

The Heads and Tails of Money Creation, its System Design Failures and the Alternative Design of Public Money

12th Annual AMI Monetary Reform Conference

Skype Presentation

by

**Dr. Kaoru Yamaguchi, Director
Japan Futures Research Center**

**9:00 AM (11:00PM Japan Time)
Sept. 30, Friday 2016**

The Heads and Tails of Money Creation and its System Design Failures - Toward the Alternative System Design -

The 34th Int'l Conf.
of the System Dynamics Society
Delft, The Netherlands
July 18, Monday 2016

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Yokei Yamaguchi

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**We are now living
under
the Debt Money System!**

The Gist of our Paper

1. Heads and Tails of Money (Deposit) Creation

- Banks are intermediaries of money (Heads)
- Banks create deposits out of nothing (Tails)
- Two theories are the heads and tails of the same coin

2. System Design Failure of Debt Money

- Debt money system is an unstable monetary system causing booms and busts

3. Alternative System Design of Public Money

- Monetary stability
- Liquidation of government debt

1. Heads and Tails of Deposit Creation



Head

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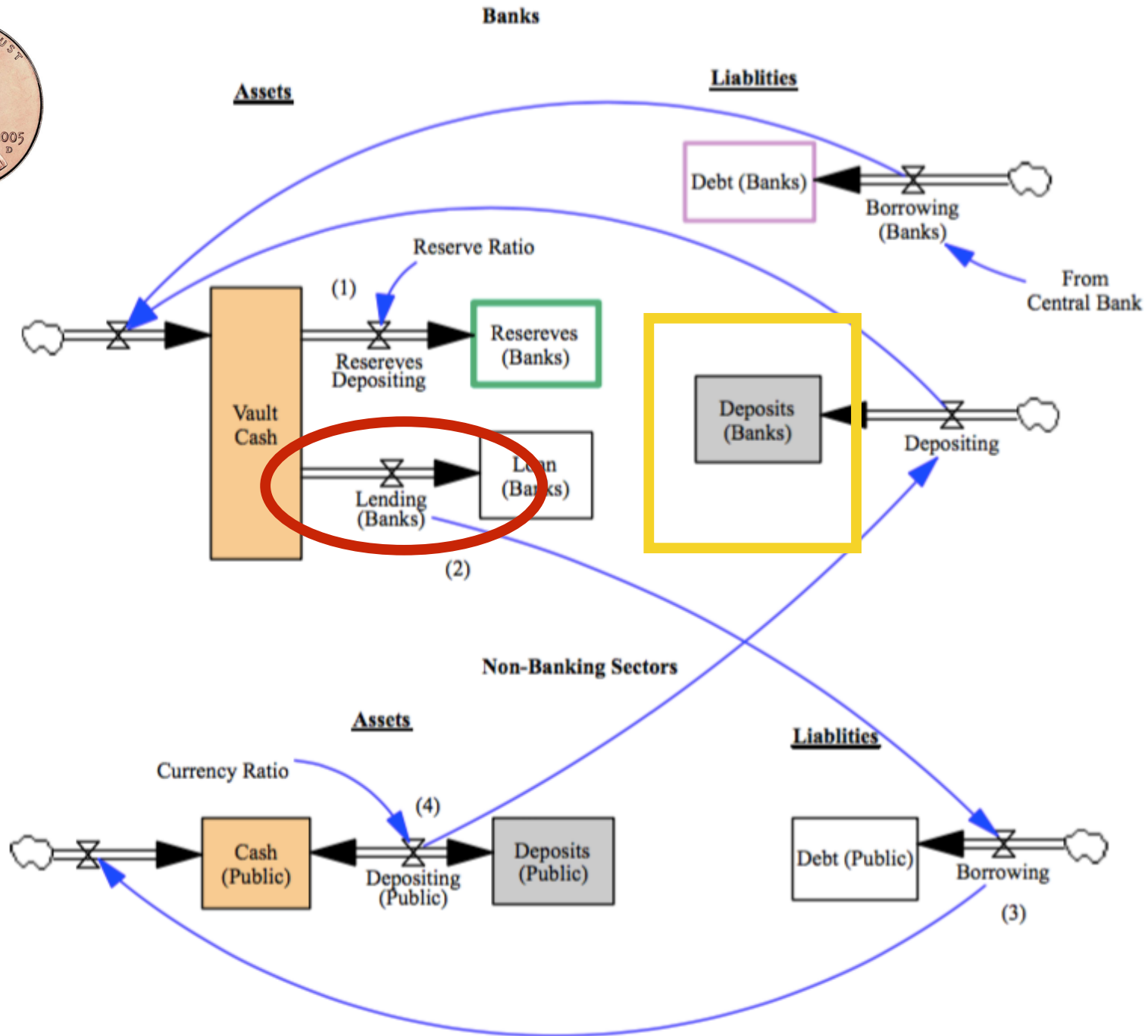


Tail



Heads: Banks as intermediaries of money

Hayek (1929); Keynes(1936); **Samuelson** (1948); Gurley and Show (1955); **Tobin** (1963, 1969); Sealey and lindley (1977); Balernsperger (1980); Mises(1980); Diamond and Dybvin (1983); Diamond (1984, 1991, 1997); Bernanke and Blinder(1988); Eatwell, Milgate and Newman (1989); Gorton and Pennacchi (1990); Bencivenga and Smith (1991); Bernanke and Gertler (1995); **Stiglitz**(1997); Rajan (1998); Myers and Rajan (1998); Allen and Gale (2004); Allen an Santomero (2001); Diamond and Rajan (2001); Kashyap, Rajan and Stein (2002); Matthews and Thompson (2005); Casu and Girardone (2006); Dewatripont et al. (2010); Gertler and Kiyotaki (2011); Stein (2014); Carney(2014), **Krugman** (2015).





Tails: Banks create deposits

Macleod(1856); Wicksell (1989); Withers(1909, 1916);

Schumpeter (1912); Cassel (1918); Hahn (1920) Hawtrey (1919);

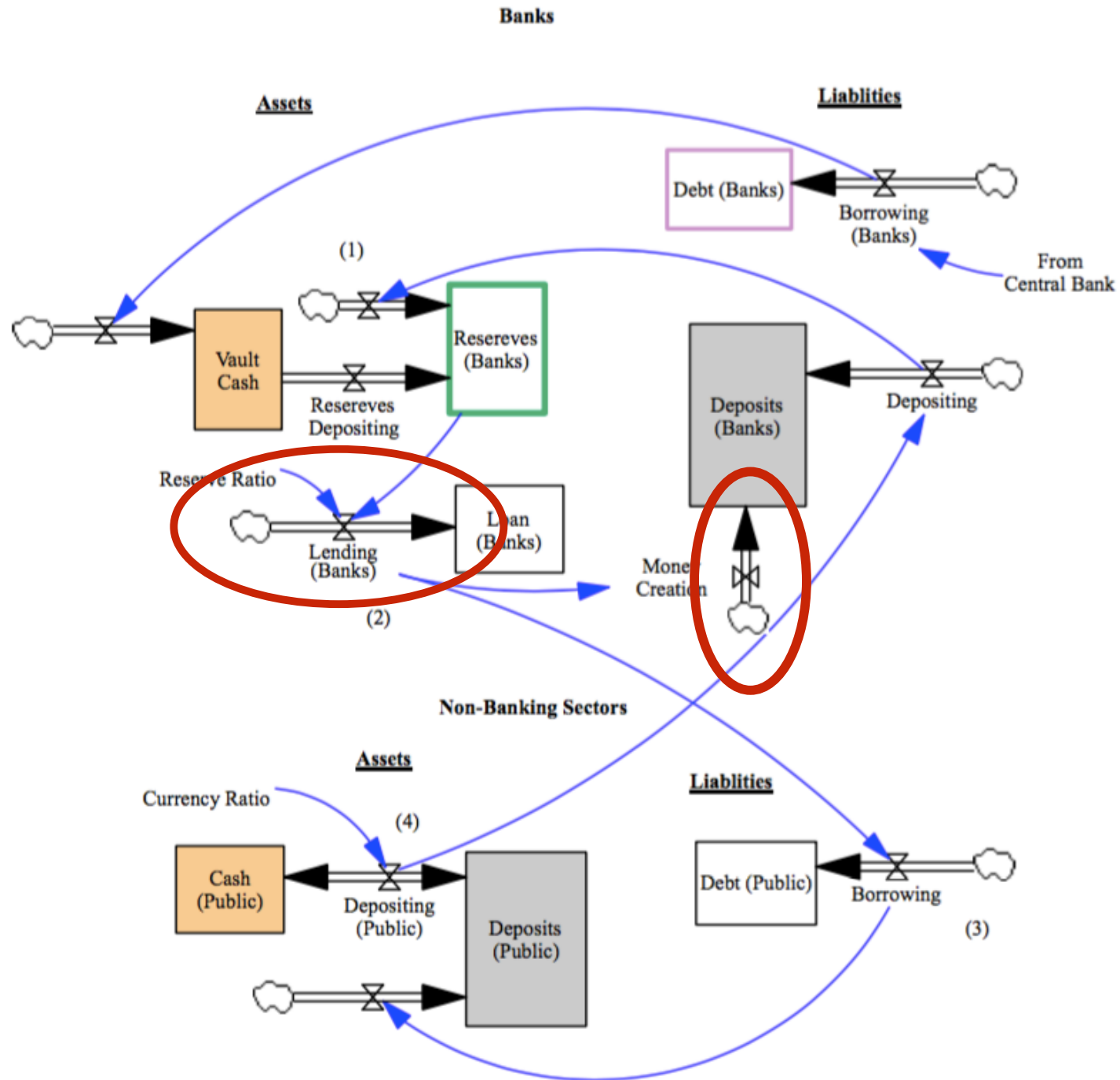
Howe(1915); Gustav Cassel(1923); Macmillan Committee(1931);

Fisher(1935,1939);

.

Rochon and Rossi(2003); Werner(2005); **Bank of England** (2014);

Jakob and Kumhof (2015)



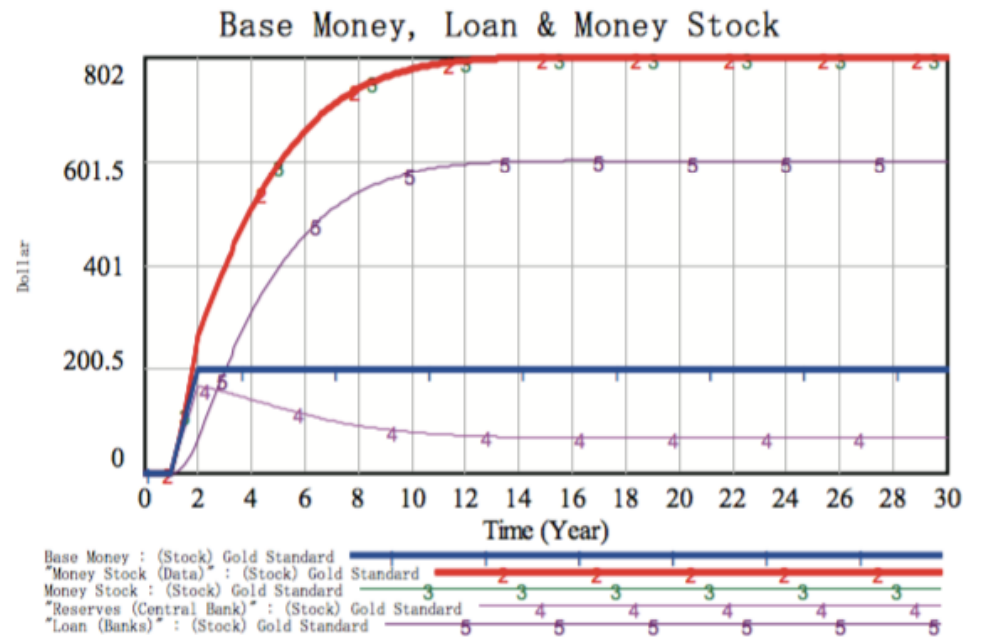
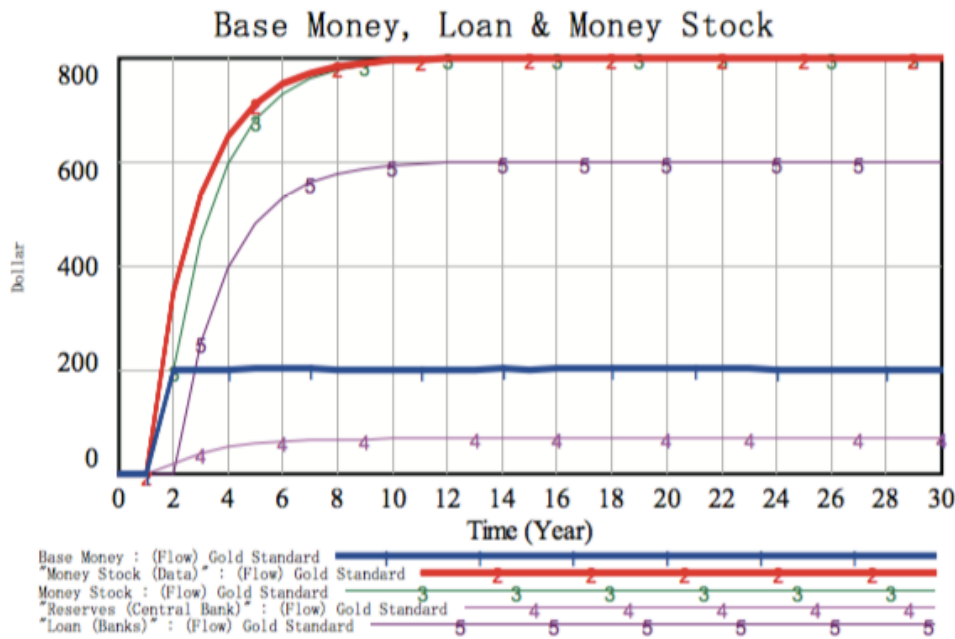


Banks are intermediaries of money

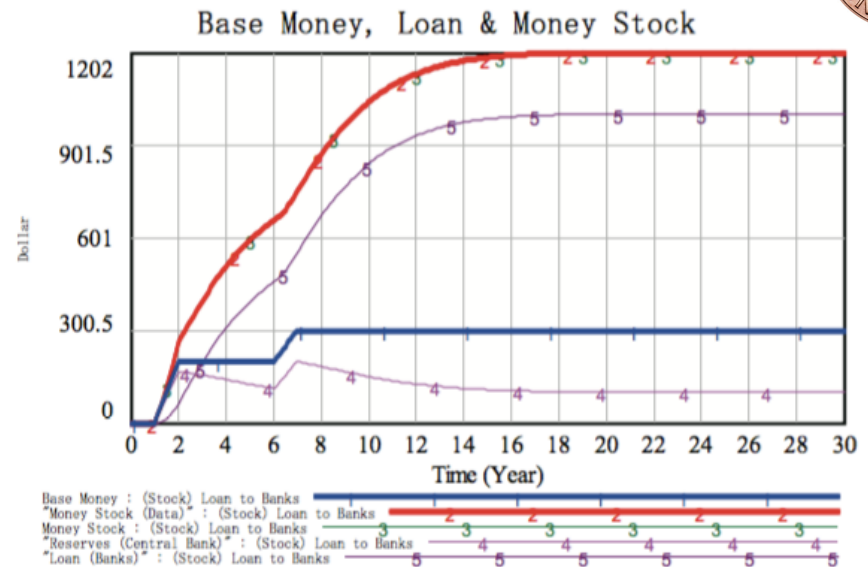
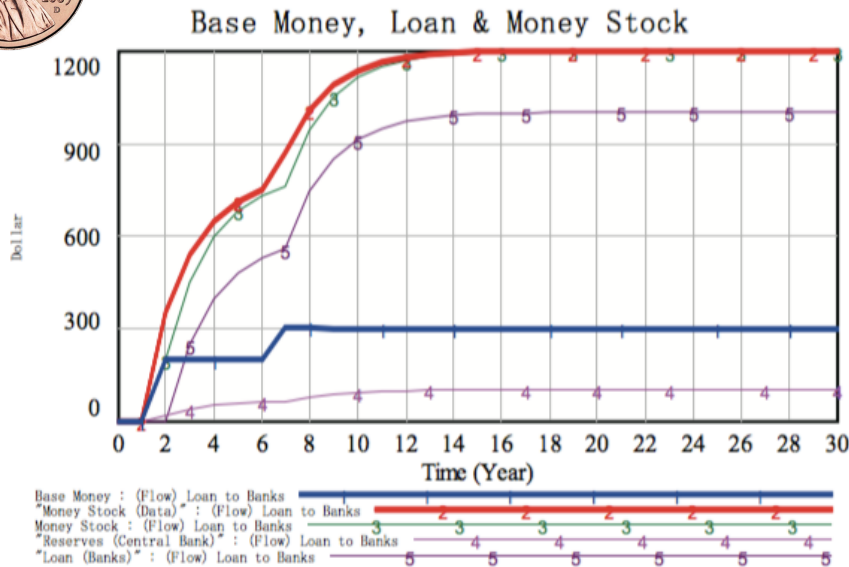
Yamaguchi (2004) : Money Supply and Creation of Deposits –
SD Macroeconomic Modeling, 22nd SD Proceedings, Oxford,
U.K. 2004

Identical Behaviors of Heads and Tails

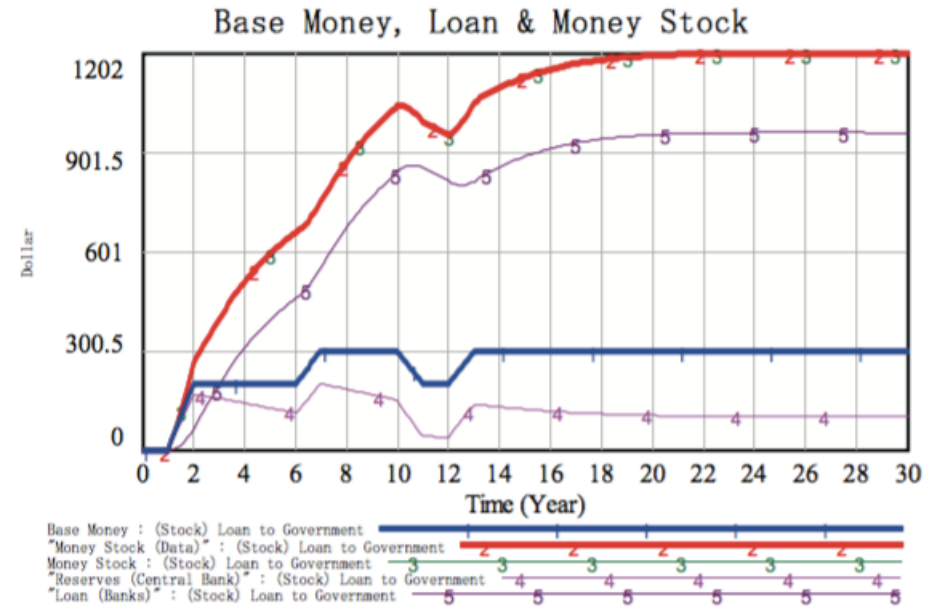
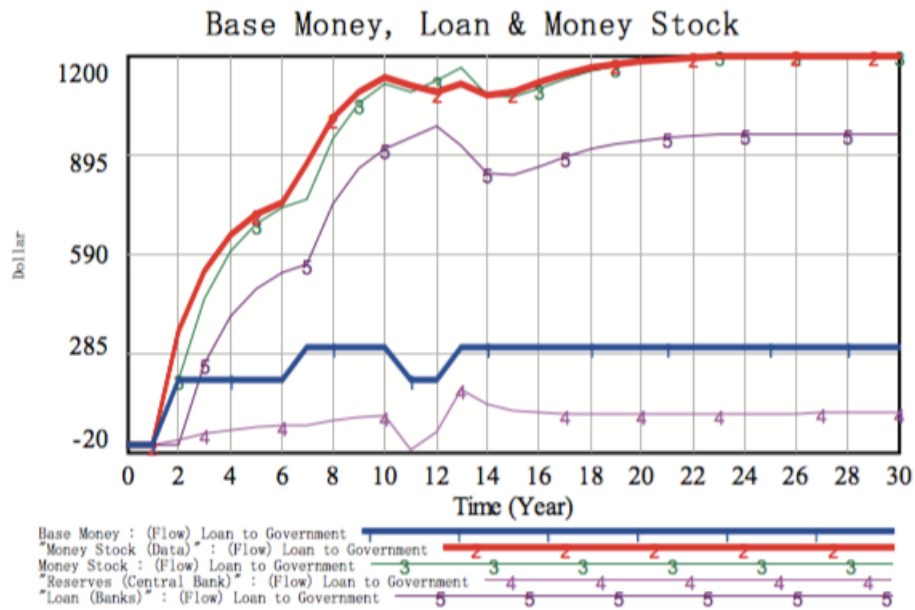




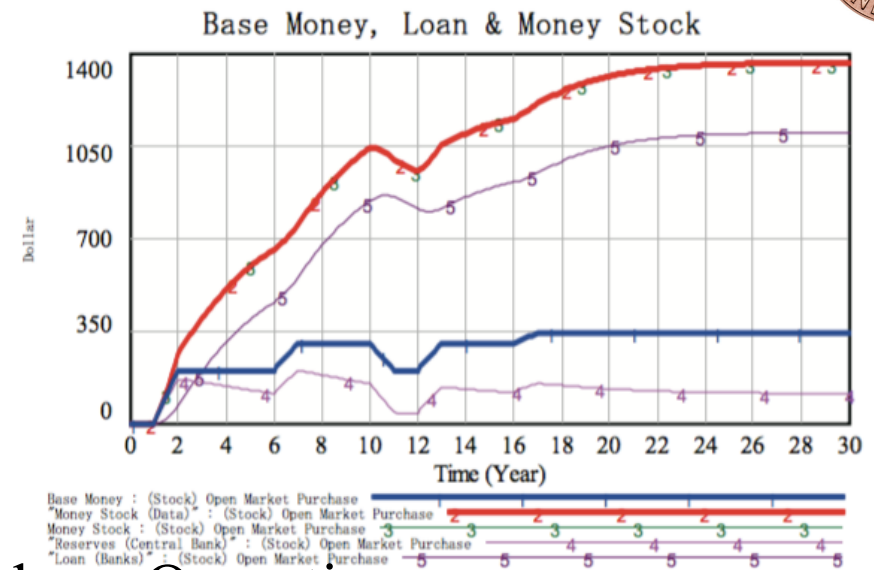
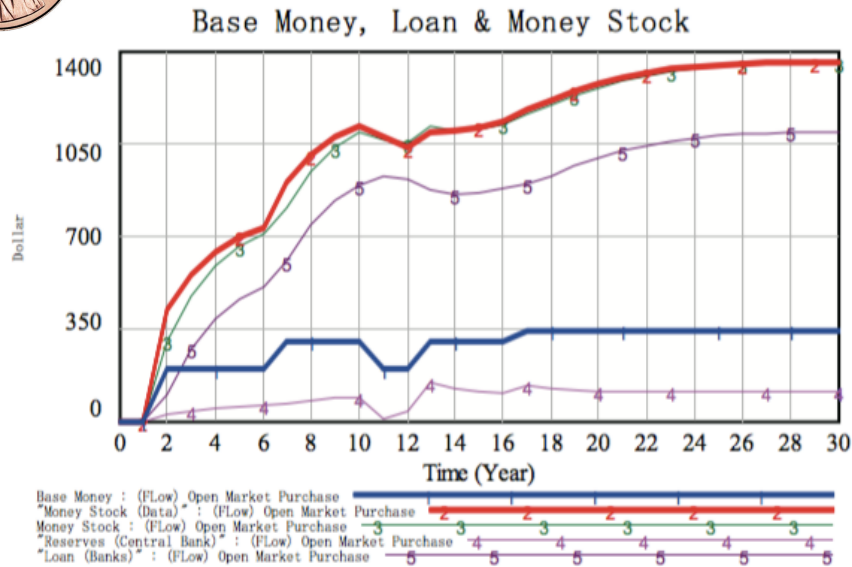
Gold Standard



Discount Loans to Commercial Banks



Government Sector issues Bonds



Open Market Purchase Operation (Asset Purchase Program)

2. System Design Failure of Debt Money

Instability of Money Stock

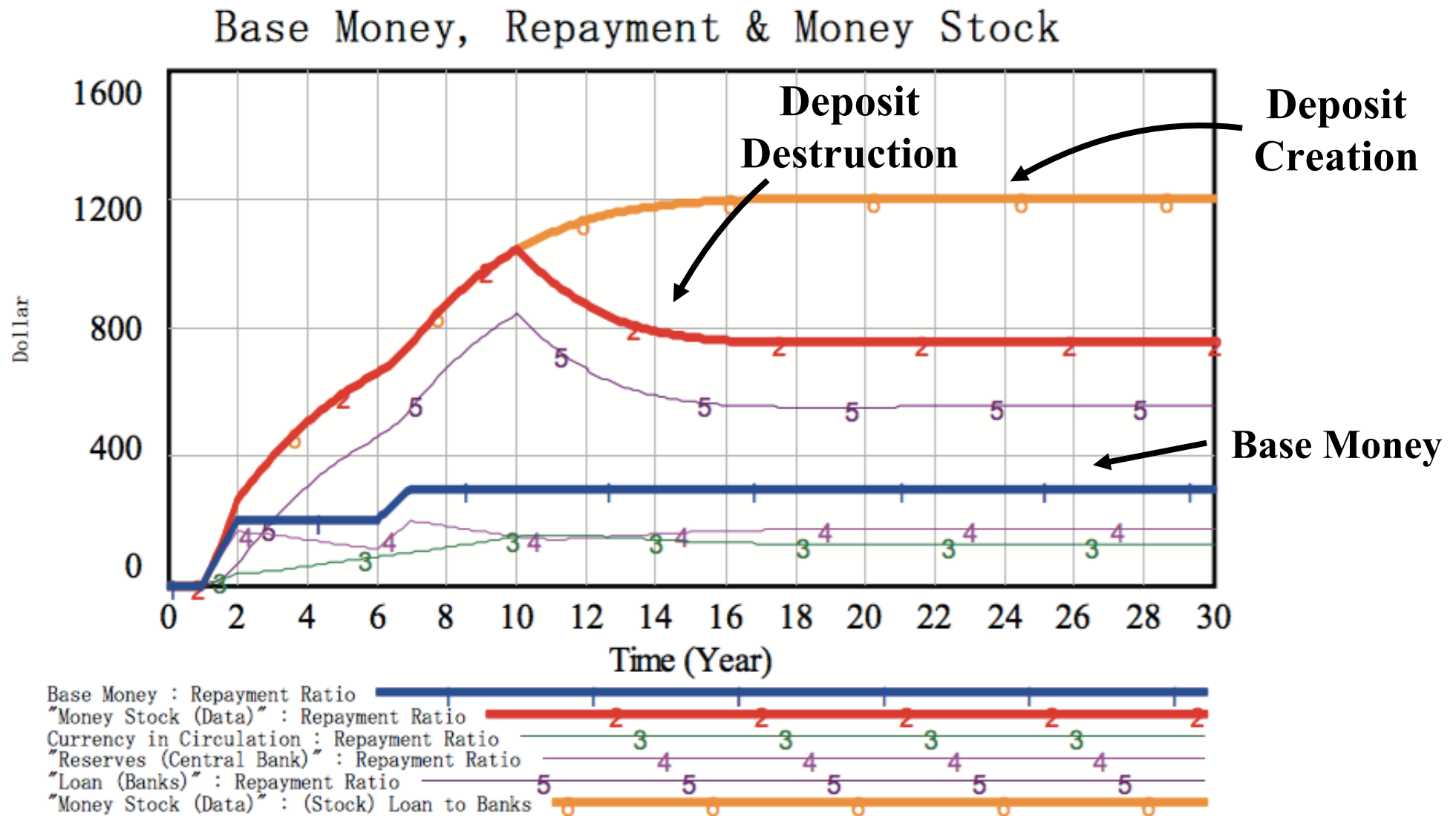


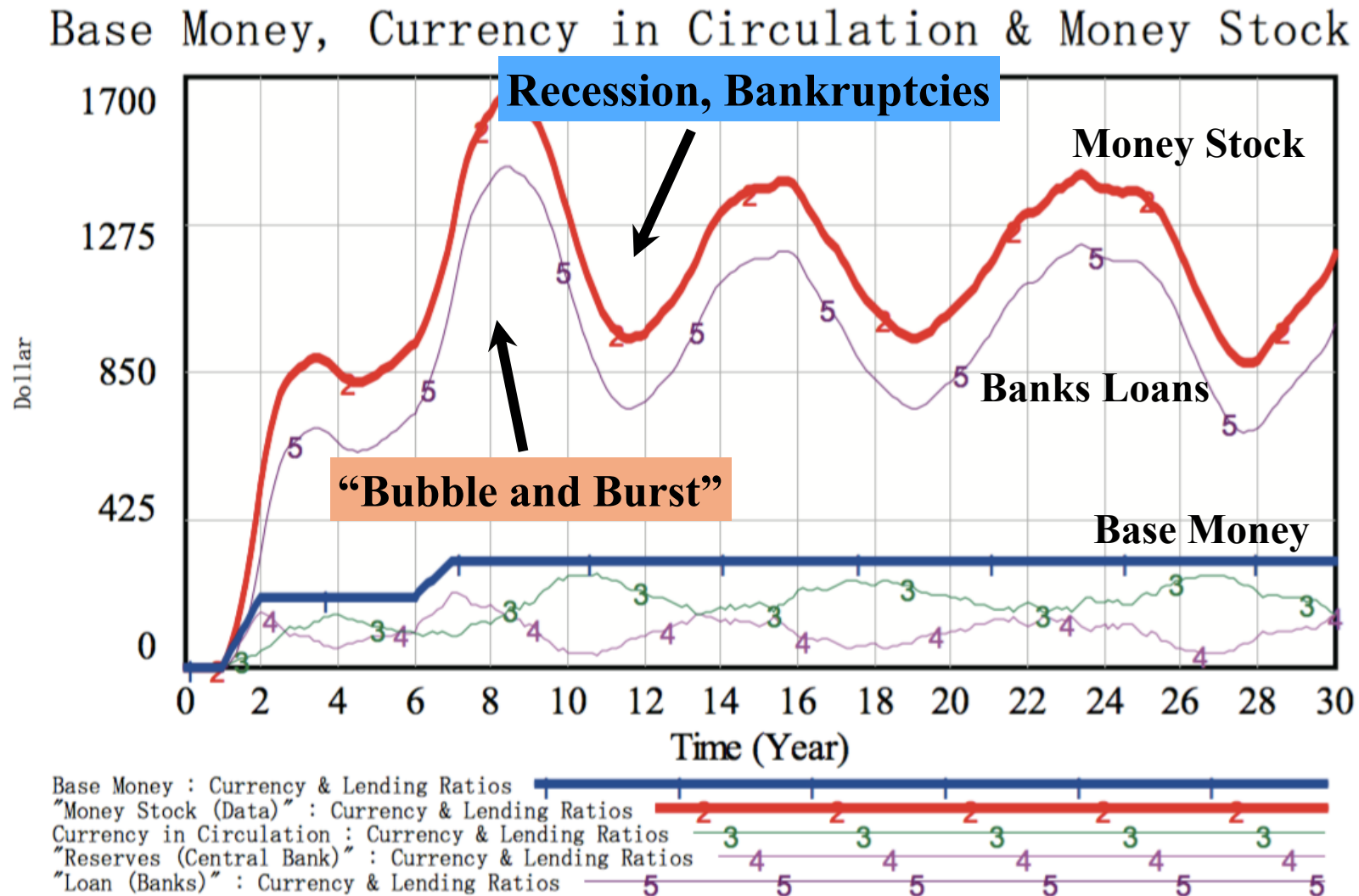
Figure 20: Destruction of Functional-Money by Repayments

Liquidity preference

Bank's capricious lending behavior



Destructive Fluctuations



Monetary Instability: Great Depression

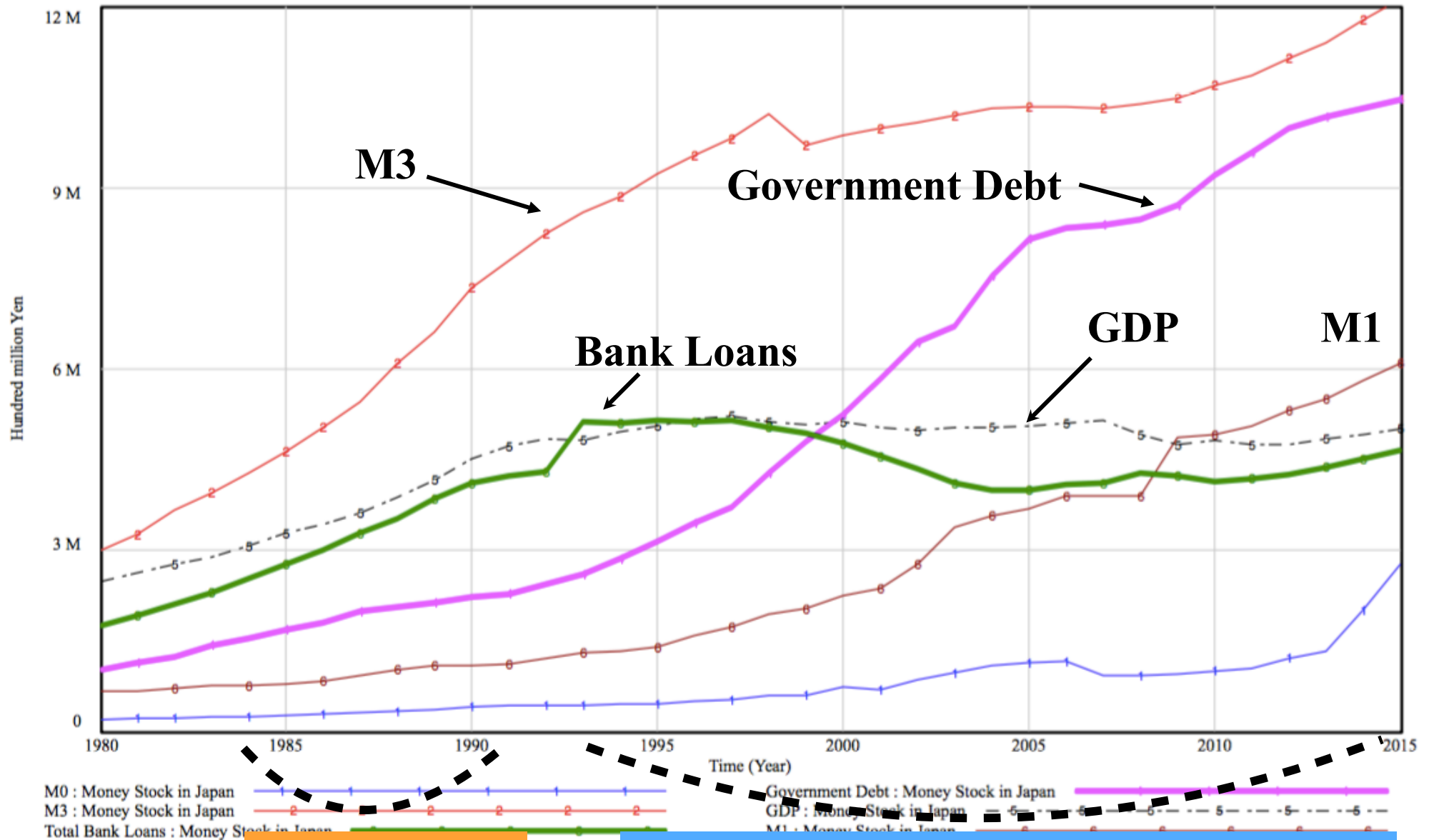
“This loss, or destruction, of 8 billions of check-book money has been realized by few and seldom mentioned. There would have been big newspaper headlines if 8 thousand miles out of every 23 thousand miles of railway had been destroyed. Yet such a disaster would have been a small one compared with the **destruction of 8 billions out of 23 billions of our main monetary highway**. That destruction of 8 billion dollars of what the public counted on as their money was the chief sinister fact in the depression from which followed the two chief tragedies, unemployment and bankruptcies. “ (pp. 6 - 7)*

*destruction of demand deposits between 1929-1933

Irving Fisher. *100% Money*. The City Printing Company, New Haven, third edition, 1945.
First edition (1935) available through ThaiSunset Publications, 2011

Monetary Instability: The case of Japan

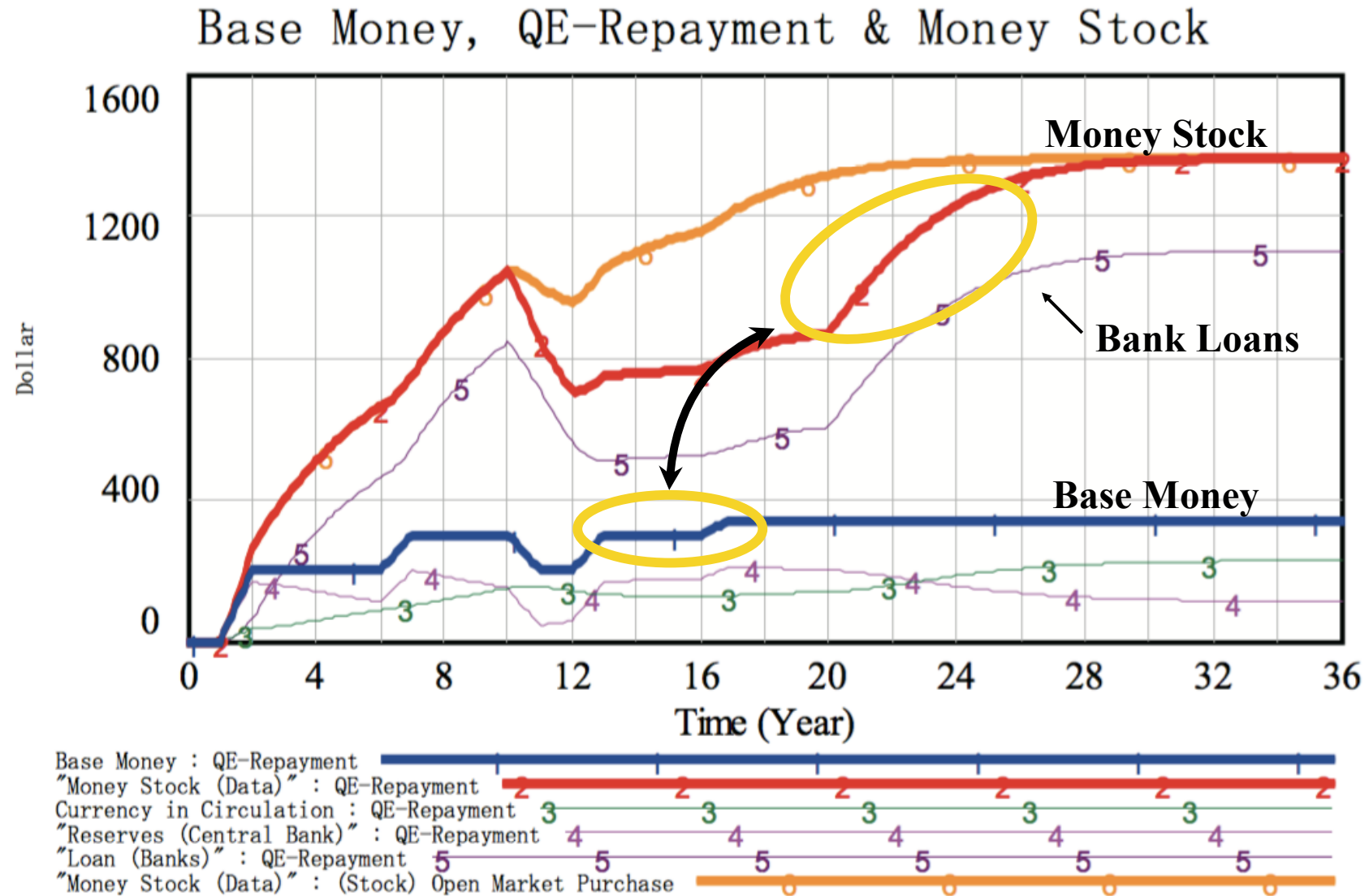
Bubbles-Bursts and QE Policies in Japan



Boom & Bust

Bankruptcies, Recession, Unemployment

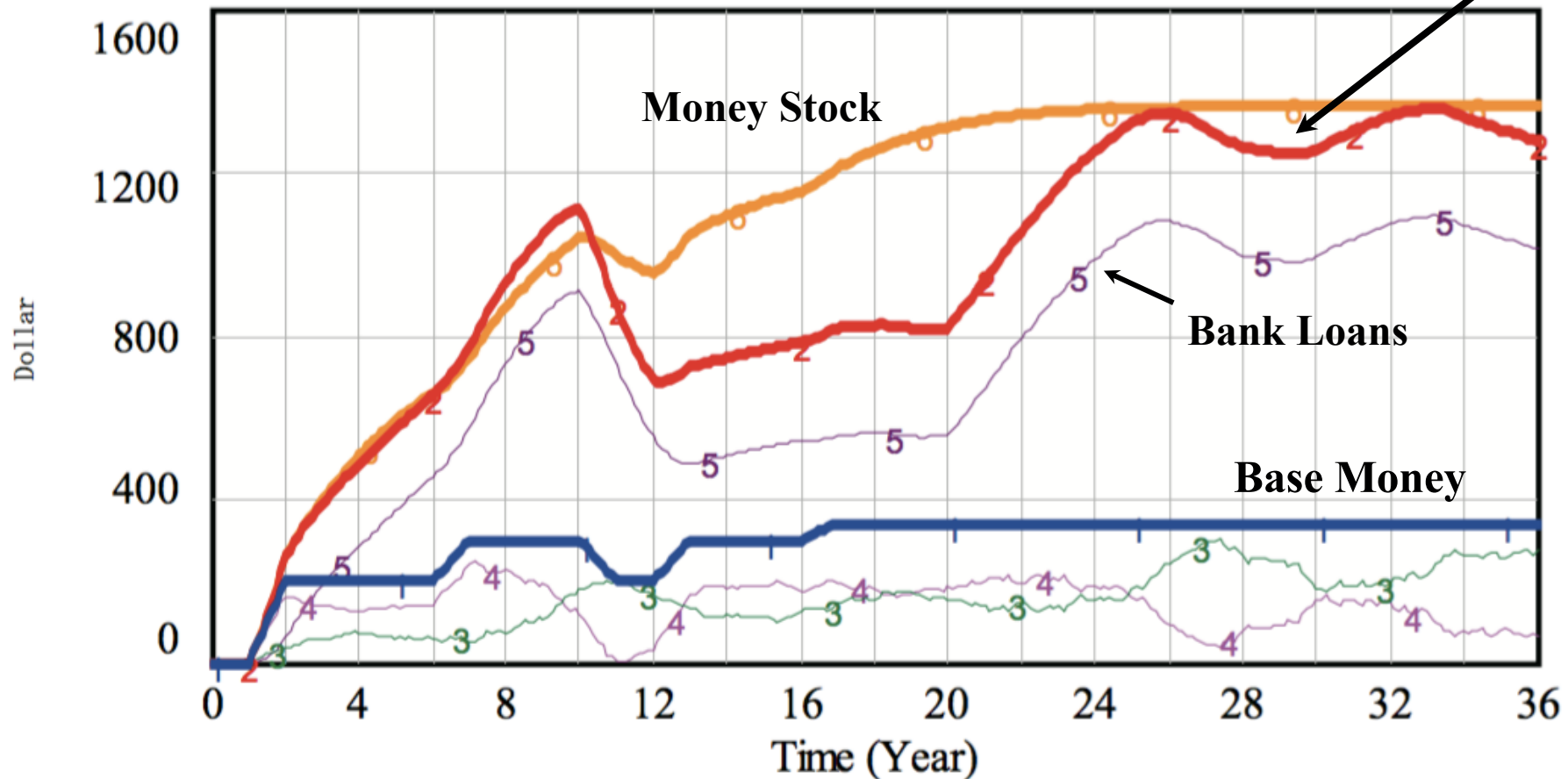
Anticipated Behavior of Quantitative Easing Policy



Even if QE succeeds

Instability !

Base Money, QE-Repayment & Money Stock



Base Money : QE-Repayment & Currency Ratio

"Money Stock (Data)" : QE-Repayment & Currency Ratio

Currency in Circulation : QE-Repayment & Currency Ratio

"Reserves (Central Bank)" : QE-Repayment & Currency Ratio

"Loan (Banks)" : QE-Repayment & Currency Ratio

"Money Stock (Data)" : (Stock) Open Market Purchase

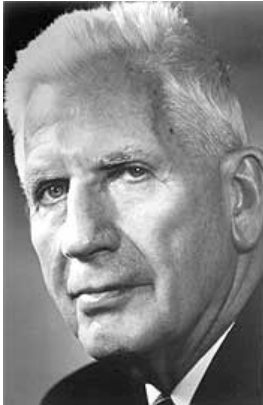
3. The Alternative System Design of Public Money

A PROGRAM FOR MONETARY REFORM

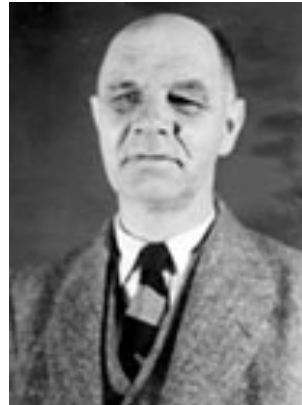
A mimeograph circulated in July **1939**

“A PROGRAM FOR MONETARY REFORM”

6 principal authors

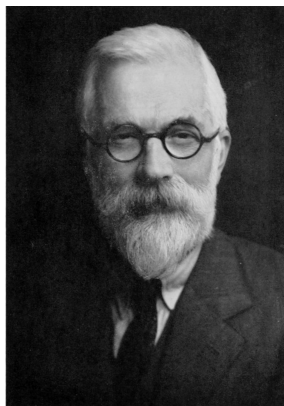


Paul H. Douglas
(1892-1976)



Frank D. Graham
(1875-1965)

Willford I. King
(1880-1962)



Irving Fisher
(1867-1947)



Earl J. Hamilton
(1899-1989)



Willford I. King
(1900-????)

A Monetary Reform: Chicago Plan → American Monetary (NEED) Act

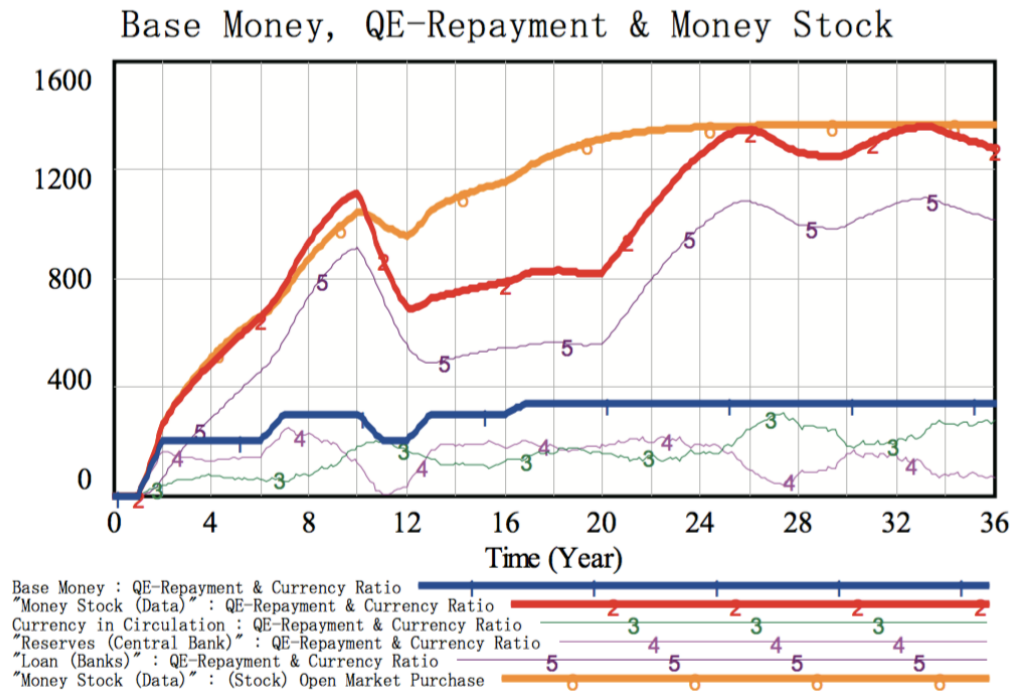
**A Debt Money System
- Money out of Nothing -**

- 1. Privately-Owned Central Bank issues Money (Notes)**
- 2. Credit Creation by Commercial Banks
(A Fractional Reserve System)**
- 3. Monetary Control by (and for) the International Bankers**

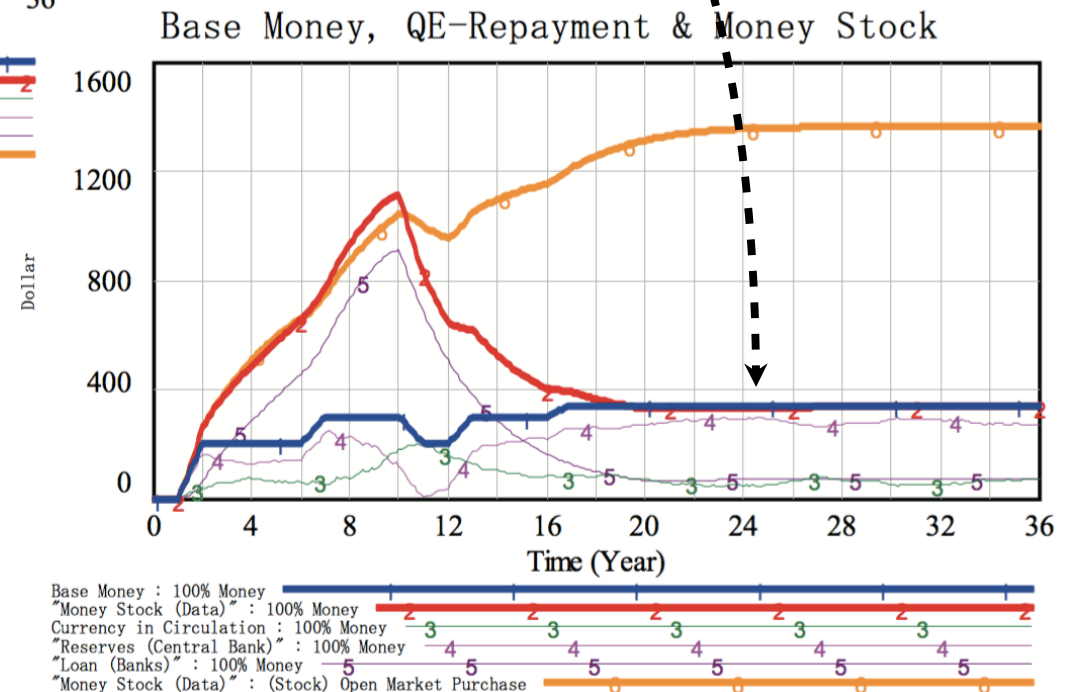
**A Public Money System
- American Monetary (NEED) Act -**

- 1. Government Issues Money
(Nationalization of the Central Bank)**
- 2. 100% Reserve
(Abolishment of the Credit Creation)**
- 3. Money as Public Utility
for the Economic Growth and Public Welfare**

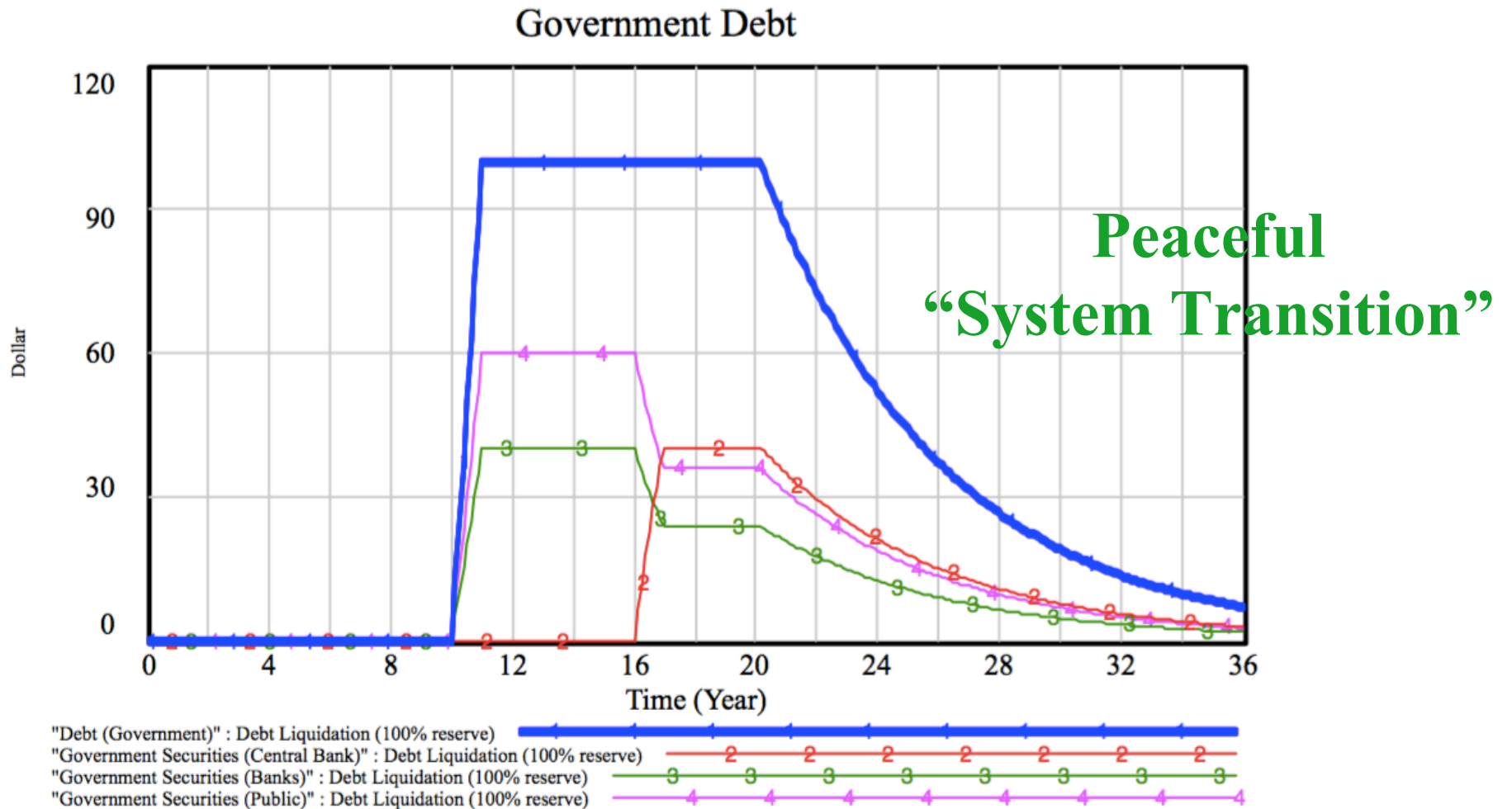
1. Attain stable money stock (100% reserve ratio)



Base money = Money stocks

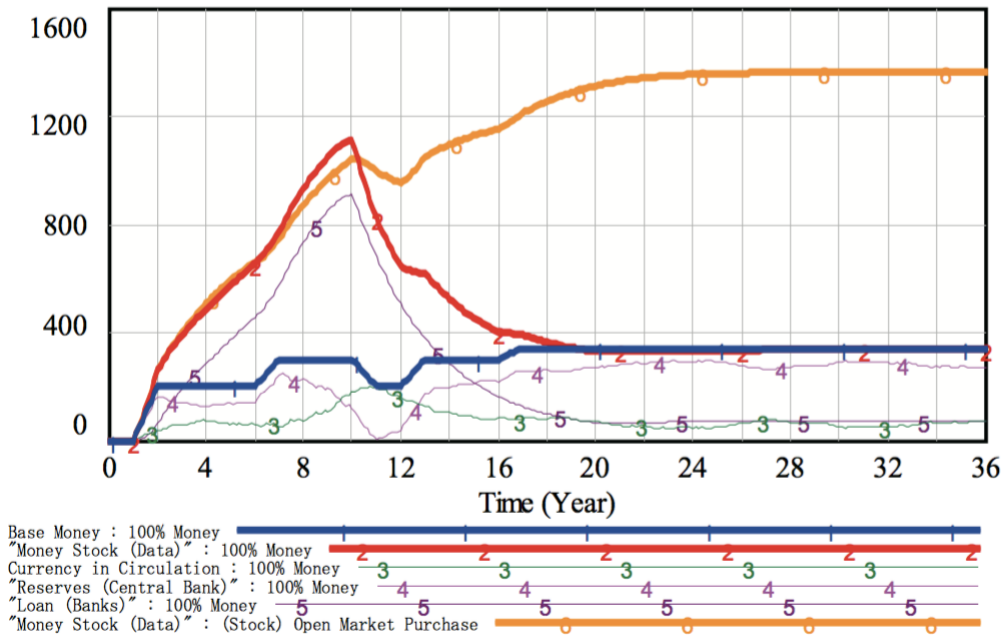


2. Liquidation of Government Debt



3. “Public Money Injection” (Direct control on money stock)

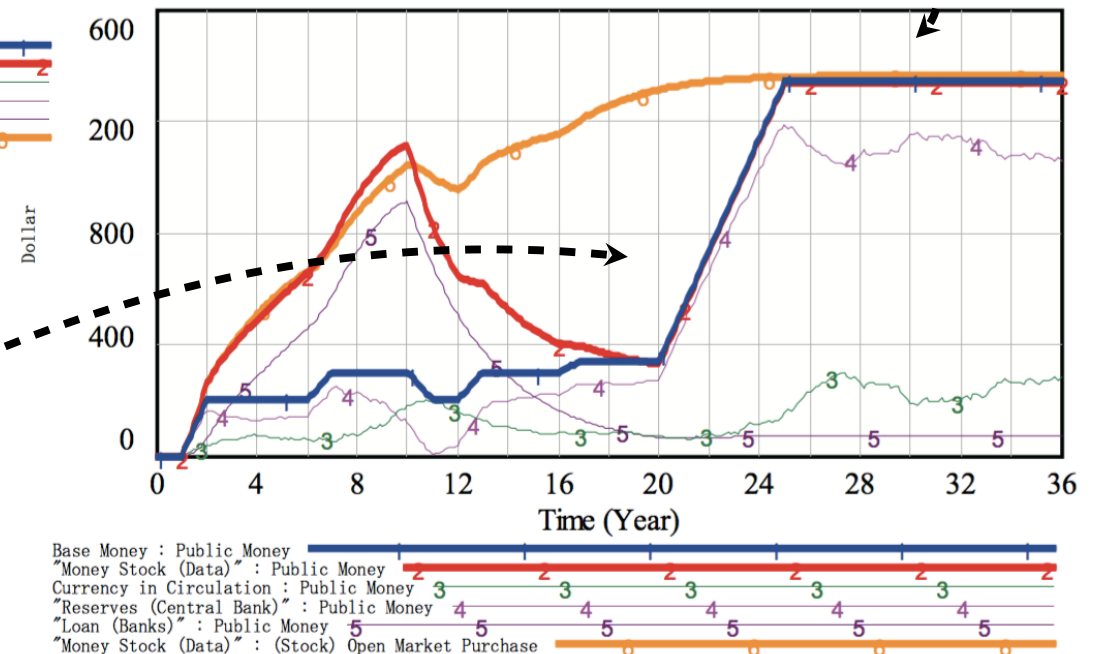
Base Money, QE-Repayment & Money Stock



Public Money Injection

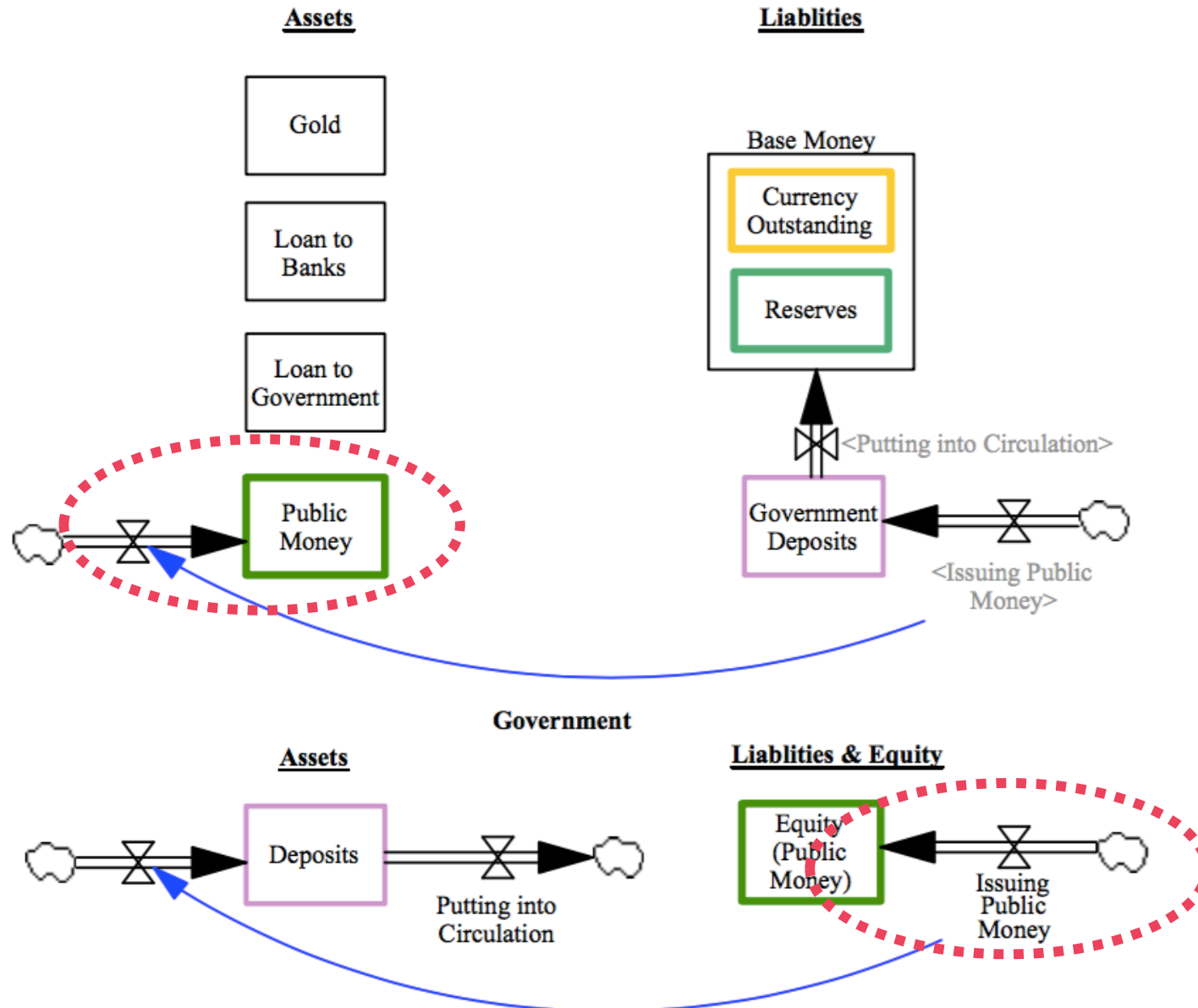
Stable Money stock

Base Money, QE-Repayment & Money Stock



Public Money Creation

Public Money Administration
(Former Central Bank)



Banks become

”Genuine Intermediaries of Money”

4. Japan's Public Money System

in Action



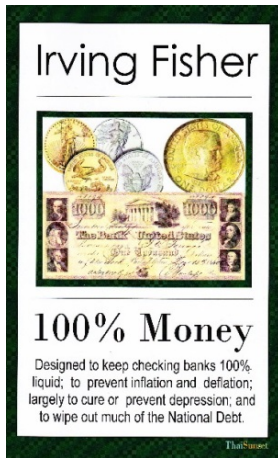
Classical Theory

Neutral Money

Market Liberals

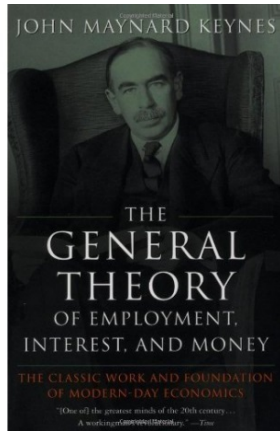
Great Depression, Oct. 29, 1929 (Black Tuesday)

1929



1935

Banking Act of 1933 (Glass-Steagall Act)



1935

American Monetary Act



Neoclassical Theory

Market & Financial Liberals

Globalization

1999

Stagflation 1970s

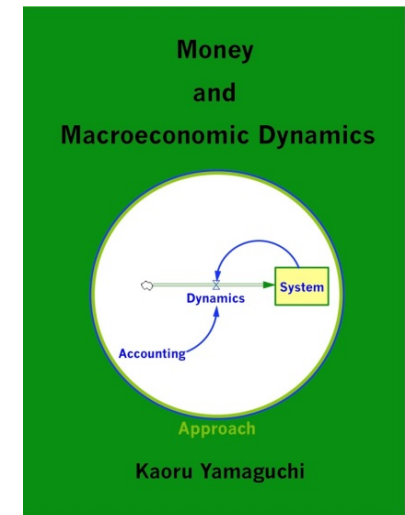
Disequilibrium Analysis

2nd Great Depression, Sept. 15, 2008 (Lehman Shock)

2008

Public Money System

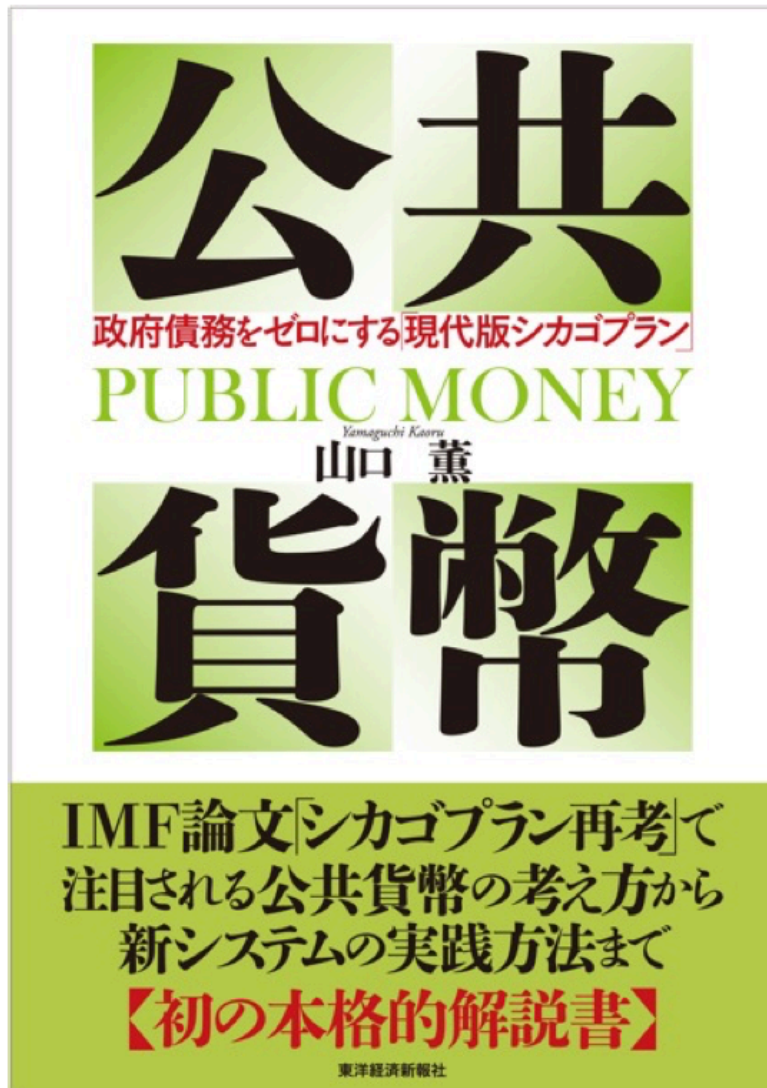
It is necessary to provide an alternative to the zombie economics of market liberalism (2008, p. 240)



2013

Debt Crisis

Debt Money System



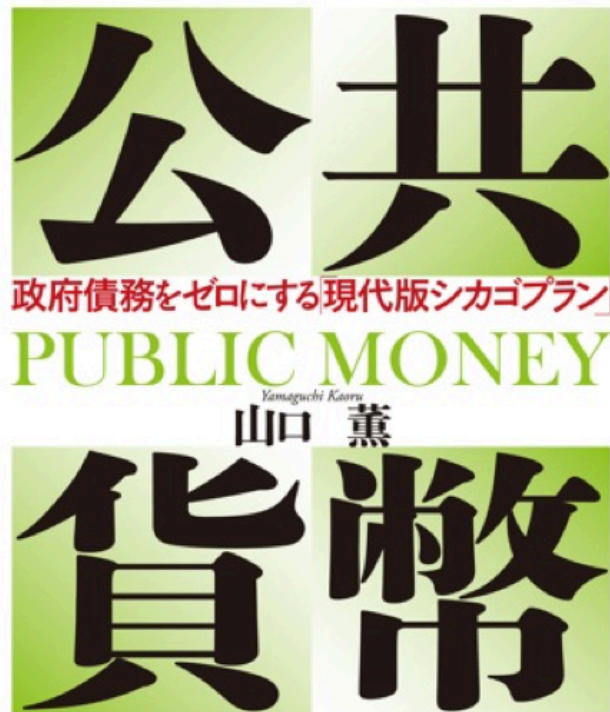
Published on [Sept. 10, 2015](#)

by

Toyo Keizai, Tokyo, 352 pp.

Money and Macroeconomic Dynamics (488 pages) , one of the most innovative macroeconomic books, was published in 2013.

PUBLIC MONEY is its simplified Japanese version (352 pages) to introduce the concept of the Monetary Reform to the Japanese readers. Public money economy is a new economic system in place of the finished Capitalism which was proved to have built-in system design failures. This new Japanese book focuses on the liquidation of national debts which Japanese economy as well as US and EU economies such as Greece are seriously facing now.



IMF論文「シカゴプラン再考」で
注目される公共貨幣の考え方から
新システムの実践方法まで
【初の本格的解説書】

東洋経済新報社

Published on [Sept. 10, 2015](#)

by

Toyo Keizai, Tokyo, 352 pp.

Part 1: Debt Money system

- 1 What is economics ?
- 2 What is money ?
- 3 Do we need the Bank of Japan ?
- 4 Why is money created out of nothing ?
- 5 Why does money become means of control ?
- 6 Why do national debts continue to increase ?
- 7 Our debt money system is Debt-end!

Part II: Public Money System

- 8 What is the Chicago Plan?
- 9 Birth of the Public Money System
- 10 We can liquidate national debts
- 11 Public money system creates happy futures to All

Part III: A Transition

- 12 Modeling a transition to the Public Money System
- 13 The Public Money Act of Japan

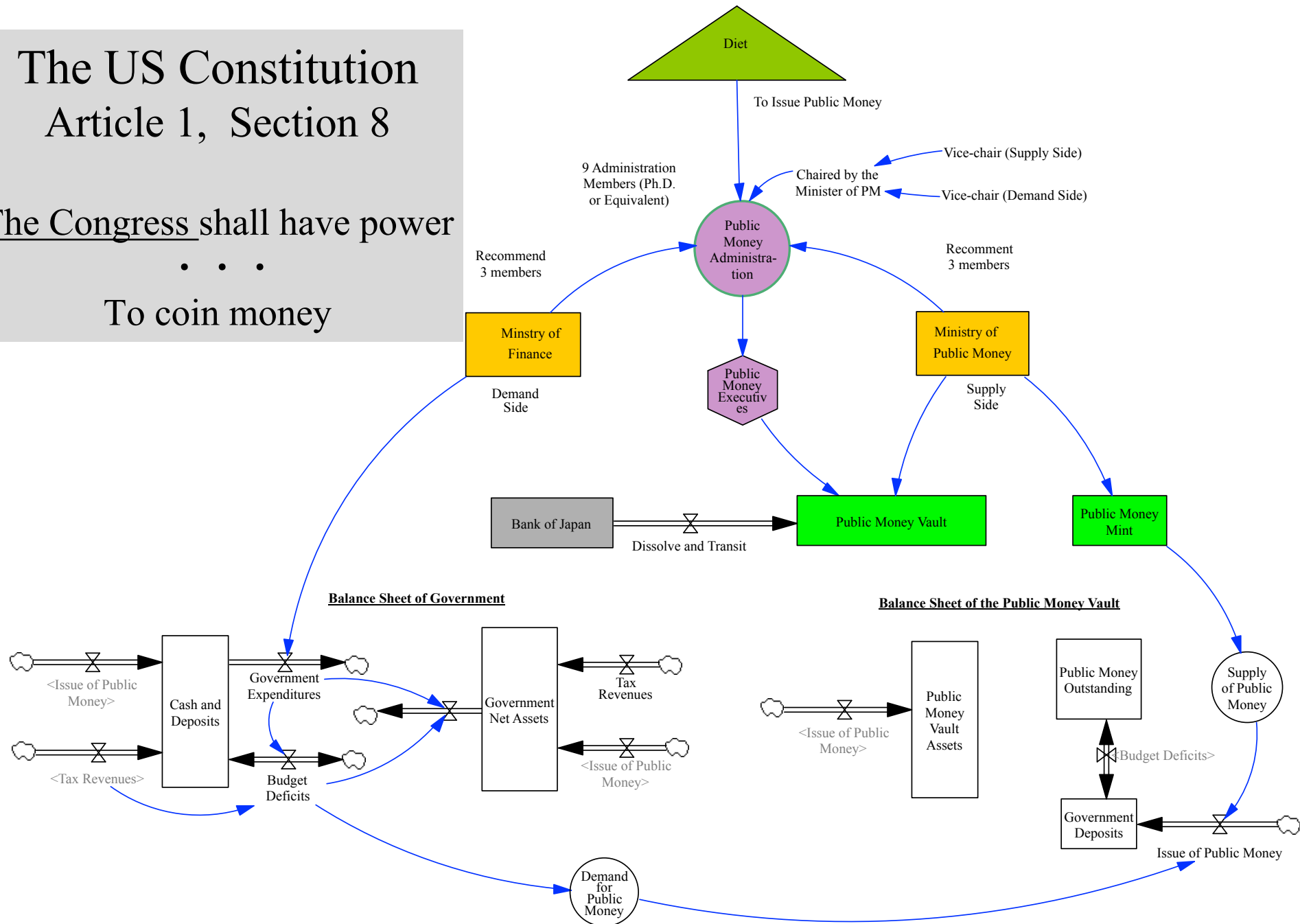
Public Money Act of Japan (Ch.13)

The US Constitution Article 1, Section 8

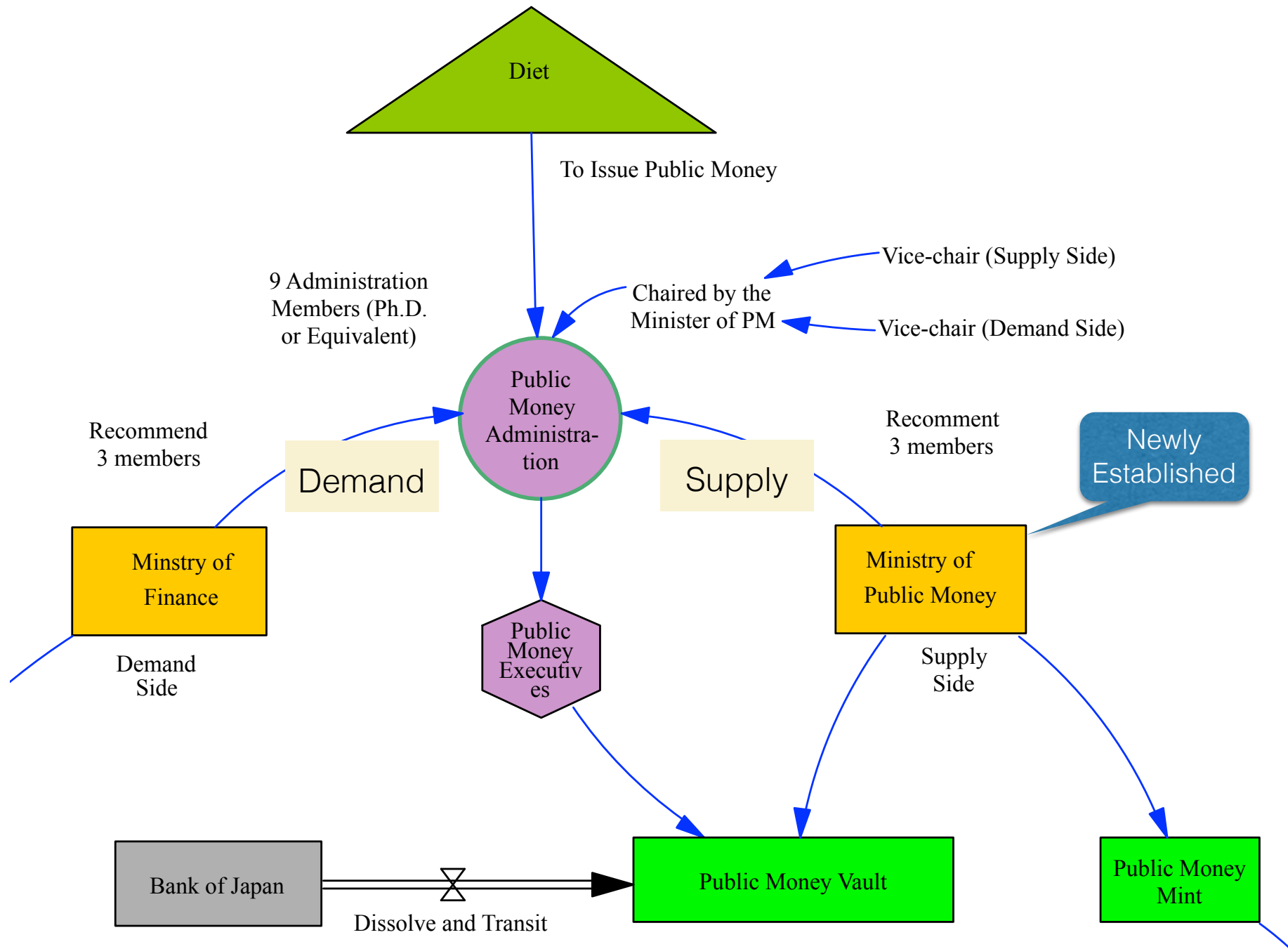
The Congress shall have power

• • •

To coin money



Public Money Act of Japan (Getting Incorporated)



5. Peer-to-Peer Public Money

(Electronic Public Money)

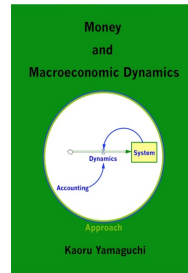
System in Progress

Great Depression, Oct.29, 1929 (Black Tuesday)

2nd Great Depression, Sept. 15, 2008 (Lehman Shock)

Chicago Plan: Monetary Reform

Accounting
System Dynamics
Macroeconomic Model
(August, 2008)



2013



2015

(Public Money)

Public Money System



Blockchain Revolution

Bitcoin: A Peer-to-Peer Electronic Cash System
by Satoshi Nakamoto, 2008;
(started on 2009-01-03 18:15:05)

Banking Patchworks

Debt Money System

- Peer-to-Peer Network
- Public Transaction Ledger
- Decentralized Verification (Blockchains)
- Highly Stable and Secure



2nd International Workshop P2P Financial Systems 2016 Opportunities · Risks · Market Dynamics · Regulation

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BANK OF ENGLAND



BANK OF CANADA
BANQUE DU CANADA



DEUTSCHE
BUNDESBANK
EUROSYSTEM



FEDERAL RESERVE BANK of ST. LOUIS
CENTRAL TO AMERICA'S ECONOMY®



UCL RESEARCH CENTRE
FOR BLOCKCHAIN TECHNOLOGIES

8-9 September 2016, London, United Kingdom

ECONOTIMES

Digital Currency Revolution



BoE explores implications of
blockchain and central bank-issued
digital currency



Friday, September 9, 2016 4:15 AM UTC

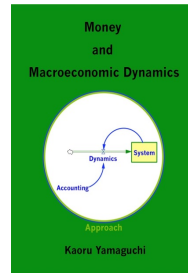
0 comment

Great Depression, Oct.29, 1929 (Black Tuesday)

2nd Great Depression, Sept. 15, 2008 (Lehman Shock)

Chicago Plan: Monetary Reform

Accounting
System Dynamics
Macroeconomic Model
(August, 2008)



2013



2015
(Public Money)

Public Money System

The Ultimate Design of
Monetary Reform
(Electronic Public Money)

P2P Public Money (EPM) System



2020

Blockchain Revolution

(The End of Banks
as
Intermediaries)

Bitcoin: A Peer-to-Peer Electronic Cash System
by Satoshi Nakamoto, 2008;
(started on 2009-01-03 18:15:05)

Banking Patchworks

Debt Money System

- Peer-to-Peer Network
- Public Transaction Ledger
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- Highly Stable and Secure