Negative Interest Rate Policy and Asian Economy

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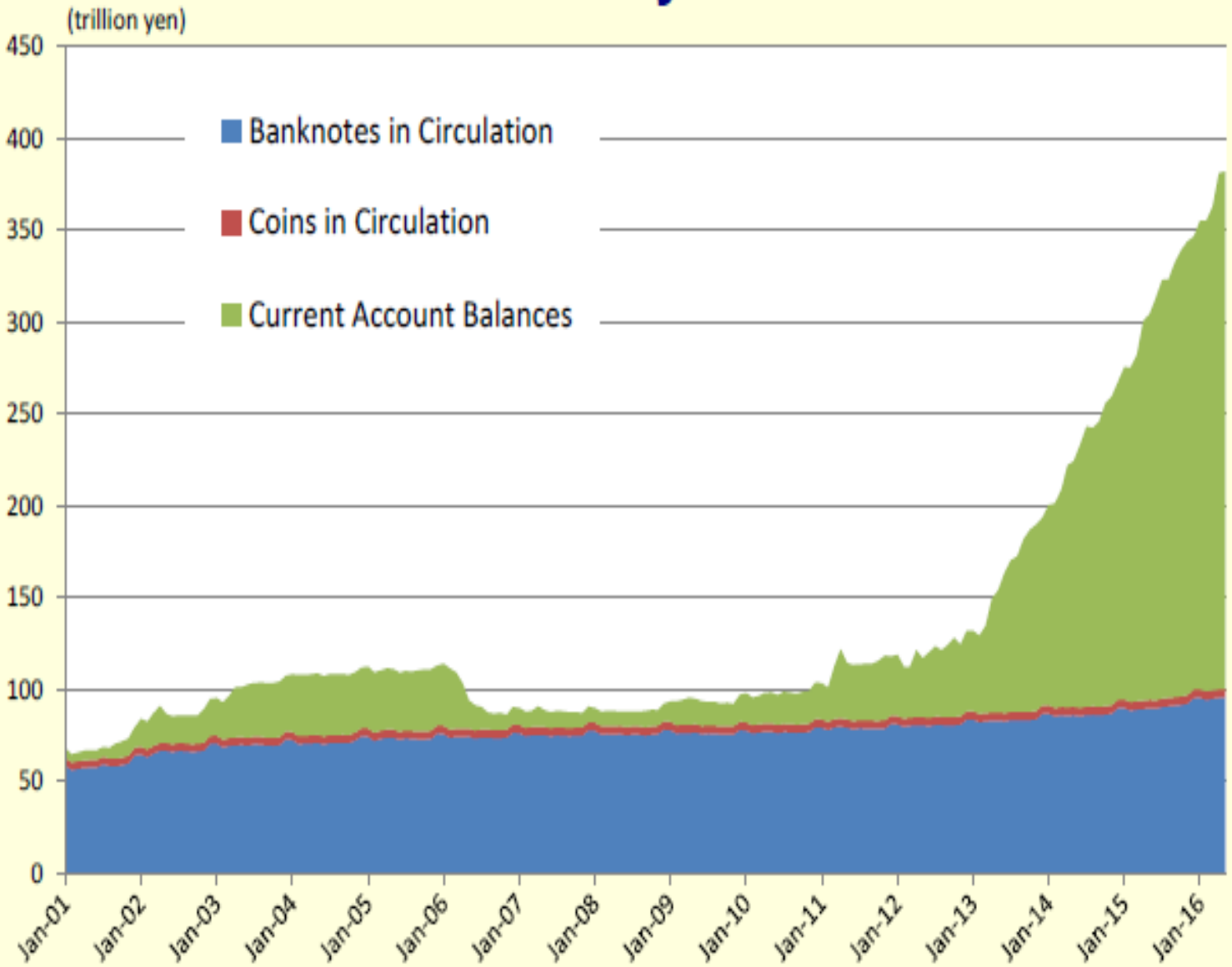
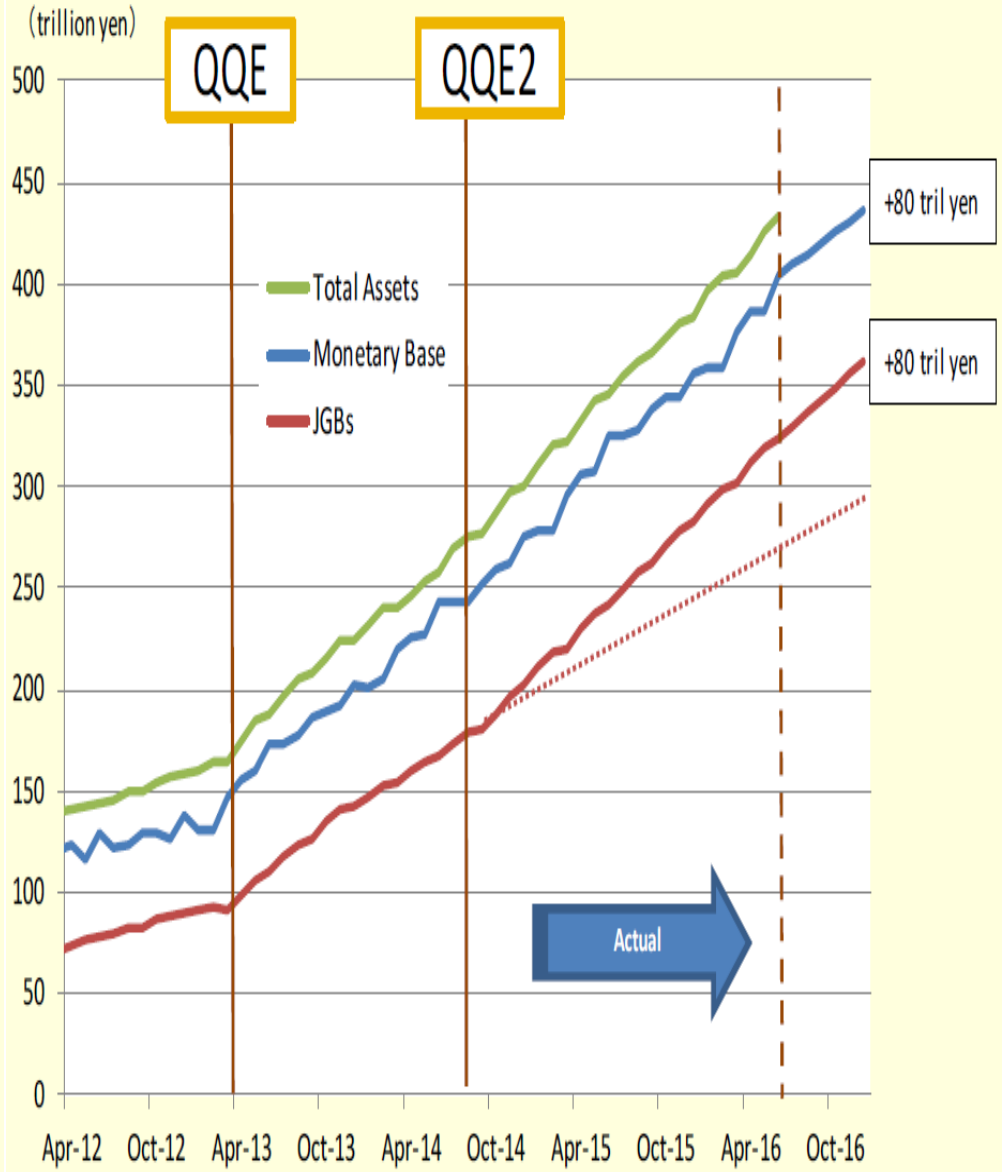
Monetary Base



Source: Bank of Japan "Monetary Base"



Declining Bank Loans

2016	
	Monetary base / GDP
Japan	80 %
USA	21 %
Euro area	20 %

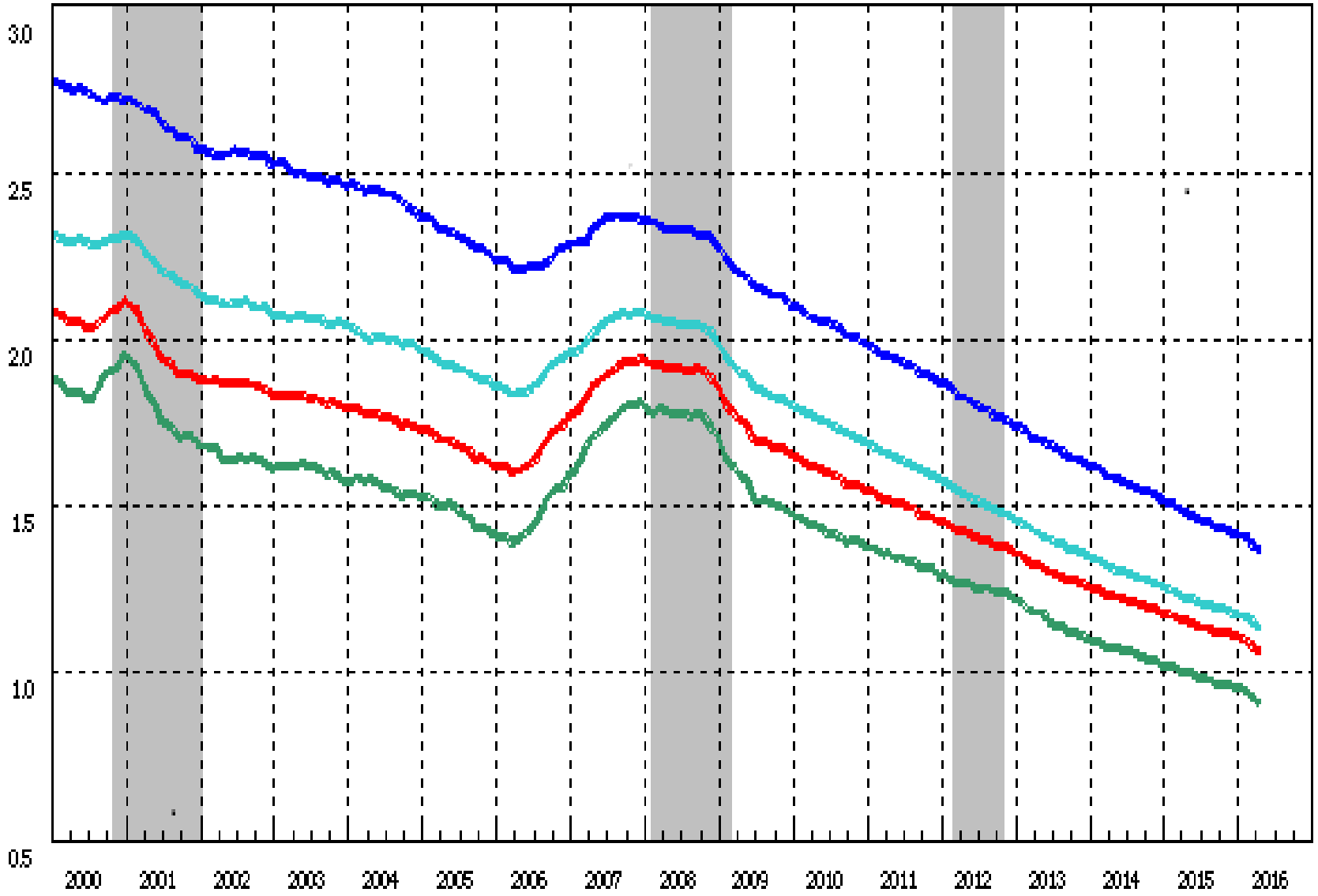


Table 3.

(Sample:

$$y_t = -0.16 - 0.0002(i - E\Delta p_{+1}) + 1.01 y_{t-1}$$

(–1.98)* (–0.53) (147.63)**

$R^2 = 0.99$ adjusted $R^2 = 0.99$ Durbin-Watson Statistic=1.70 S

$$y_t = -0.15 + 0.0002(i - E\Delta p_{+1}) + 1.01 y_{t-1}$$

(–2.36)* (1.17) (188.23)**

$R^2 = 0.99$ adjusted $R^2 = 0.99$ Durbin-Watson Statistic =1.62

$$(m-p)_t = 0.02 + 0.70 y_t - 0.025 i_t + 0.99(m-p)_{t-1}$$

(0.11) (2.67)** (–2.72)** (171.06)**

$R^2 = 0.99$ adjusted $R^2 = 0.99$ Durbin-Watson Statistic =1.93

Source: Authors' compilation.

Figure 12: The Ineffectiveness of Monetary Policy in Japan

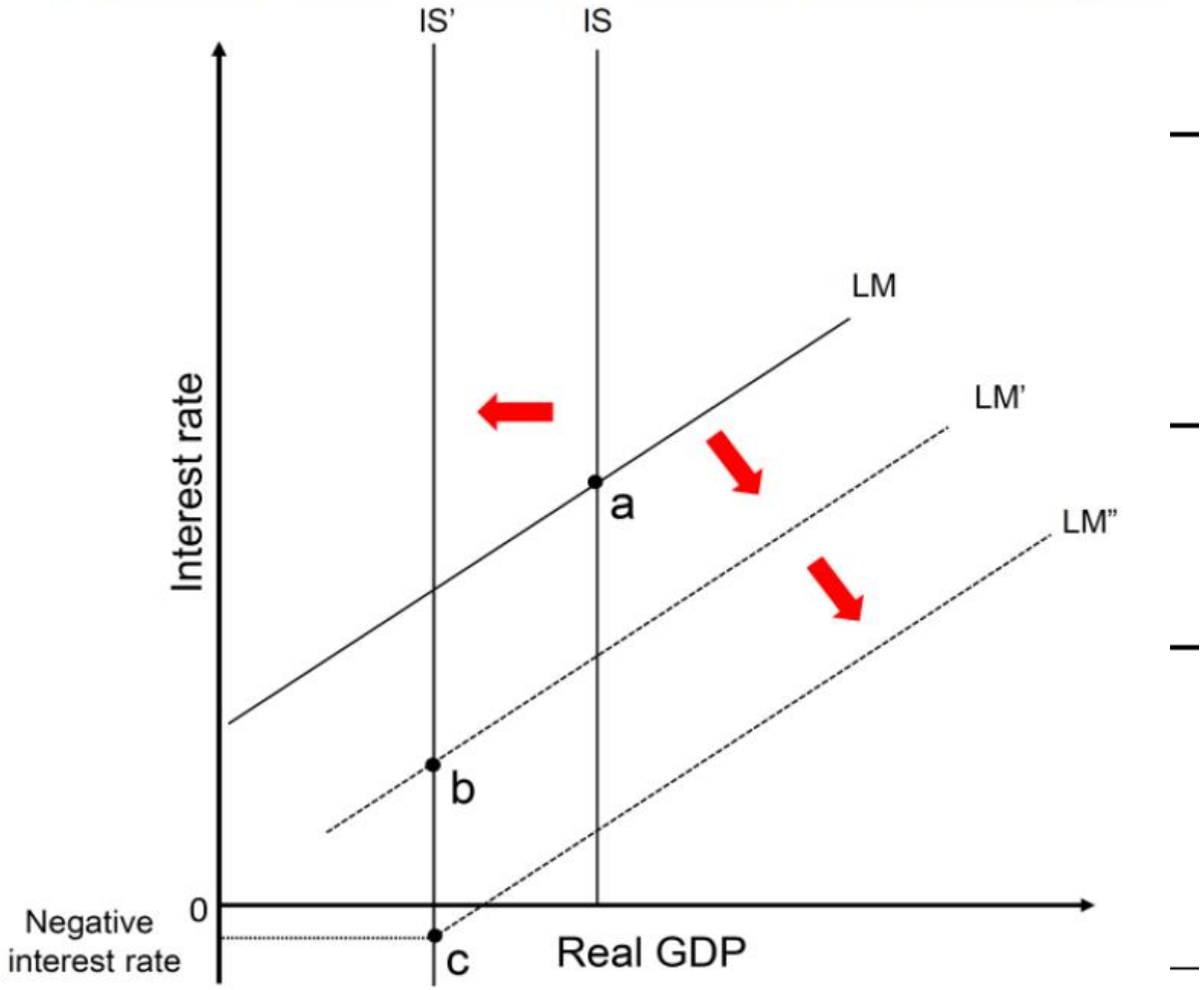
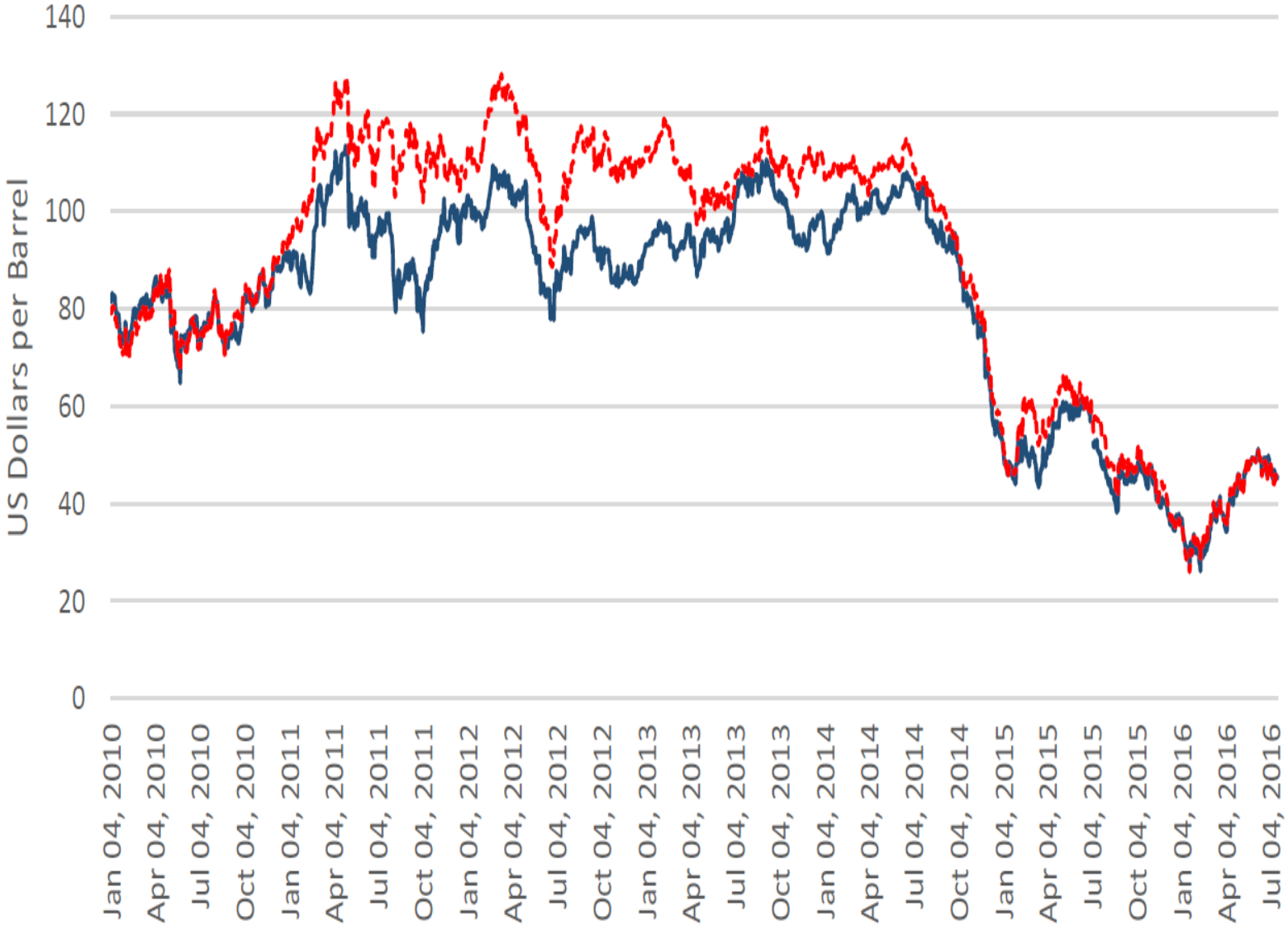
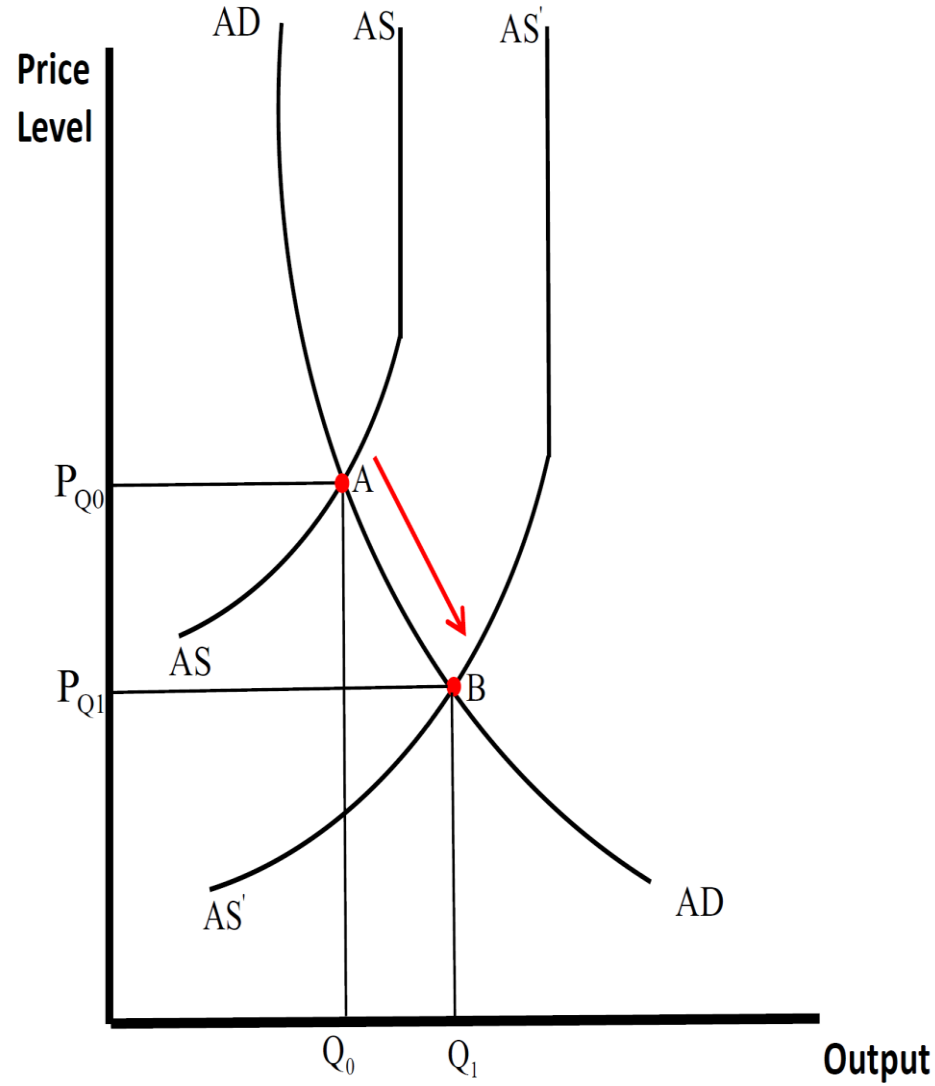
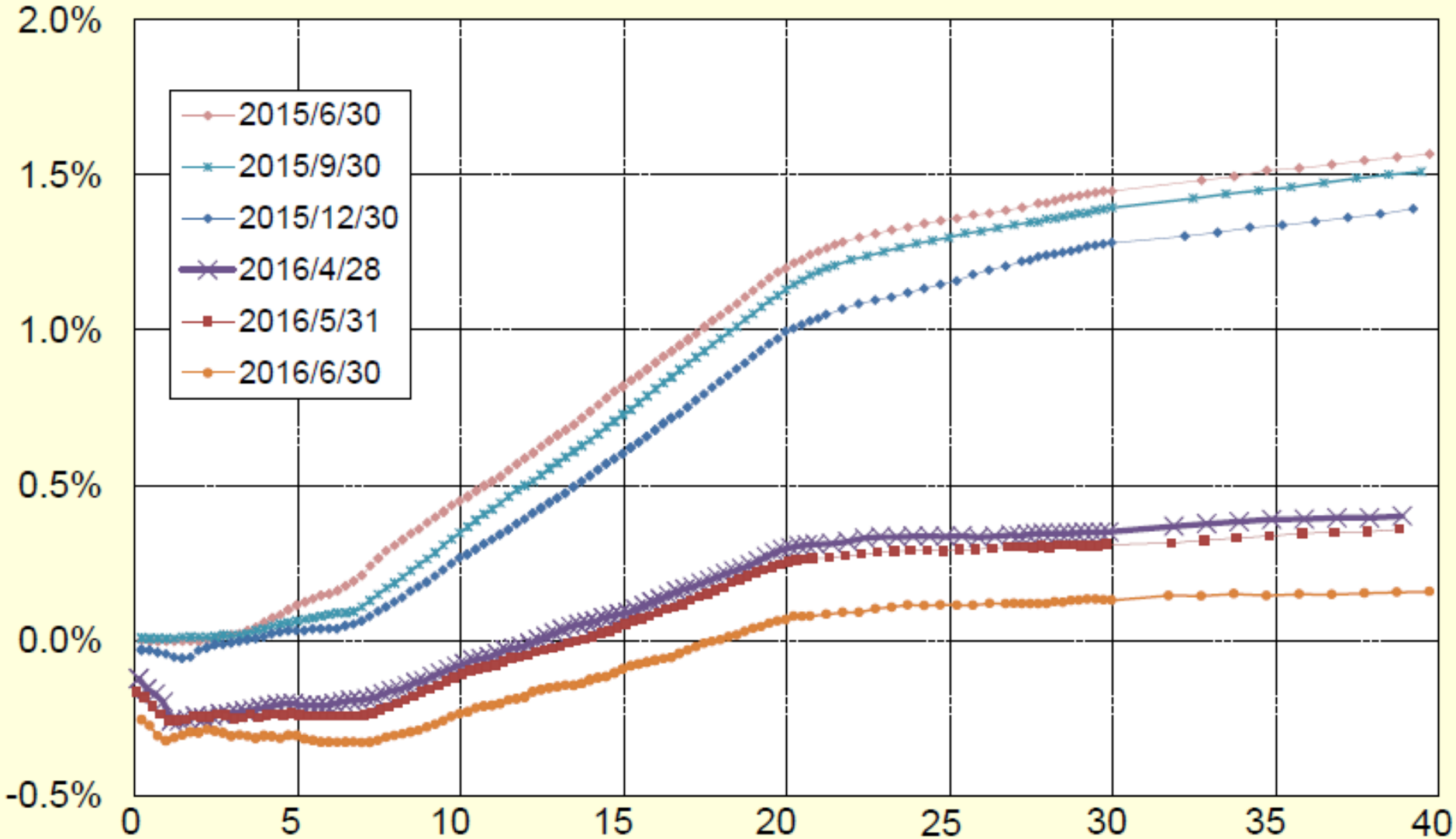


Figure 1: Recent Global Spot Oil price Movements
(4 Jan 2010–18 July 2016)





JGB Yield Curves



Source: Japan Bond Trading Co.,Ltd.

Breakdown by JGB and T-Bill Holders (Mar. 2016)

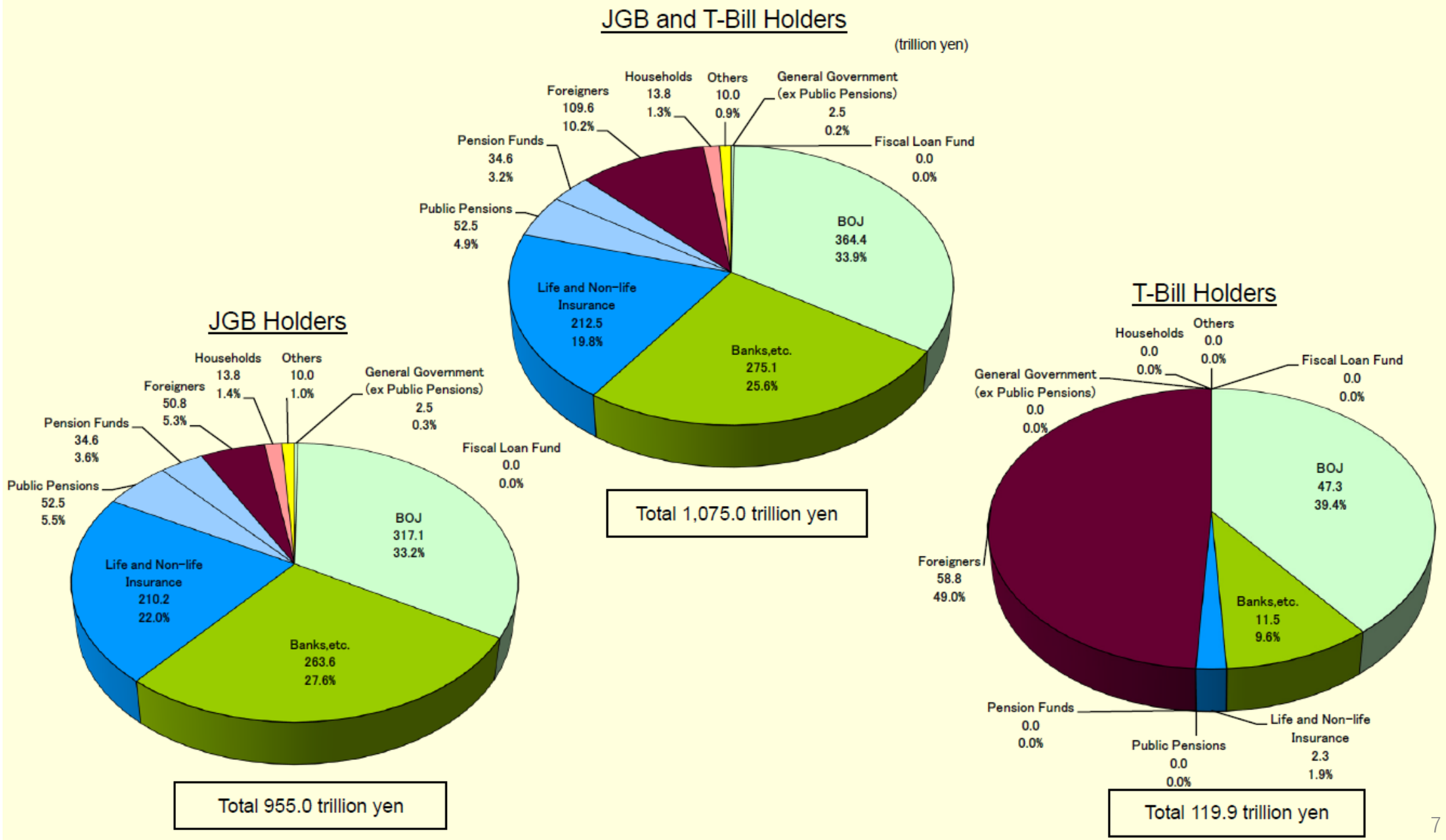


Figure 1: Gross Debt/Gross Domestic Product in Selected OECD Countries, 2014

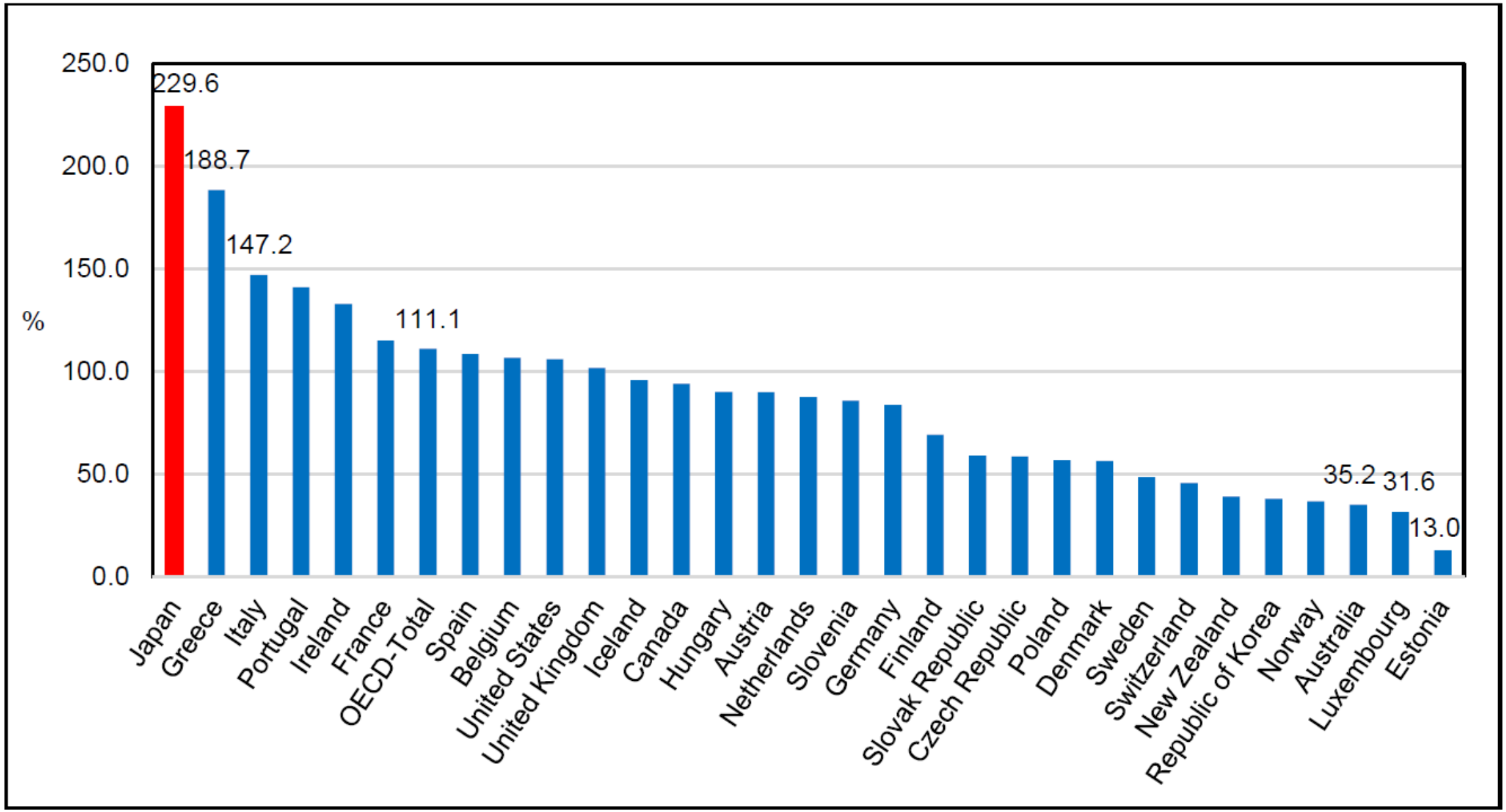
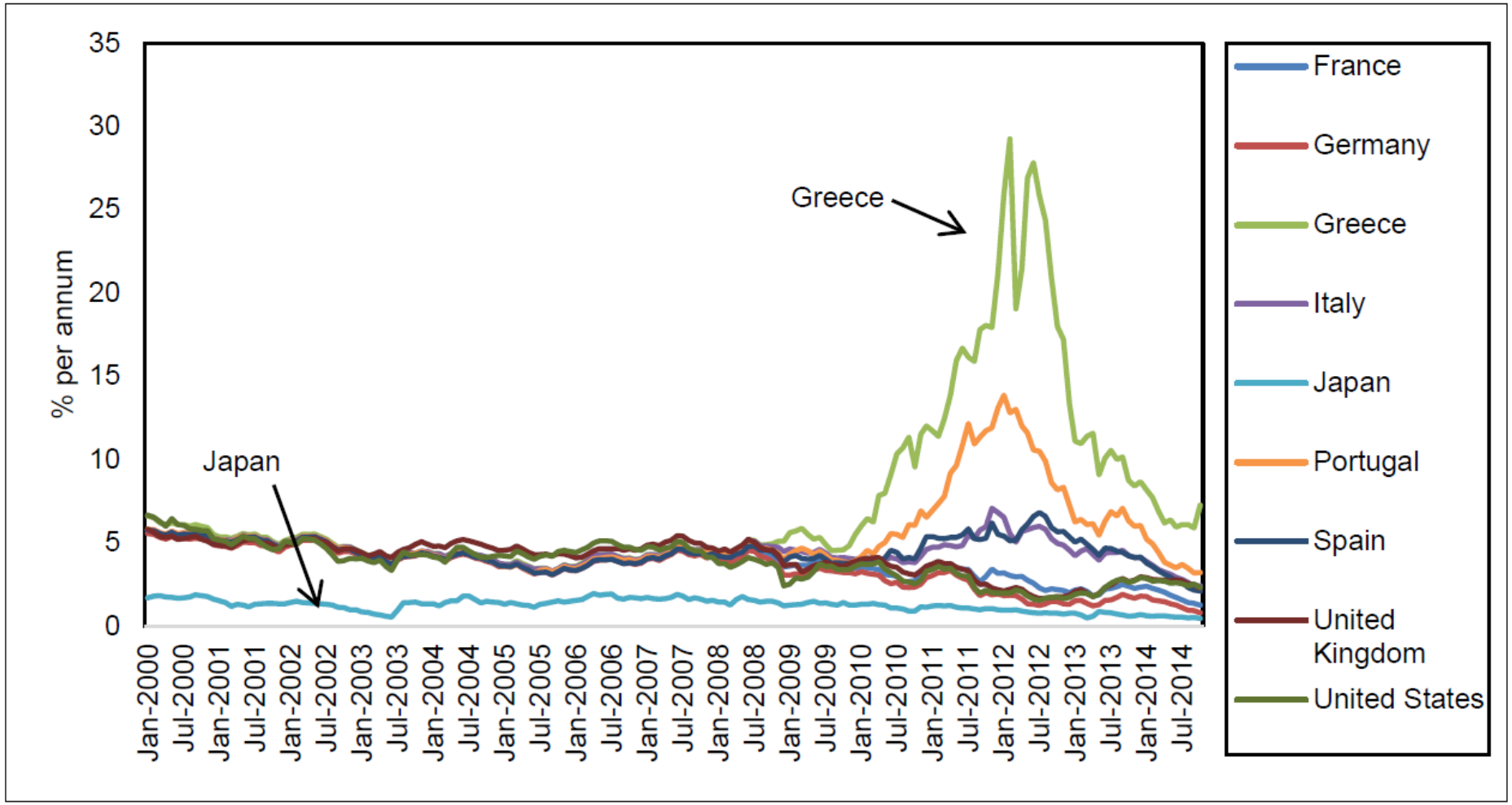
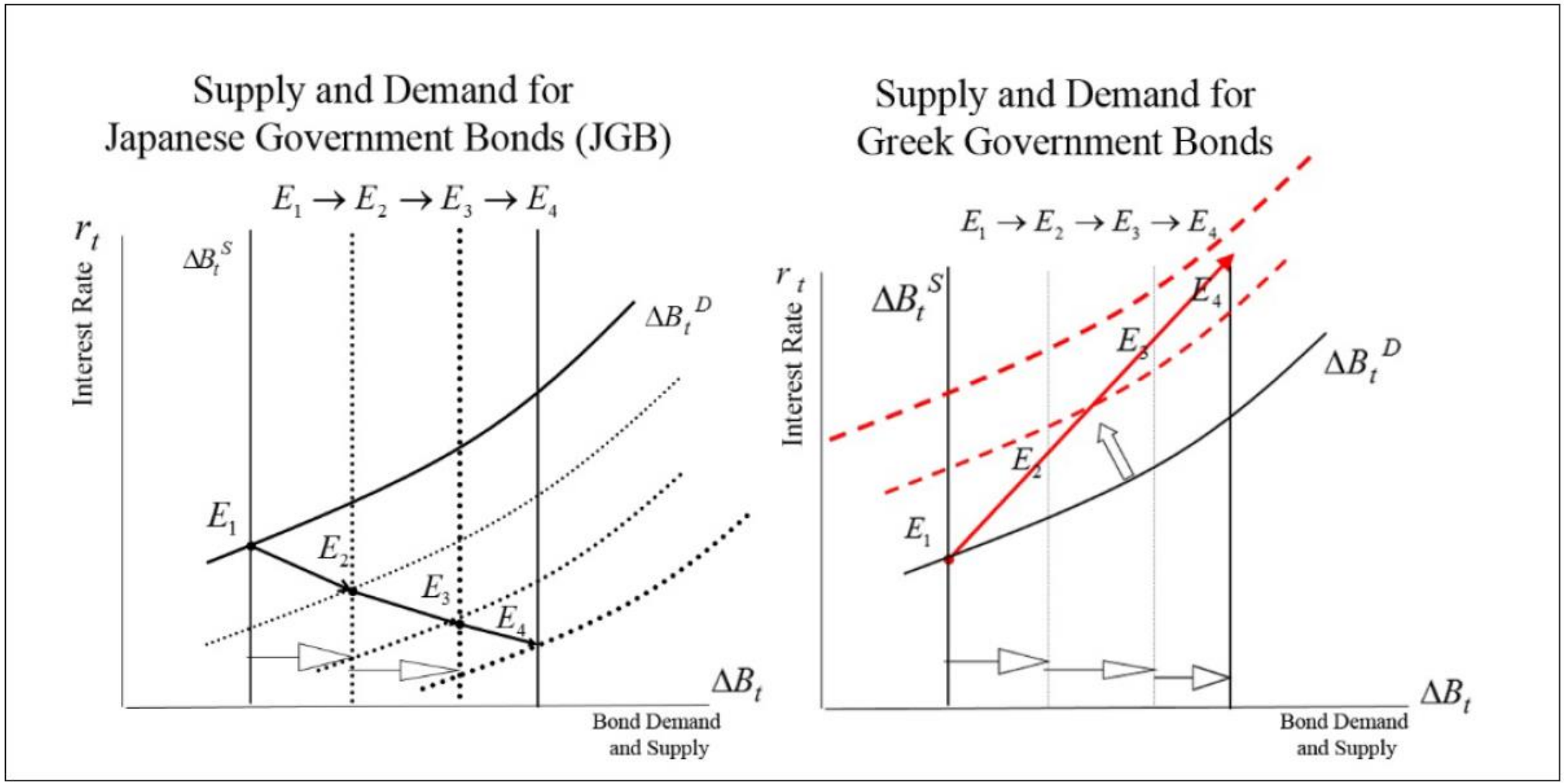


Figure 4: Interest Rates in Selected OECD countries



OECD = Organisation for Economic Co-operation and Development.

Figure 2: Government Bond Markets of Japan and Greece



Source: Yoshino and Taghizadeh-Hesary (2014a).

The first-order conditions are:

$$\frac{\partial L}{\partial G_t} = w_1(B_t - B_t^*)\left(\frac{\partial B_t}{\partial G_t}\right) + w_2\frac{\partial Y_t}{\partial G_t}\left(Y_t - Y_t^f\right) + w_3(G_t - G_{t-1}) + w_5(\Delta B_t - \Delta B_t^*)\left(\frac{\partial \Delta B_t}{\partial G_t}\right) = 0^2 \quad (15)$$

$$\frac{\partial L}{\partial T_t} = w_1(B_t - B_t^*)\left(\frac{\partial B_t}{\partial T_t}\right) + w_2\frac{\partial Y_t}{\partial T_t}\left(Y_t - Y_t^f\right) + w_4(T_t - T_{t-1}) + w_5(\Delta B_t - \Delta B_t^*)\left(\frac{\partial \Delta B_t}{\partial T_t}\right) = 0^3 \quad (16)$$

From Equation (15), we obtain our government spending rule.

$$G_t - G_{t-1} = \alpha_1(B_t - B_t^*) + \alpha_2(\Delta B_t - \Delta B_t^*) + \alpha_3\left(Y_t - Y_t^f\right)$$

Government Spending Rule (17)

where $\alpha_1 = \frac{w_1}{w_3}\left(\frac{B_{t-1}}{b_1 - B_{t-1}} + 1\right)$, $\alpha_2 = \frac{w_5}{w_3}\left(\frac{B_{t-1}}{b_1 - B_{t-1}} + 1\right)$, $\alpha_3 = -\frac{w_2}{w_3}\left(\frac{(d_1 + i_1) + d_1 i_1}{\Delta}\right)$

$$T_t - T_{t-1} = \beta_1(B_t - B_t^*) + \beta_2(\Delta B_t - \Delta B_t^*) + \beta_3\left(Y_t - Y_t^f\right)$$

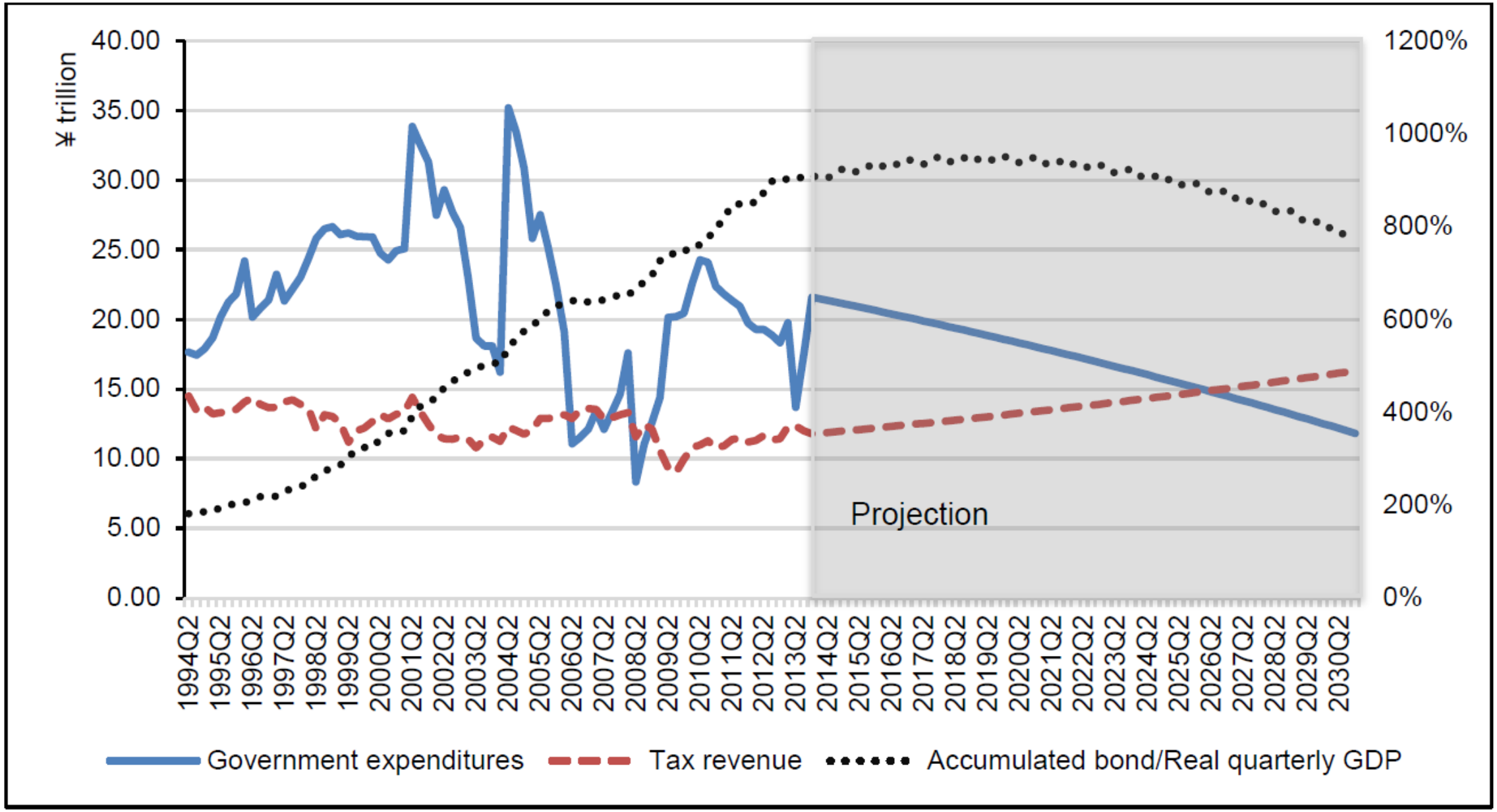
Taxation Rule (18)

where $\beta_1 = -\frac{w_1}{w_4}\left(\frac{B_{t-1}}{b_1 - B_{t-1}} + 1\right)$, $\beta_2 = -\frac{w_5}{w_4}\left(\frac{B_{t-1}}{b_1 - B_{t-1}} + 1\right)$, $\beta_3 = \frac{w_2}{w_4}\left(\frac{(d_1 + i_1)c_1 + d_1 i_1}{\Delta}\right)$.

From these two first-order conditions, we can find the relationship between $G_t, T_t, (B_t - B_t^*)$, $(\Delta B_t - \Delta B_t^*)$ and the primary balance.

$$PB_t - PB_{t-1} = (\alpha_1 - \beta_1)(B_t - B_t^*) + (\alpha_2 - \beta_2)(\Delta B_t - \Delta B_t^*) + (\alpha_3 - \beta_3)\left(Y_t - Y_t^f\right) \quad (19)$$

Figure 10: Government Expenditure and Tax Revenue

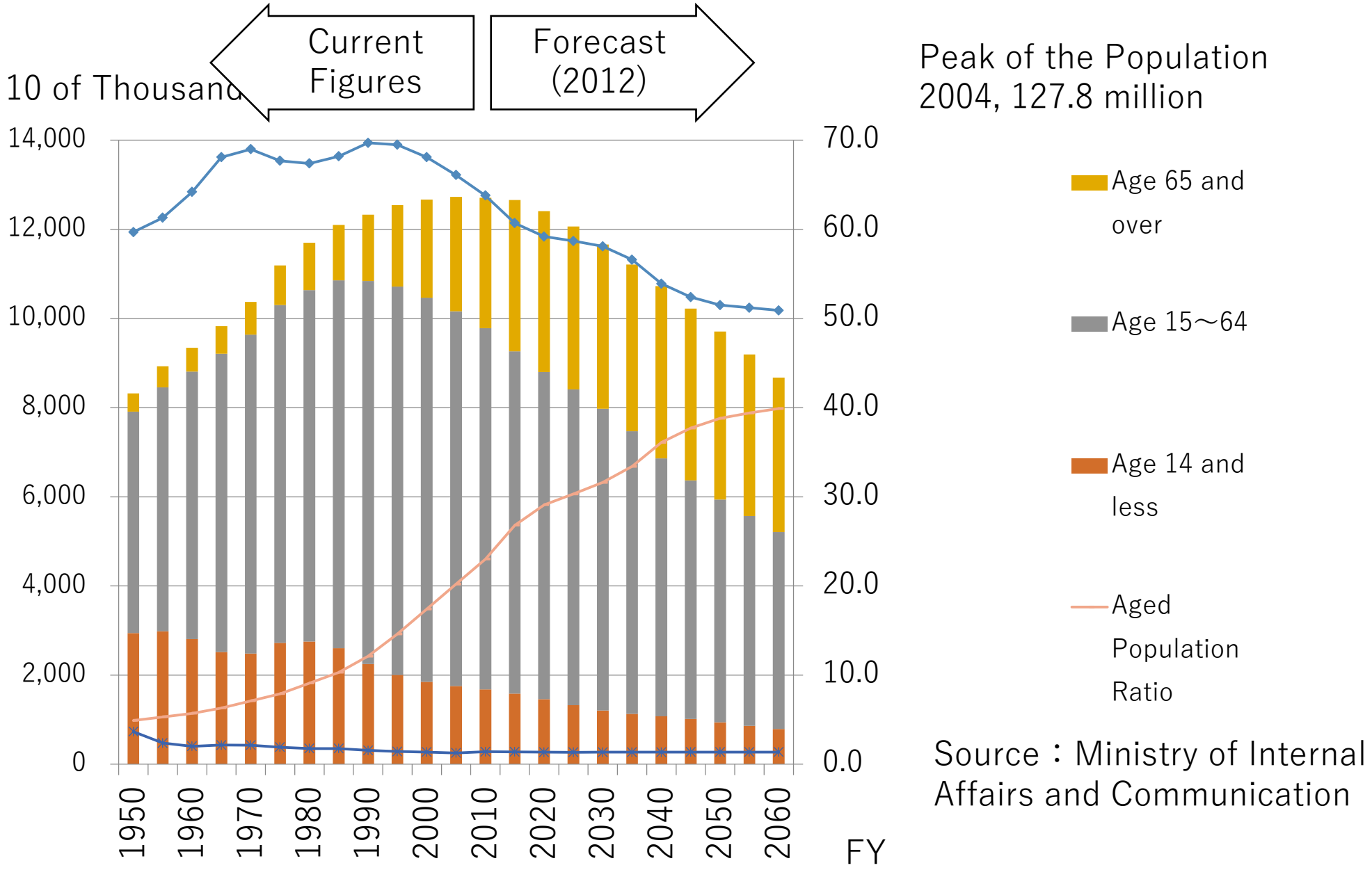


Spillover effects → Return to investors

	1956-60	1961-65	1966-70	1971-75	1976-80	1981-85
Direct Effect (Kg)	0.696	0.737	0.638	0.508	0.359	0.275
Indirect Effect (Kp)	0.453	0.553	0.488	0.418	0.304	0.226
Indirect Effect (L)	1.071	0.907	0.740	0.580	0.407	0.317
20% Returned	0.3048	0.292	0.2456	0.1996	0.1422	0.1086

%Increment	1986-90	1991-95	1996-00	2001–05	2006-10	39.5
	0.215	0.181	0.135	0.114	0.108	
	0.195	0.162	0.122	0.1	0.1	
	0.193	0.155	0.105	0.09	0.085	
	0.0776	0.0634	0.0454	0.038	0.037	
	36.1	35.0	33.6	33.3	34.3	

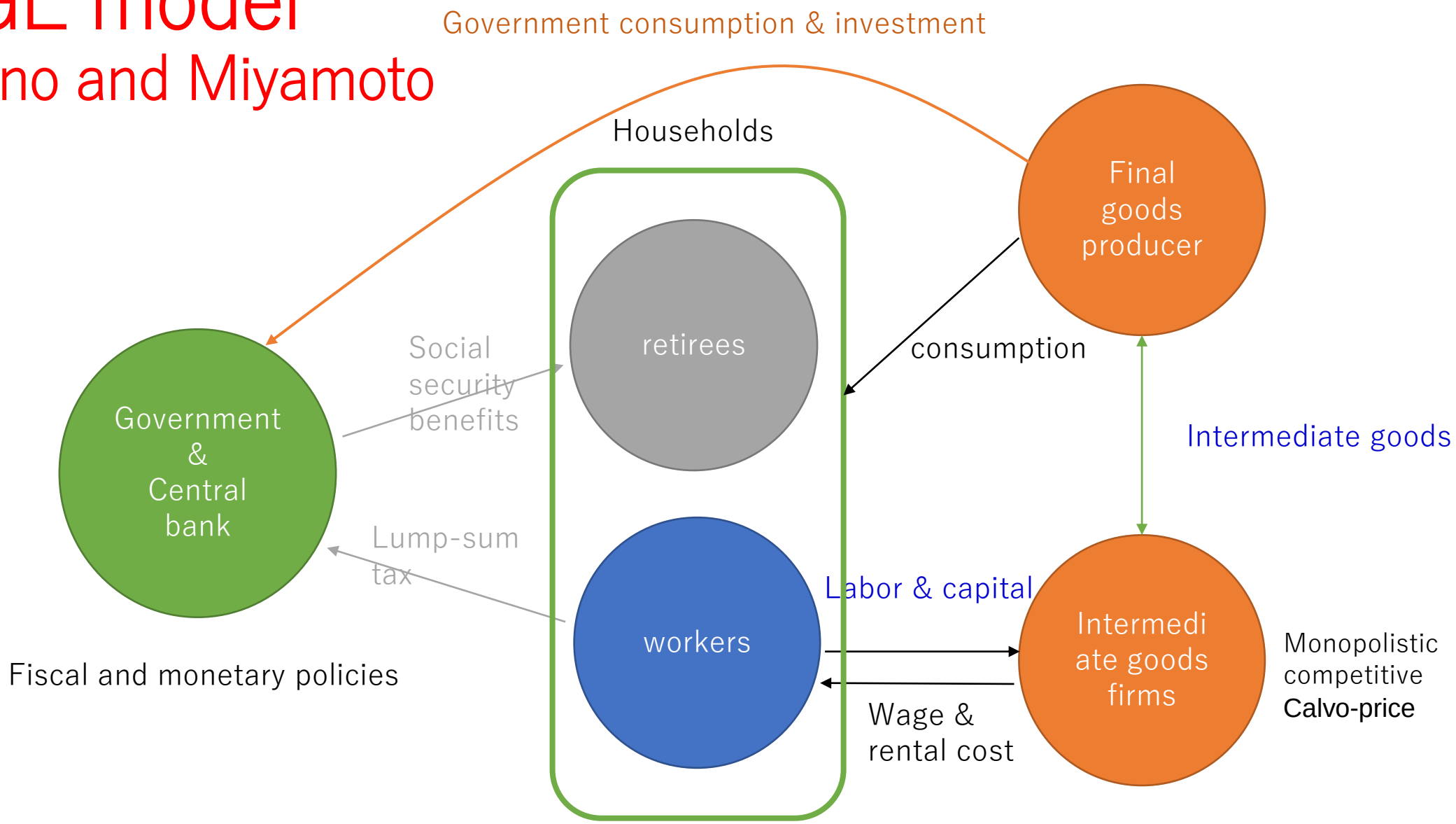
Population Aging of Japan



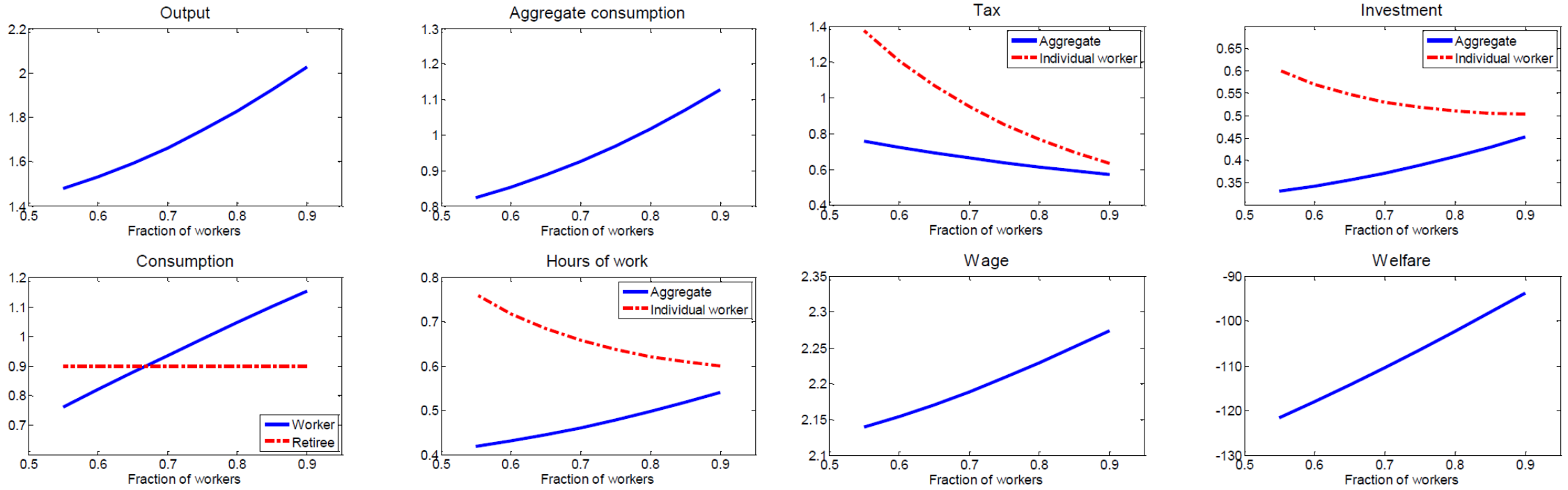
Peak of the Population
2004, 127.8 million

Source：Ministry of Internal Affairs and Communication

DSGE model
Yoshino and Miyamoto



The long-run effect of aging

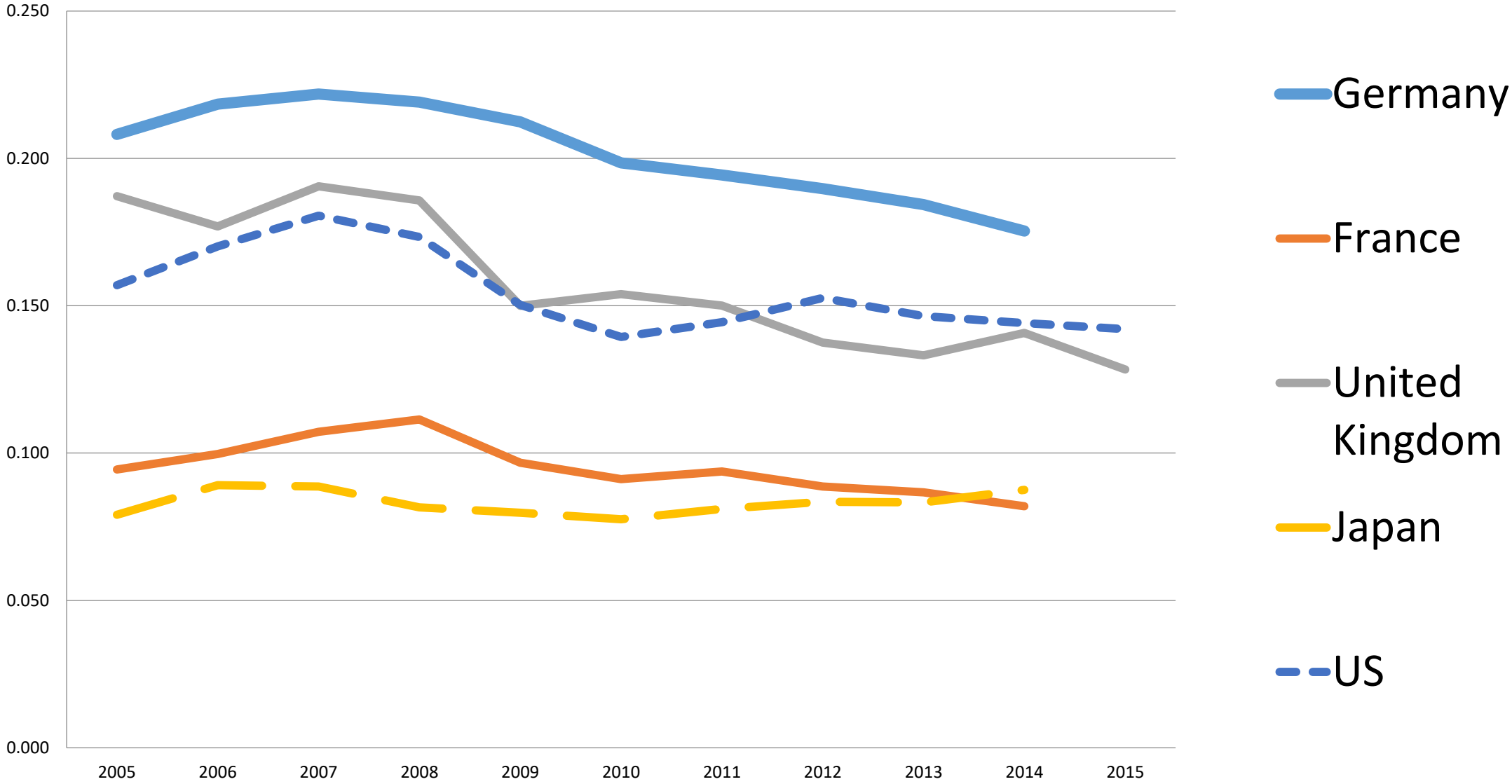


Population aging (worker ↓)

→Output ↓, Consumption ↓, Labor supply ↓, Investment ↓

Note: Population size is normalized to one

(Dividends & Interest receipts)/Primary Income



Mutual Funds – Holding Period

Fee Structure is important

		Gross return on investment		Net return of individual investers		Sales charges		Trust remunerations
No switching for 15years 2000.1～2014.12	A_0=100	R 44.27	=	A_T-A_0 24.34	+	τ 2.45	+	ε 17.48

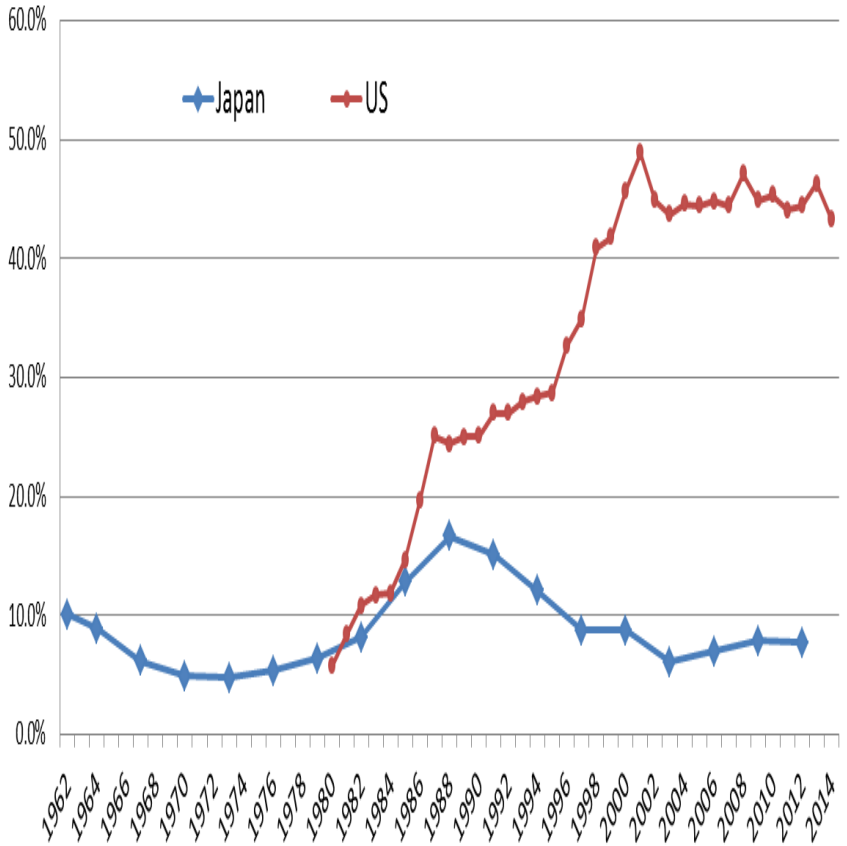
Net return per year for 15years 1.6%

		Gross return on investment		Net return of individual investers		Sales charges		Trust remunerations
Switching funds every 2.8years	A_0=100	R 43.31	=	A_T-A_0 14.65	+	τ 12.13	+	ε 16.53

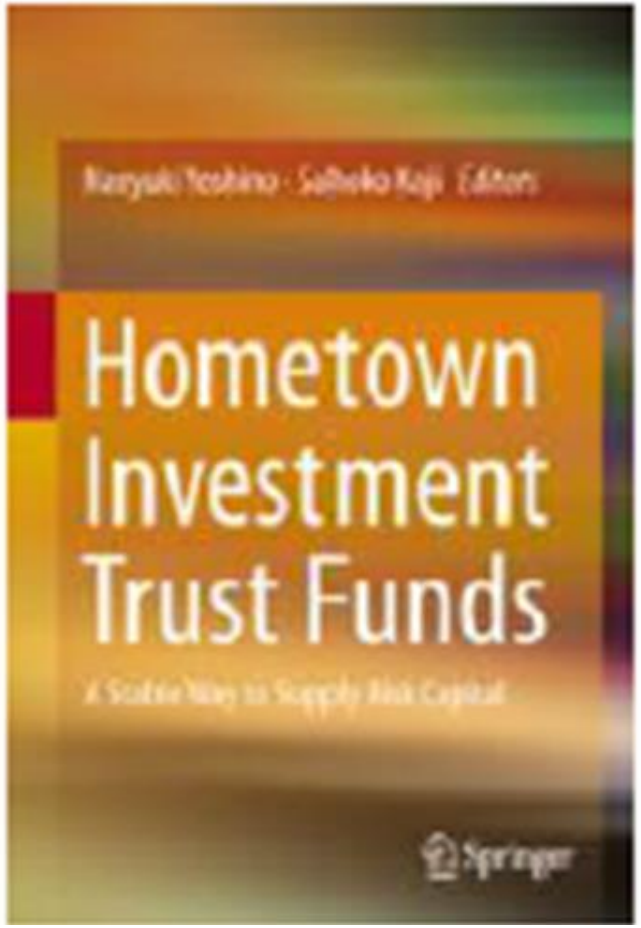
Net return per year for 15years 0.97%

		Gross return on investment		Net return of individual investers		Sales charges		Trust remunerations
Switching funds every 2.0years	A_0=100	R 42.99	=	A_T-A_0 10.47	+	τ 16.32	+	ε 16.20

Net return per year for 15years 0.69%



Possible Solutions
Start up businesses, farmers



Hometown Investment Trust Funds

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A Stable Way to Supply Risk Capital

Yoshino, Naoyuki; Kaji Sahoko (Eds.)
2013, IX, 98 p. 41 illus.,20 illus. in color

Available Formats:

ebook
Hardcover
Springer

Japan, Cambodia Vietnam, Peru

Agricultural Funds

Beans and Wine

Dec 11 2013 , Tehran - I
IRAN

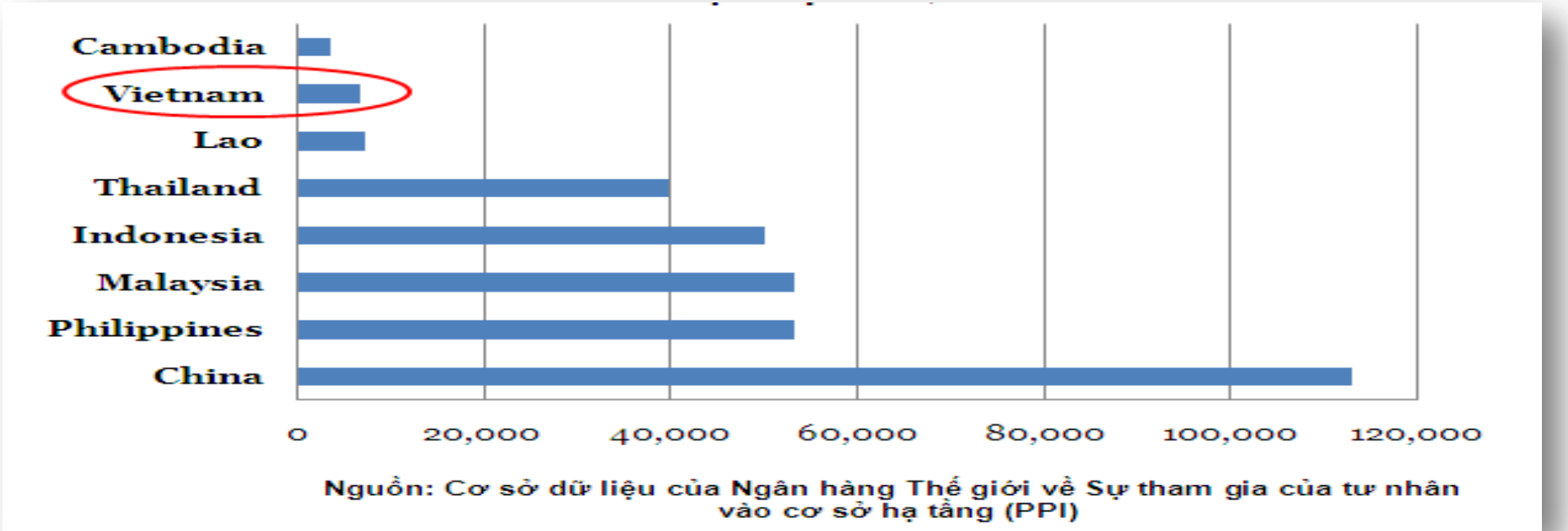
Demand of investment capital for infrastructure in ASIA

Average annual infrastructure investment supply: ~USD 8 billion

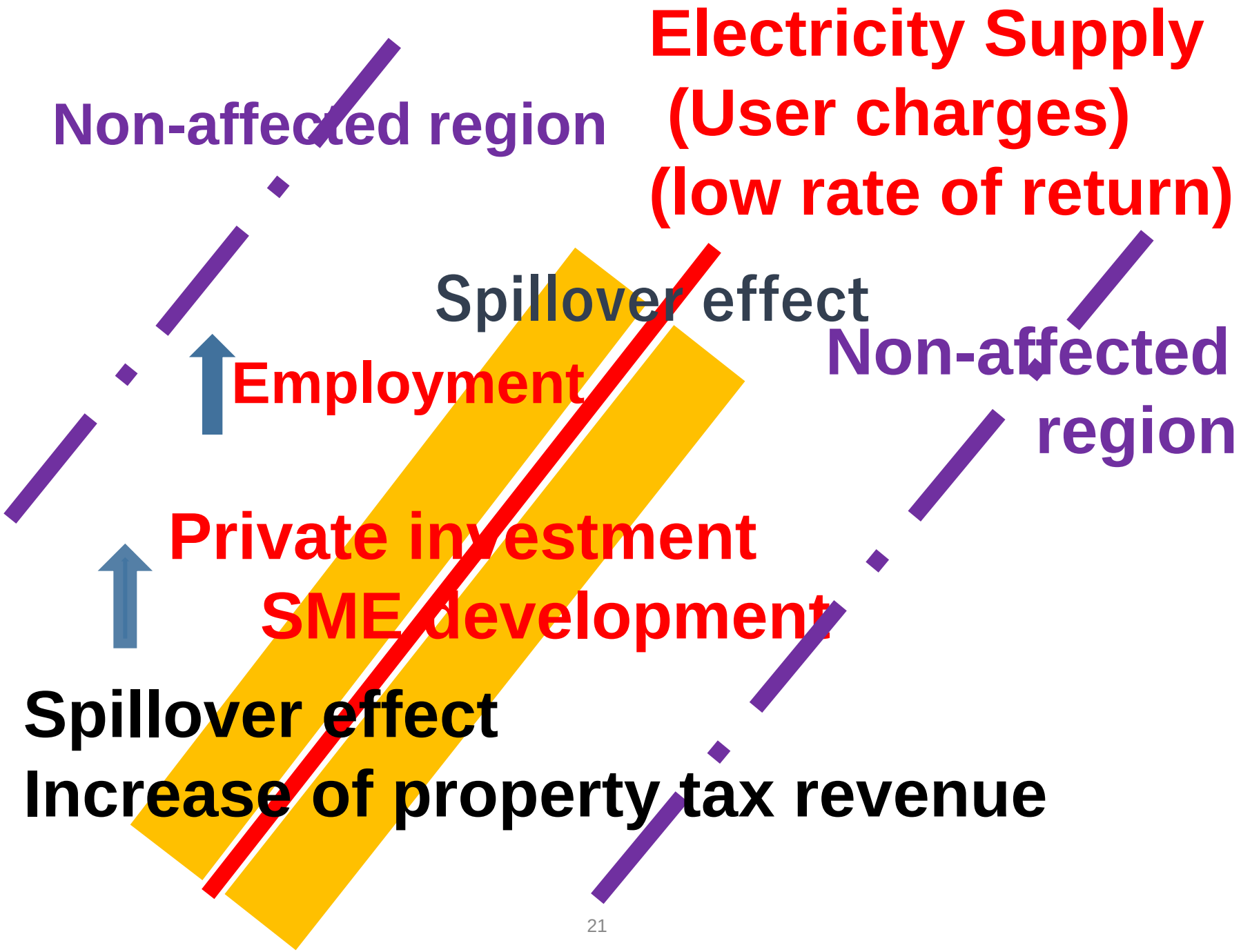
Shortage of funds

Average annual infrastructure investment demand: ~ USD 40 billion

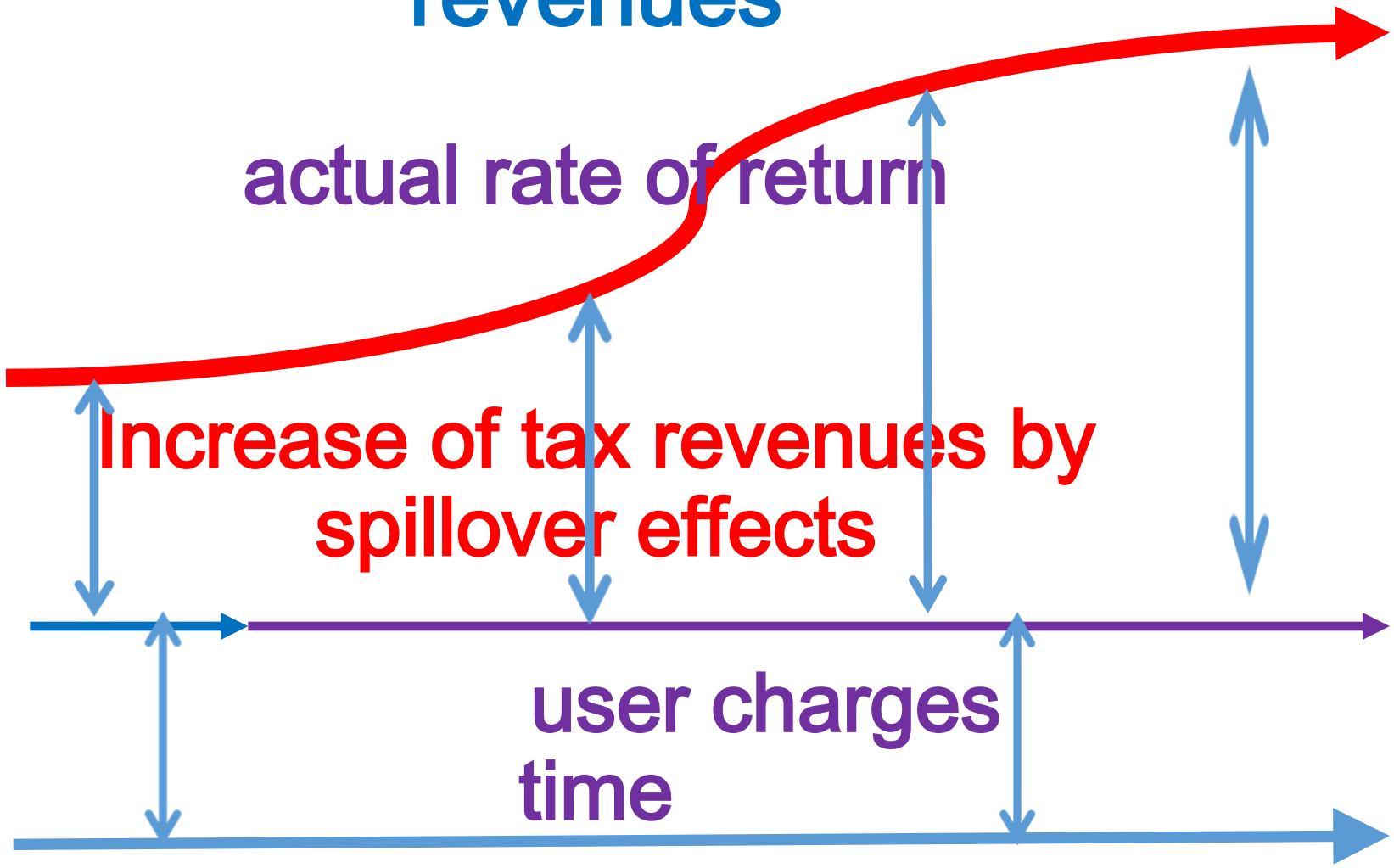
Shortage of funds ~ USD 40 billion



Nguồn: Cơ sở dữ liệu của Ngân hàng Thế giới về Sự tham gia của tư nhân vào cơ sở hạ tầng (PPI)


Electricity Supply
(User charges)
(low rate of return)
Non-affected region
Spillover effect
Employment
Non-affected
region
Private investment
SME development
Spillover effect
Increase of property tax revenue

Injection of Increased Tax revenues



The Southern Tagalog Arterial Road (STAR Highway), Philippines, Manila

Tax Revenues in three cities

Yoshino and Pontines (2015) ADBI Discussion paper 549

表 8　フィリピンの STAR 高速道路の影響のない地域と比較した事業税の増加額

（単位：100 万ペソ）

	t_{-2}	t_{-1}	t_0	t_{+1}	t_{+2}	t_{+3}	t_{+4}以降
Lipa 市	134.36	173.50	249.70	184.47	191.81	257.35	371.93
Ibaan 市	5.84	7.04	7.97	6.80	5.46	10.05	12.94
Batangas 市	490.90	622.65	652.83	637.89	599.49	742.28	1208.61

（出所）Yoshino and Pontines (2015)より筆者作成

Completion

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