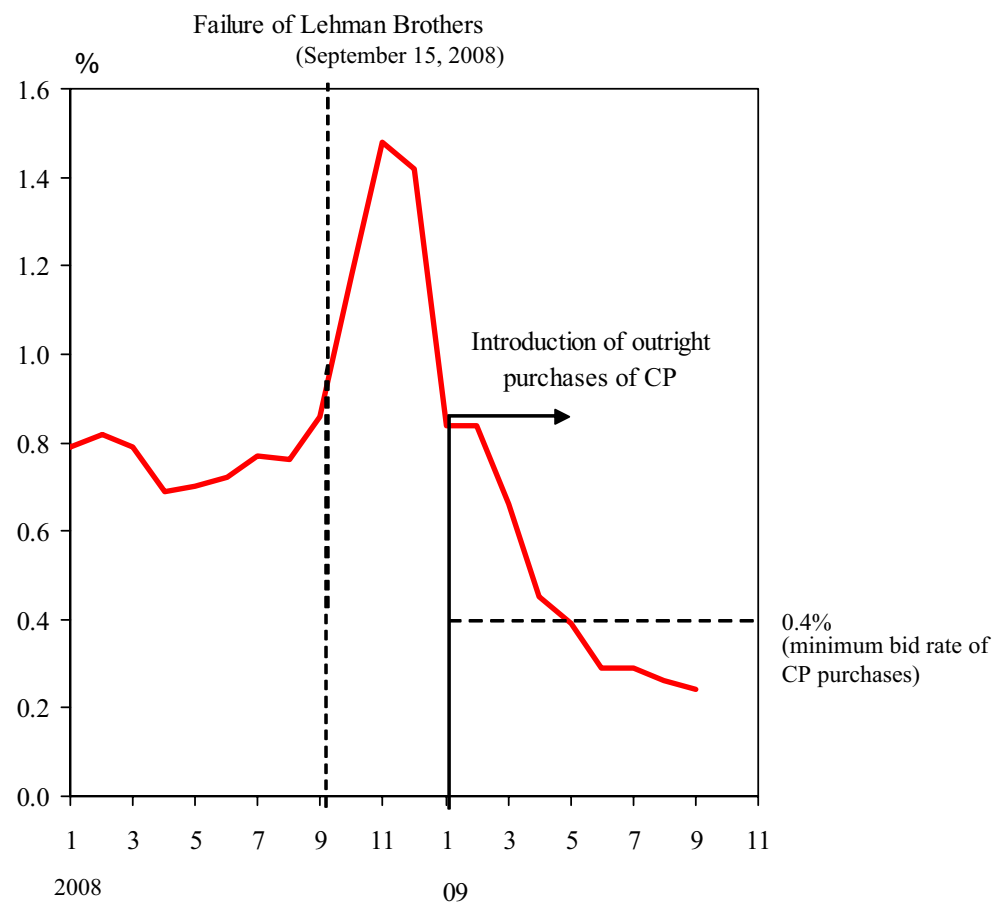
- A multiple-price competitive auction in which a minimum yield equally applied to CP and ABCP is set according to their residual maturity as below and counterparties bid the non-negative yield spread from the minimum yield.
  - (A residual maturity of up to 1 month) The targeted uncollateralized overnight call rate (0.1 percent, currently) plus 20 bps
  - (A residual maturity of more than 1 month and up to 3 months) The target uncollateralized overnight call rate plus 30 bps
  - The minimum bid rate is set to be more favorable than the market interest rates when the market is malfunctioning, but not more favorable than the market interest rates of normal times. With this setting, bids will naturally decrease in number as the market function recovers.

# Issuance Rates on CP and Amounts of Competitive Bids for CP Purchases

Amounts of competitive bids for CP purchases



Issuance rates on CP  
(3-month CP with ratings A-1 or higher)



Source: Bank of Japan.

# Experience of the Failure of Lehman Brothers

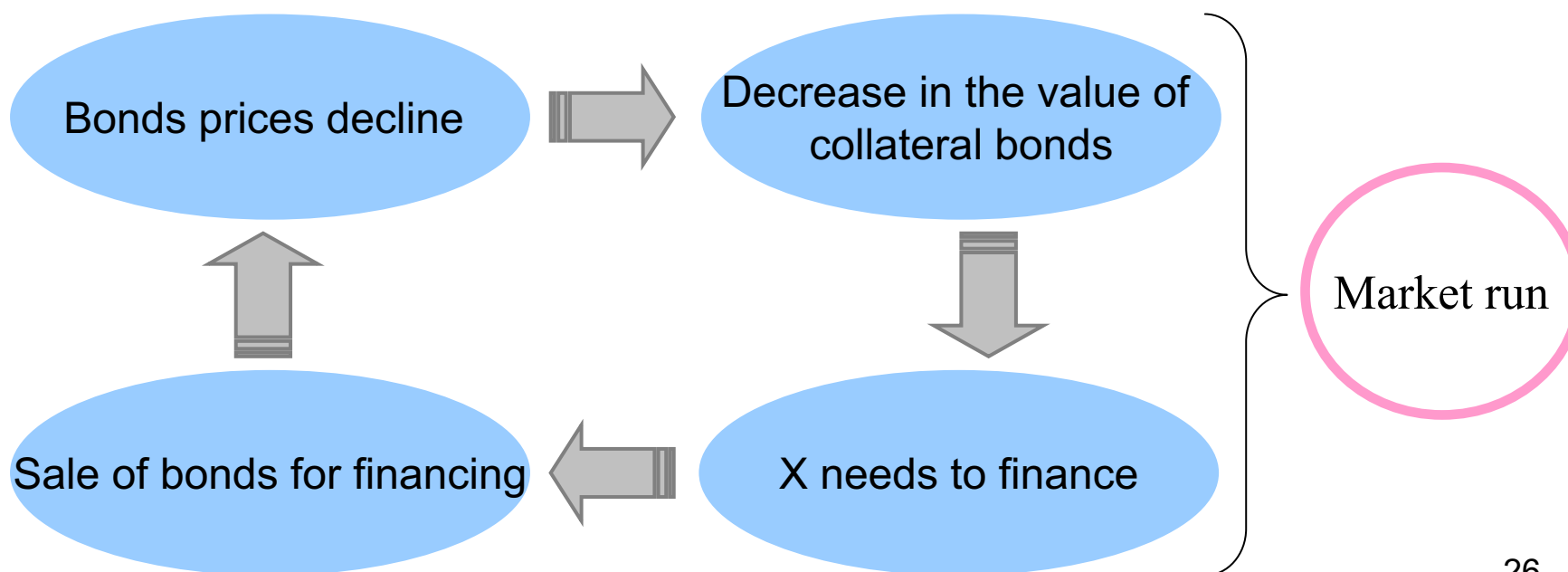
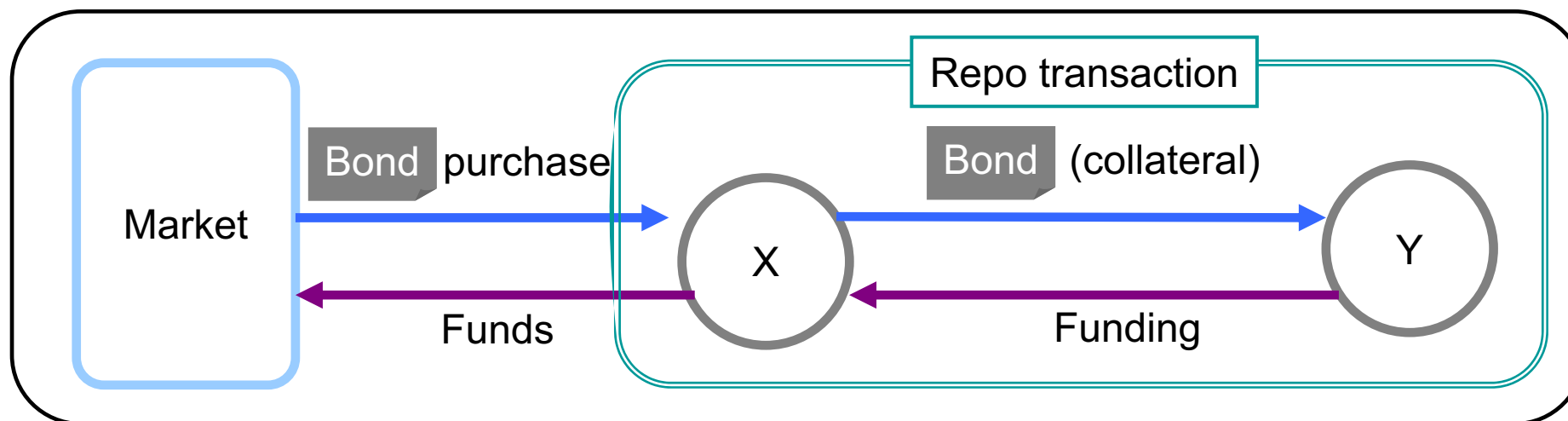
| (Japan time)   | Measures taken in other countries  | Measures taken in Japan   |
|--|--|---|
| September 15<br>(National holiday)<br>About noon<br><br>About 3:00 p.m.<br><br>About 9:00 p.m. | <ul style="list-style-type: none"> <li>The holding company in the U.S. and a subsidiary in the UK went insolvent (filed petitions for protection under Chapter 11 of the U.S. Bankruptcy Code and administration under the UK Insolvency Act).</li> </ul> <p>Suspended the business activities of Lehman in order to prevent market participants from entering into new transactions that would further complicate the claims and debts among the parties.</p> | <p>Worked in close coordination with the overseas authorities and central banks.</p> <ul style="list-style-type: none"> <li>The FSA issued to Lehman Brothers Japan Inc. (hereinafter referred to as "Lehman JP") the order of retention of assets within Japan and business improvement order.</li> <li>The FSA issued to Lehman JP the business suspension order.               <ul style="list-style-type: none"> <li>---- excluding transactions for return of deposited client assets and those for settlement of unsettled contracts including buying/selling of securities.</li> </ul> </li> </ul> |
| September 16<br>Early morning  | <p>Avoided "intraday insolvency."</p> <p>Part of the existing transactions were allowed to be settled as an exception to the restraining order.</p>  | <ul style="list-style-type: none"> <li>Lehman JP filed for commencement of civil rehabilitation procedure and a temporary restraining order.</li> <li>The Tokyo District Court issued a temporary restraining order.               <ul style="list-style-type: none"> <li>---- excluding transactions for return of deposited client assets and those for settlement of unsettled contracts including buying/selling of securities.</li> </ul> </li> </ul> <p>→ The Bank of Japan continued current account transactions and other existing transactions with Lehman JP.</p>                              |
| September 19   |  | <ul style="list-style-type: none"> <li>The Tokyo District Court made an order of commencement of civil rehabilitation procedure.</li> </ul>   |



## VI. Professional Life at the Central Bank

- Raison d'être of public service
- Importance of broad knowledge
- Importance of business operations
- Significance of working in an organization
- Importance of a flexible approach to cope with changes

## Repo Transactions and a “Market Run”



## VII. Concluding Remarks