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“Monetary Policy, Structural Decline and Income Inequality in Europe and Japan”

Deutsches Institut für Japanstudien

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Outline

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2. Expansionary Monetary and Fiscal Policy as Origins of Crisis
3. Crisis Therapies in Japan and its Effects
4. Hysteresis and Implications for Income Inequality
5. Economic Policy Implications

1. Introduction: Share Prices as Indicators of Exuberance

Source: IMF.
2. Expansionary Monetary & Fiscal Policy as Origin of Crisis

Japan (Hoffmann and Schnabl 2008)
- Interest rate cuts as response to appreciation.
- Louvre Accord (Feb. 87) triggers fiscal expansion.
- Japanese bubble economy as a result.

Europe (Schnabl and Wollmershäuser 2013)
- Bursting of the dotcom bubble triggers sharp interest rate cuts.
- Consolidation of public budgets and unit labour costs in Germany (unification / Agenda 2010 / Maastricht).
- Undue credit growth at the periphery of the European (Monetary) Union driven by capital inflows from Germany. The real estate and stock market booms are enhanced by growing government expenditure.
Equilibrium in the Austrian Business Cycle Theory

\[ S_1 = I_1 \]

\[ S_2 = I_2 \]

\[ i_{n2} = i_{cb2} = i_{c2} \]

\[ i_{n1} = i_{cb1} = i_{c1} \]
Unsustainable Upswing (Overinvestment Boom)

\[ i_{n2} = i_{c1} = i_{c2} \]

Positive interest spread

\[ I_{ii1} \]
Downswing

\[ I_{ii1} \]

\[ I_{ii2} \]

\[ S \]

\[ I_2 > S_2 \]

\[ i_{n2} \]

\[ i_{n1} = i_{cb1} = i_{c1} \]

\[ = i_{cb2} = i_{c2} \]

positive interest spread
Pre- and Post-Crisis Short-Term Interest Rates

Source: IMF.
3. Crisis Therapies in Japan und Europe

**Trigger of the Crisis**

- Japan: Monetary tightening to deflate the bubble.
- Europe: Monetary tightening combined with changing mood on international financial markets (US subprime crisis).

**Japanese Crisis Therapies**

- (First hesitantly) interest rate cuts and expansion of the central bank balance sheet (quantitative easing).
- Asymmetric monetary policy (Hoffmann und Schnabl 2011).
- Keynesian fiscal stimulus packages.
- Recapitalisation of commercial banks (only 1999).
Japan: Government Spending

Source: IMF.
Japan: Short-Term and Long-Term Interest Rates

Source: IMF.

- Short-term: Money market overnight rate
- Long-term: 10 year government bond yields
Size of Central Bank Balance Sheets (% of GDP)

Key:
- Federal Reserve
- Bank of Japan
- Europäische Zentralbank

Source: IMF.

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Japan: Interest Rate, Credit Growth and Real Growth

- Private credit growth: 3-year average
- Money market rate
- Real growth rate: 3-year average

Source: IMF.
Supply-Sided Credit Crunch
• Valuation losses on asset holdings as well as bad loans force commercial banks to reduce credit to the enterprise sector.
• Enterprises get bankrupt, what further increases the stock of bad loans.
• The credit crunch is worsened.
• Expansionary monetary policy and recapitalization are recommended as crisis therapies (Posen 2000, Bernanke 2000).

Demand-Sided Credit Crunch (Koo 2003)
• Enterprises and households realize valuation losses on their asset positions.
• To consolidate their balance sheets liabilities are reduced. (deleveraging).
• The liquidation of assets contributes to declining asset prices.
• The government has to raise further credit and increase demand to fill the gap (Koo 2003).
Collapse of Financial Intermediation

Money Markets (McKinnon 2012)

- Given very low interest rates, there is no incentive to supply overnight credit on money markets.
- Given grown risk on money markets, the liquidity supply on commercial banks is substituted by the central bank.
- Commercial banks prefer deposits at the central bank.

Credit Markets (Schnabl 2015)

- The liquidity glut improves the financing conditions for large enterprises (equity and outside capital).
- The enterprise sector is transformed from a net debtor into a net creditor.
- Small and medium enterprises get increasingly delinked from the credit market.
- Credit to the enterprise sector is substituted by financial assets and credit to the public sector.
Japan: Net Saving by Sector

Source: Cabinet Office Japan.

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Japan: Deposit-Credit-Spread of Commercial Banks

Source: IMF, Bank of Japan.
Declining Investment and Growth

Quasi-Nationalization Dynamics

• The financial sector gets dependent on persistent low-cost liquidity injections of the central bank (zombie banks).
• Credit to the private sector is gradually substituted by credit to the public sector.
• Credit to the enterprise sector is increasingly contingent on concerns about financial stability (forbearance lending, zombie enterprises).

Decline of Investment and Marginal Efficiency of Investment

• Real investment is substituted by financial investment, because financial investment has an implicit insurance mechanism.
• Depressing the central bank rate towards zero is equivalent to a declining average marginal efficiency of investment (Evergreening, Peek and Rosengreen 2005; X-Inefficiency, Leibenstein 1966; Soft Budget Constraints, Kornai 1993; Competition as a Discovery Procedure, Hayek 1968).
• Declining productivity increases depress real wage increases.
Shares of Financial Assets out of Total Assets of Enterprises

[Graph showing the percentage of financial assets in total assets from 1980 to 2013 for USA and Deutschland, with a steady increase in the USA and more fluctuation in Deutschland.]
G3 Investment and Growth

Source: IMF, arithmetic average.
4. Hysteresis Effects and Implications for Income Inequality

The Government Debt Trap (Schnabl 2012)

• Declining interest rates provide an incentive to increase government debt, because interest rate payments as a share of overall expenditure decline.
• The higher the government debt, the higher is the pressure on the central bank to keep short-term and long-term interest rates low by inflating the central bank balance sheet.

Monetary Expansion Reduces Inflation (Schnabl 2015)

• Real estate booms create overcapacities in the housing sector, what first increases and than depresses rents.
• Decreasing financing costs of enterprises contribute to lower goods prices (competition from China).
• Private demand is substituted by public demand.
• Redistribution effects in favour of high-income classes are not captured by consumer price indices.
Structure of Japanese GDP

Source: IMF.
Simulation of the Japanese Debt Service

Debt service/Revenue (Percent)

Interest rate (Percent)

- 235%
- 275%
- 300%
Japan Rolling Coefficient of the Effect of M0-Growth Inflation (10-year Windows)
Redistribution Effects and Real Wage Repression

Redistribution Effects of Asymmetric Monetary Policy

• Cantillon (1931) effect: The wages in the financial sector are growing faster than the wages in other sectors.
• In particular, wages in the top segment of the financial sector are growing fast (boni).
• Given growing public debt in financial crisis, the authorities strive to depress wages in the public sector.
• The crisis undermines the negotiating power of trade unions, in particular of unqualified labour force. Wage in the private sector fall.

Redistribution across Assets Classes

• The returns of low-risk asset classes (which are held by the middle class) are depressed.
• High returns can be only realized by capital gains in relative risky asset classes (which are held by the upper class).
Asymmetric Risk Distribution and Future Redistribution

Chartelier’s Principle: Hayek (1944: 166)
• “mit jeder Gewährung völliger Sicherheit an eine Gruppe die Unsicherheit der übrigen notwendigerweise größer wird. Garantiert man jemand eine bestimmte Menge eines Kuchens von veränderlicher Größe, so muß notwendig der Anteil, der für alle anderen übrig bleibt, verhältnismäßiger schwankungen unterworfen sein als die wechselnde Größe des ganzen Kuchens."

The Hidden (Future) Redistribution Effect
• Zero interest rate policies undermine all kind of capital-based saving including the holdings of government bonds (middle class).
• Life insurances holding large shares of government bonds have to curtail their future disbursements.
• Growing government debt reduces future subsidies to public pension schemes.
Development of Real Income Components in Japan

Source: Economic and Social Research Institute, Cabinet Office, Government of Japan.
Sectoral Wage Development in the USA

Asset Prices and Income Inequality in the US

Source: The World Top Incomes Database.
Asset Prices and Income Inequality in Japan

Source: The World Top Incomes Database.
Share of Precarious Employment Forms in Japan

Source: Japan Ministry of International Affairs and Communication.

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The Road to Serfdom (1944):
The public control of important segments of the economy is equivalent to the control of the whole economy.

The Pretence of Knowledge (1974):
conserves structural distortions,
paralyses innovation and dampens long-term growth.

Source: IMF.
5. Economic Policy Implications

- The asymmetric monetary policy interventions maintain growth and prevent unemployment in the short term.
- In the long-term they trigger negative growth, redistribution and welfare effects.
- Hayek (1944): “Any attempt to control prices or quantities of particular commodities deprives competition of its power of bringing about an effective coordination of individual efforts, because price changes then cease to register all relevant changes in circumstances and no longer provide a reliable guide for the individual’s action.”
- Economic policy implication: Exit from the low-interest rate policy would reduce speculation, stimulate saving and investment, enhance productivity and real wage increases and reduce adverse redistribution effects.
Thank you very much for your attention!
A Wave of Wandering Bubbles

Index: Januar 1985=100 (Nasdaq Januar 1997=100)

- Malaysia (linke Skala)
- Nasdaq (linke Skala)
- Shanghai (linke Skala)
- Japan (linke Skala)
- Nareit (linke Skala)
- US Staatsanleihen (rechte Skala)

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