Is the Persistence of Japan’s Low Rate of Deflation a Problem?

Yasushi Okada
Economic and Social Research Institute
1. Deflation and Liquidity Trap
Fig. 1 Inflation Rate of GDP Deflator
(Fixed-Based, excluding Consumption Tax)
Fig. 2 CPI Inflation Rate excluding Consumption Tax
Demand for Narrow Money

Marshallian K (M1/Nominal GDP)

Introducing *Payoff for Time Deposit*
(Deposits shift from M2 to M1)

GDP Deflator-based Deflation started
Fig. 5 Growth Rate of Money Stock (M2+CD's)
Fig. 3 Change of Monetary Growth happened at $T$. 

$\ln(\text{Money Stock})$
Fig. 4 Transition Path of Price Level

\[ \text{ln(Price)} \]

\[ T \]
2. Real Wages, Deflation and Corporate Profit
Share of Wage Income to Nominal GDP \(=\) \(\frac{\text{Compensation of Employee}}{\text{Nominal GDP}}\)

\[
\frac{\begin{pmatrix}
\text{Compensation of Employee} \\
\text{GDP Deflator} \cdot \text{Employee}
\end{pmatrix}}{egin{pmatrix}
\text{Hour Worked}
\end{pmatrix}}
\]

\[
= \frac{\begin{pmatrix}
\text{Real GDP/Employee} \\
\text{Hour Worked}
\end{pmatrix}}{egin{pmatrix}
\text{Real Wage Rate}
\end{pmatrix}}
\]

\(=\) \(\frac{\text{Real Wage Rate}}{\text{Labor Productivity}}\)
Fig. 6 Labor Productivity and Time Trend
(1994Q1=100)

1.4% growth path
Fig. 7 Nominal and Real Wage Rate
(1994Q1=100)

Real Wage Rate
(deflated by GDP deflator excluding Consumption Tax)

Nominal Wage Rate

GDP Deflator excluding Consumption Tax
(Chained Series 1994Q1=100)
Fig. 8 Labor Productivity and The Real Wage Rate
(1994Q1=100)