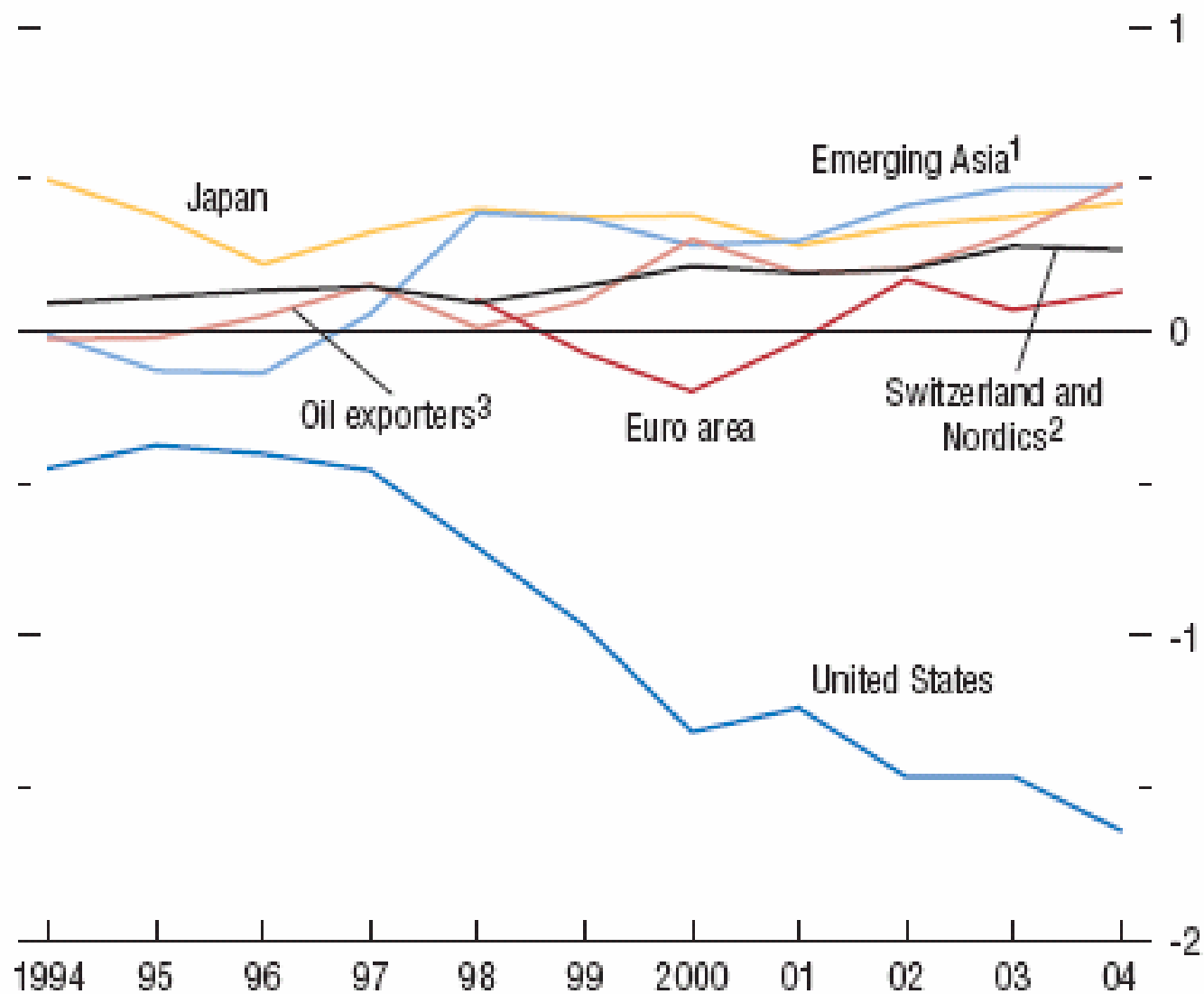
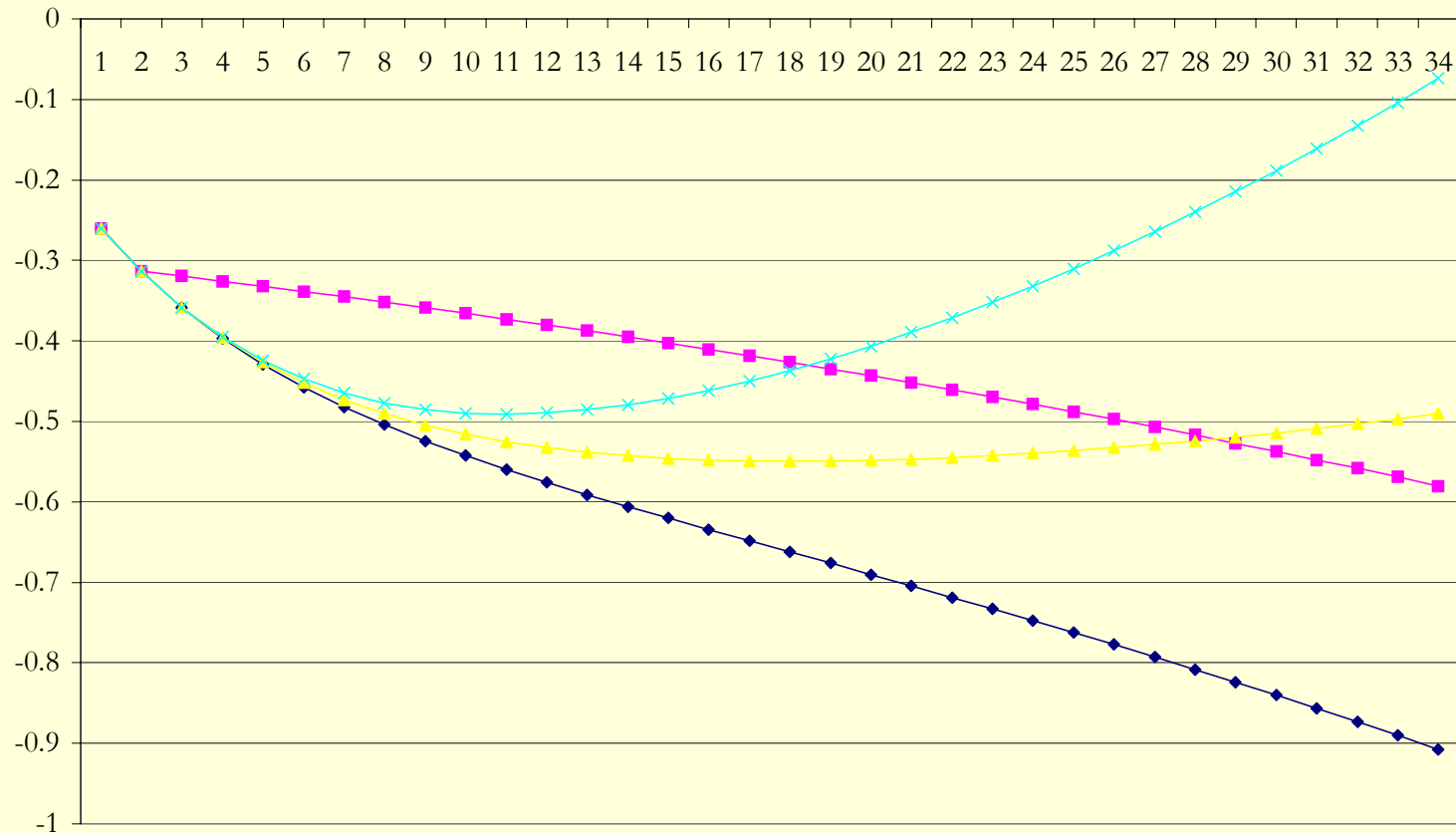


Current Account Balances



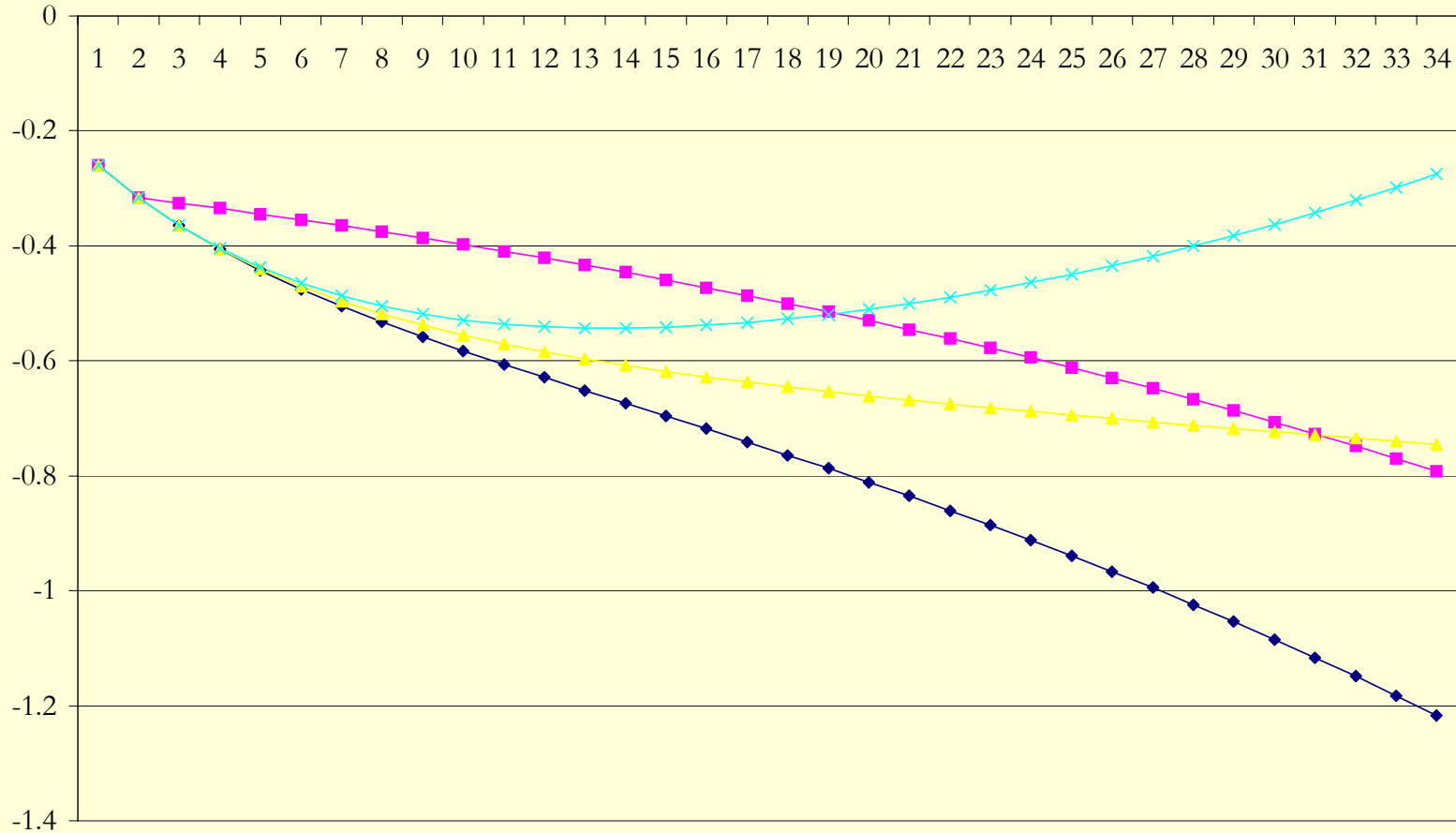
Debt Dynamics, $g=.03$, $r=.05$

$$k_{t+1}^f = \frac{tb_t}{1+g} + \frac{1+r}{1+g} k_t^f$$



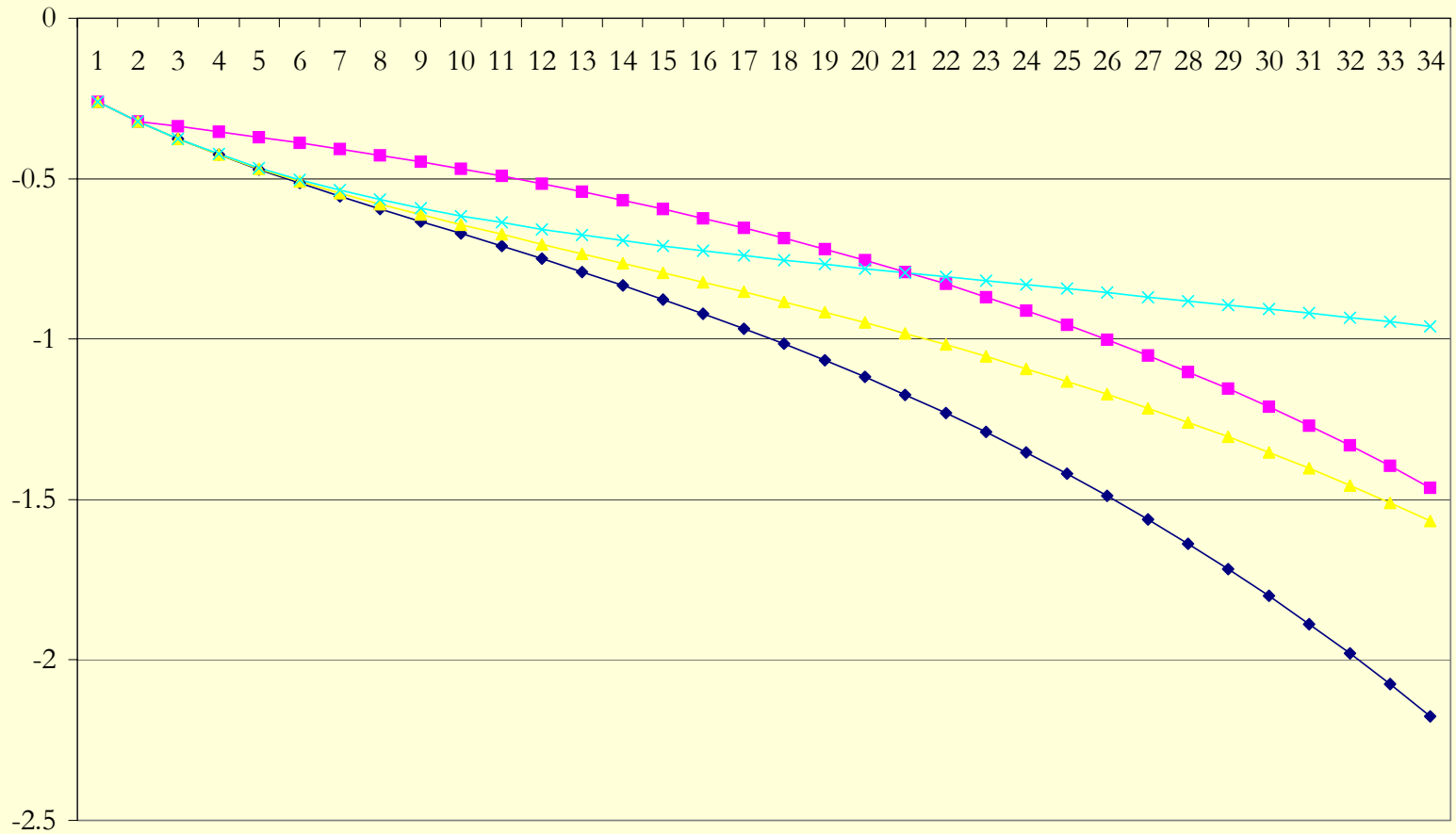
Debt Dynamics, $g=.03$, $r=.06$

$$k_{t+1}^f = \frac{tb_t}{1+g} + \frac{1+r}{1+g} k_t^f$$



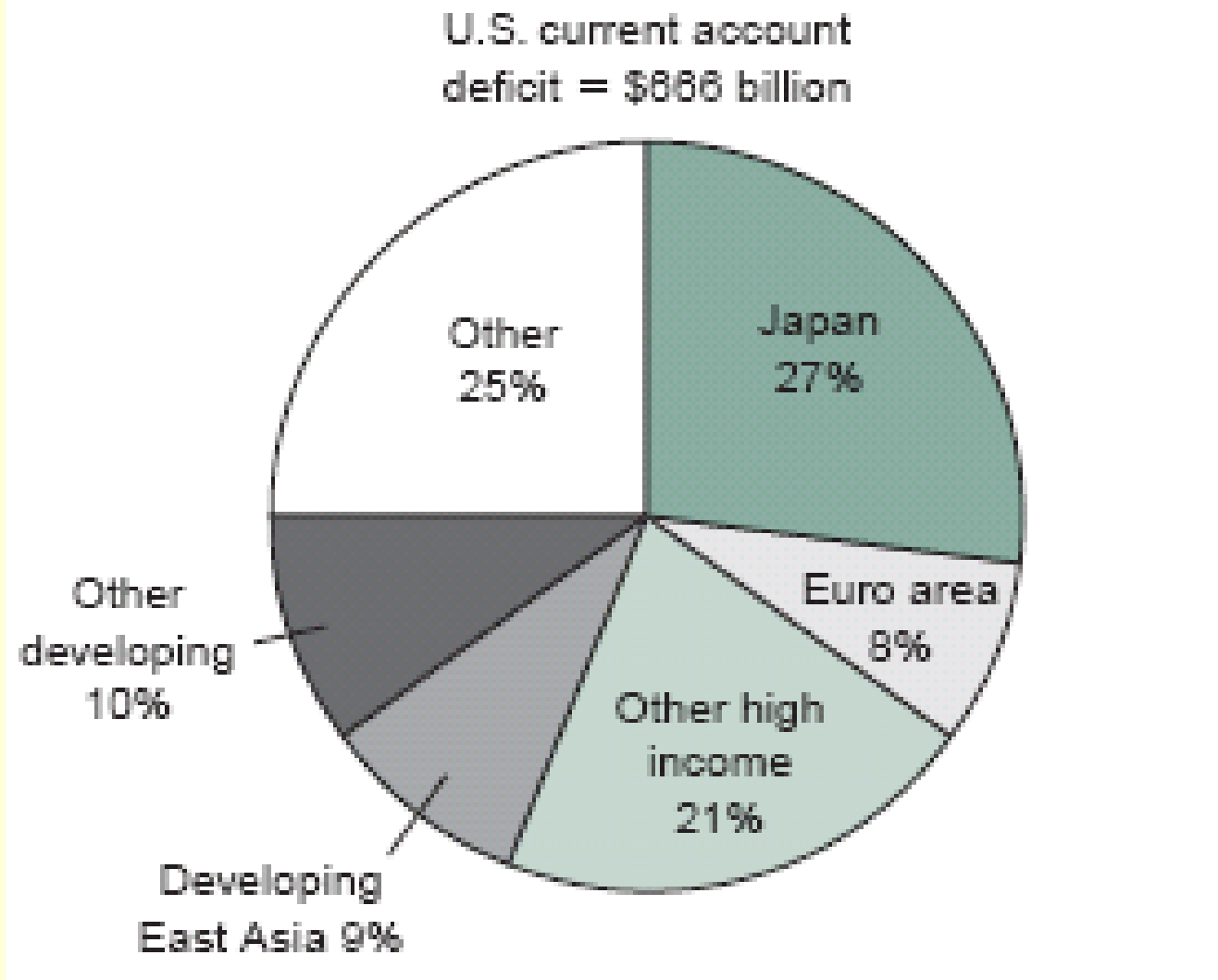
Debt Dynamics, $g=.03$, $r=.08$

$$k_{t+1}^f = \frac{tb_t}{1+g} + \frac{1+r}{1+g} k_t^f$$

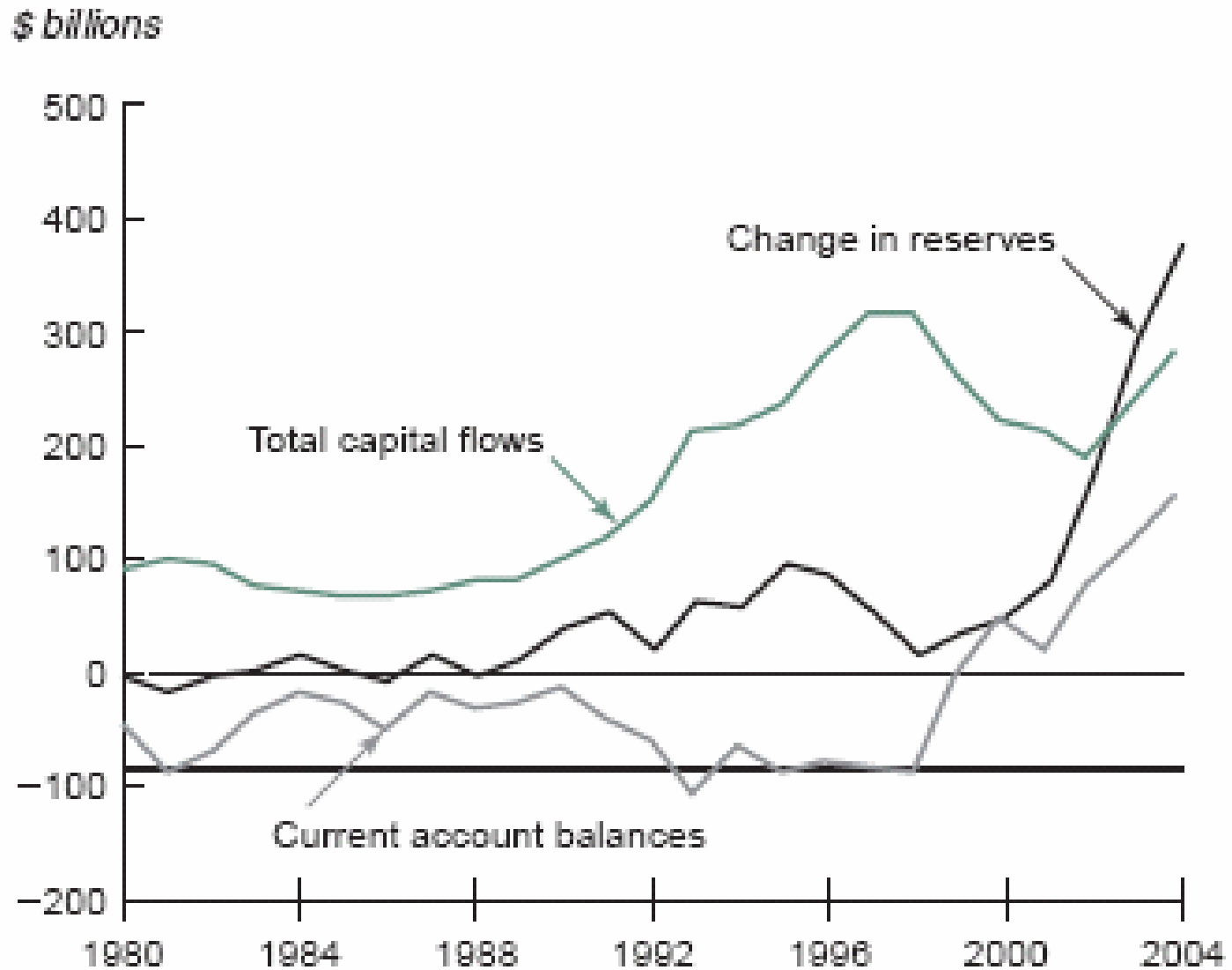


World Current Account Surpluses, 2004

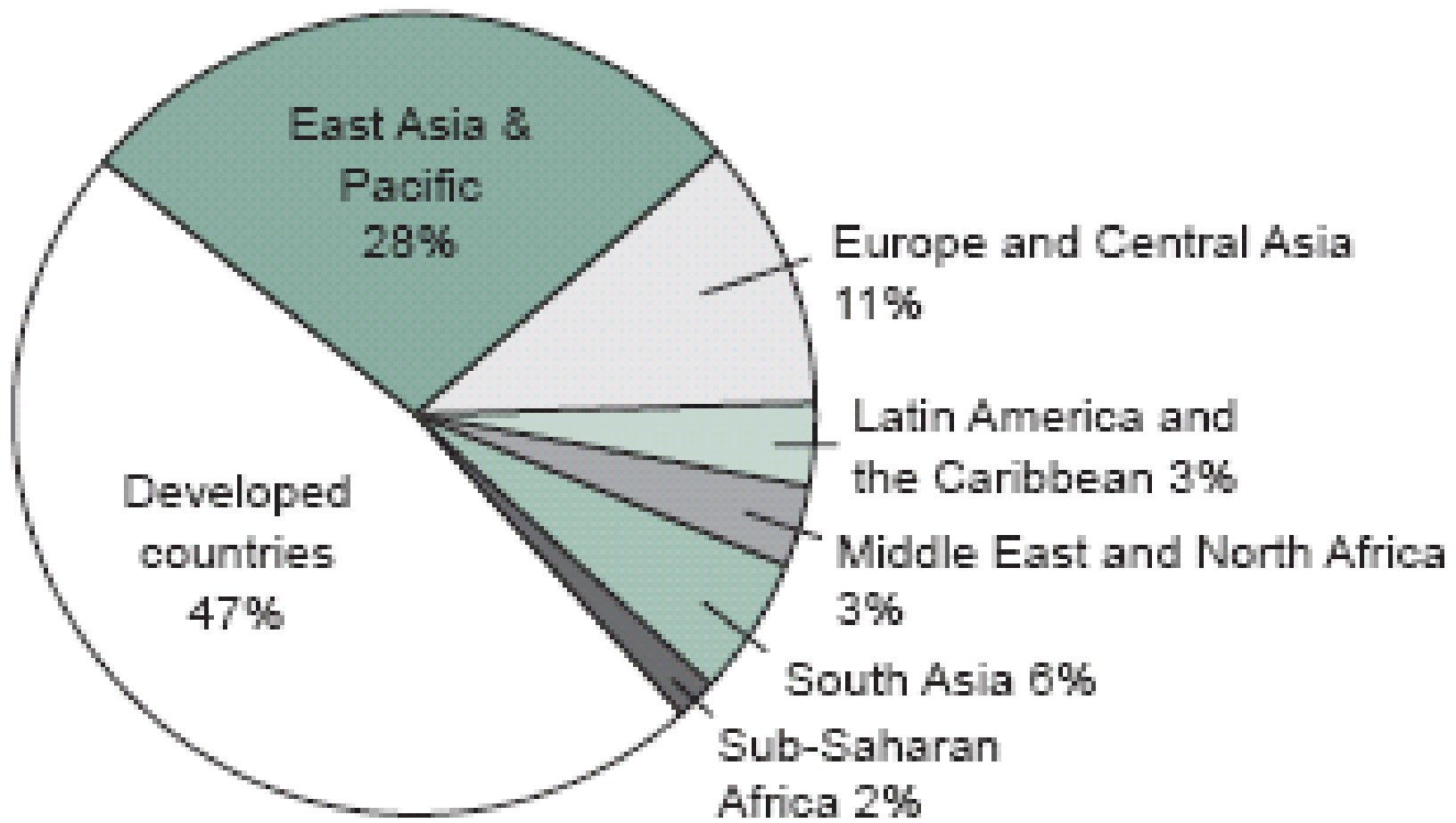
(percent of US deficit)



Capital Flows, Reserve Accumulation and Current Account Balances in Developing Countries



Global Foreign Exchange Reserve Accumulation



Net Foreign Assets, Percent of World GDP

Percent of World GDP

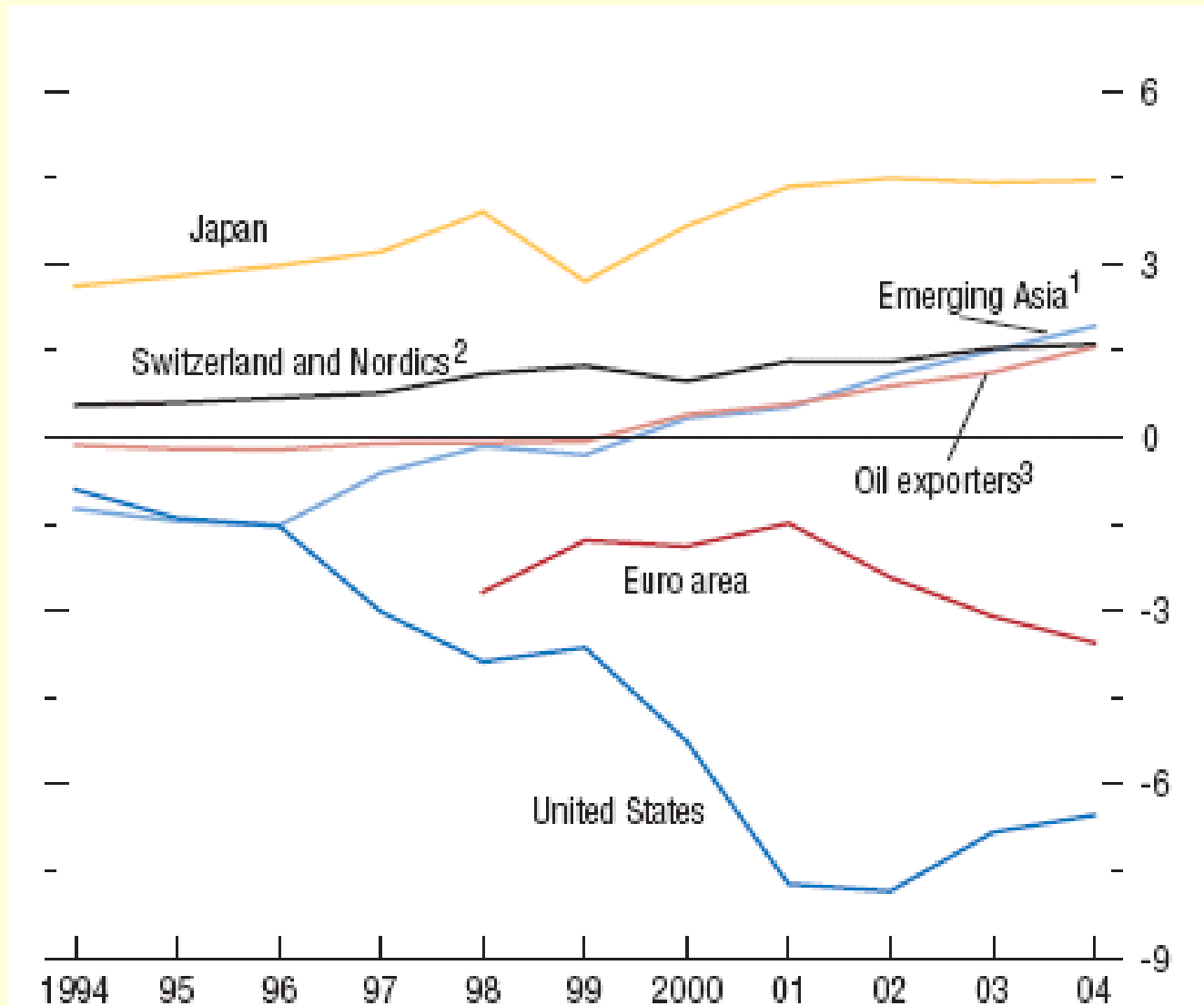
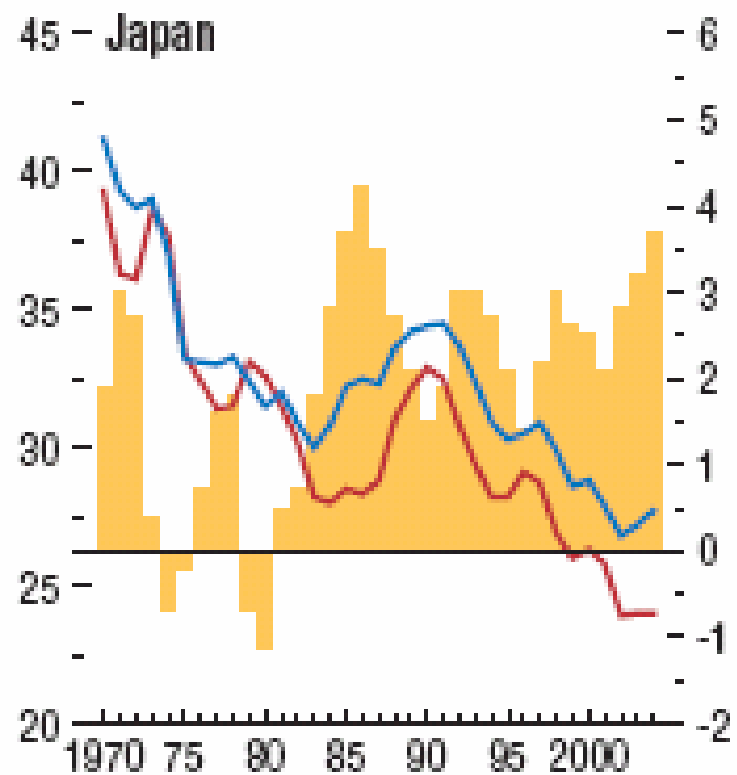
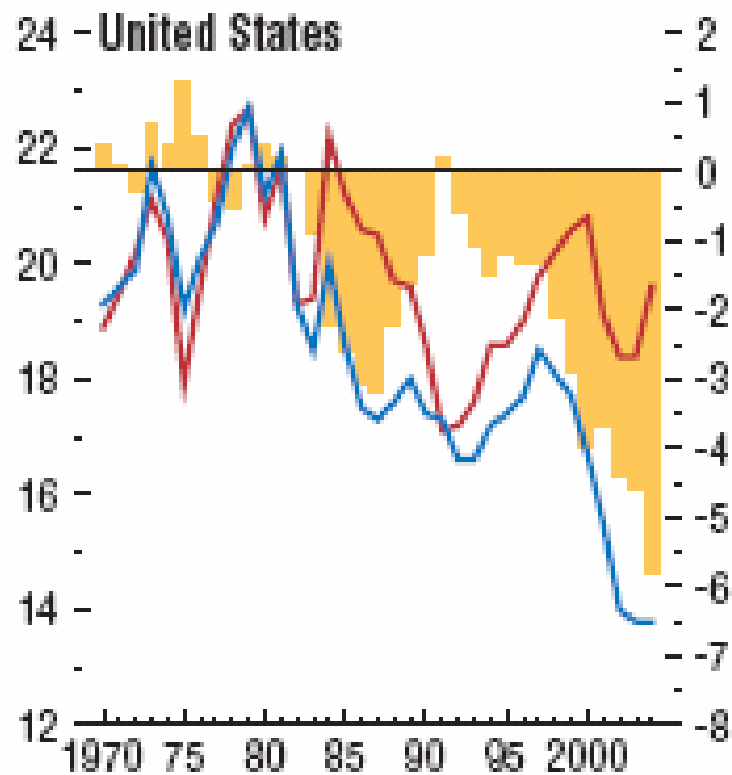


Table 1. Global Current Account Balances, 1996 and 2003 (Billions of U.S. dollars)

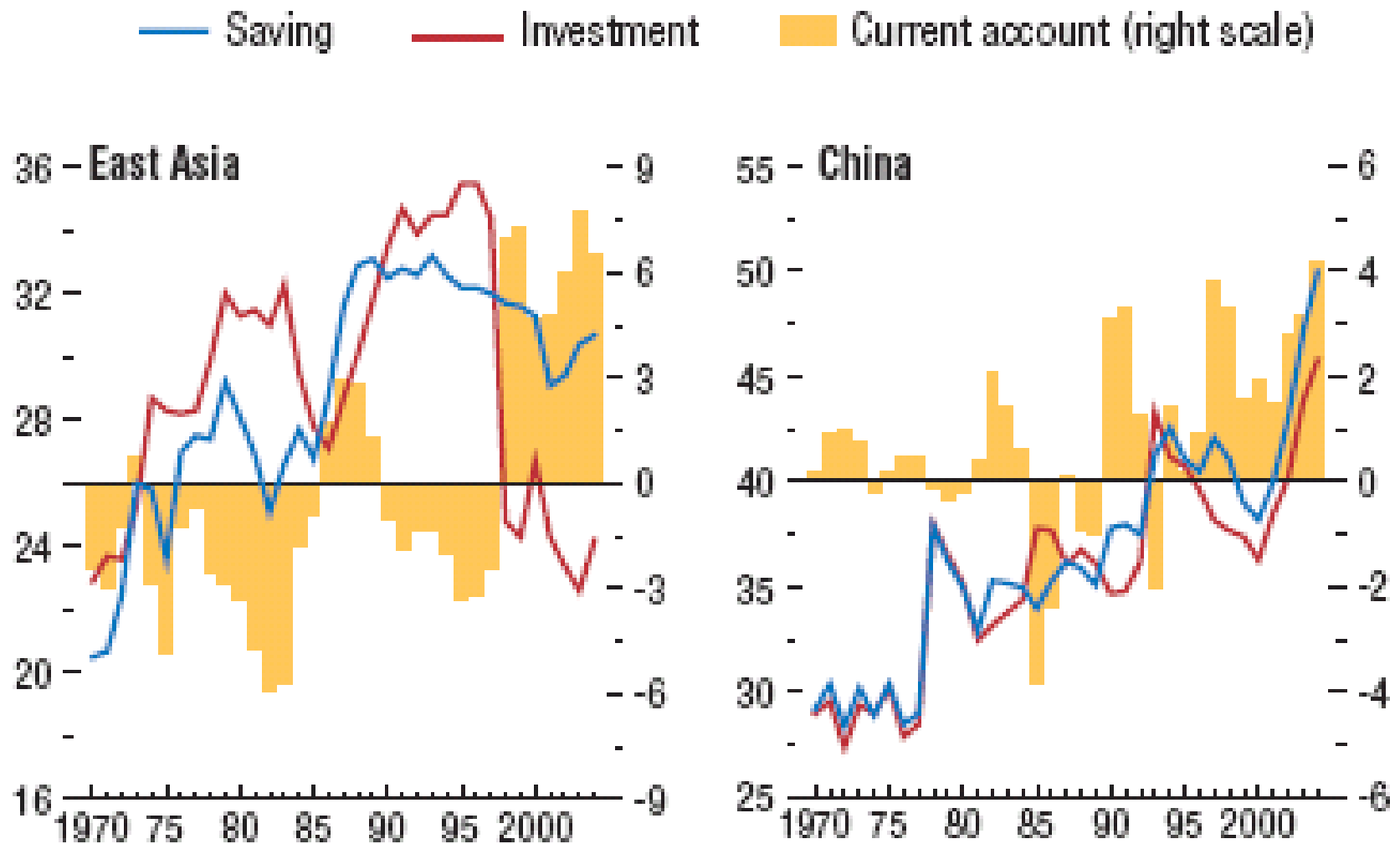
Countries	1996	2003
Industrial	46.2	-342.3
United States	-120.2	-530.7
Japan	65.4	138.2
Euro Area	88.5	24.9
France	20.8	4.5
Germany	-13.4	55.1
Italy	39.6	-20.7
Spain	0.4	-23.6
Other	12.5	25.3
Australia	-15.8	-30.4
Canada	3.4	17.1
Switzerland	21.3	42.2
United Kingdom	-10.9	-30.5
Developing	-87.5	205.0
Asia	-40.8	148.3
China	7.2	45.9
Hong Kong	-2.6	17.0
Korea	-23.1	11.9
Taiwan	10.9	29.3
Thailand	-14.4	8.0
Latin America	-39.1	3.8
Argentina	-6.8	7.4
Brazil	-23.2	4.0
Mexico	-2.5	-8.7
Middle East and Africa	5.9	47.8
E. Europe and the former Soviet Union	-13.5	5.1
Statistical discrepancy	41.3	137.

Savings Falls in US, Investment in Japan

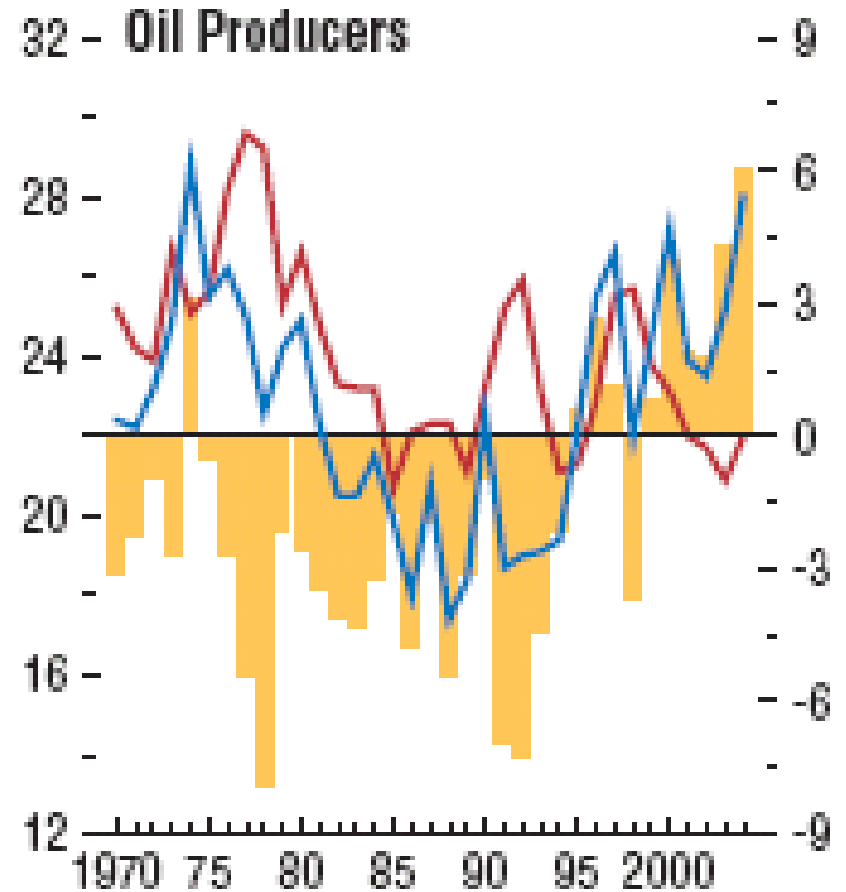
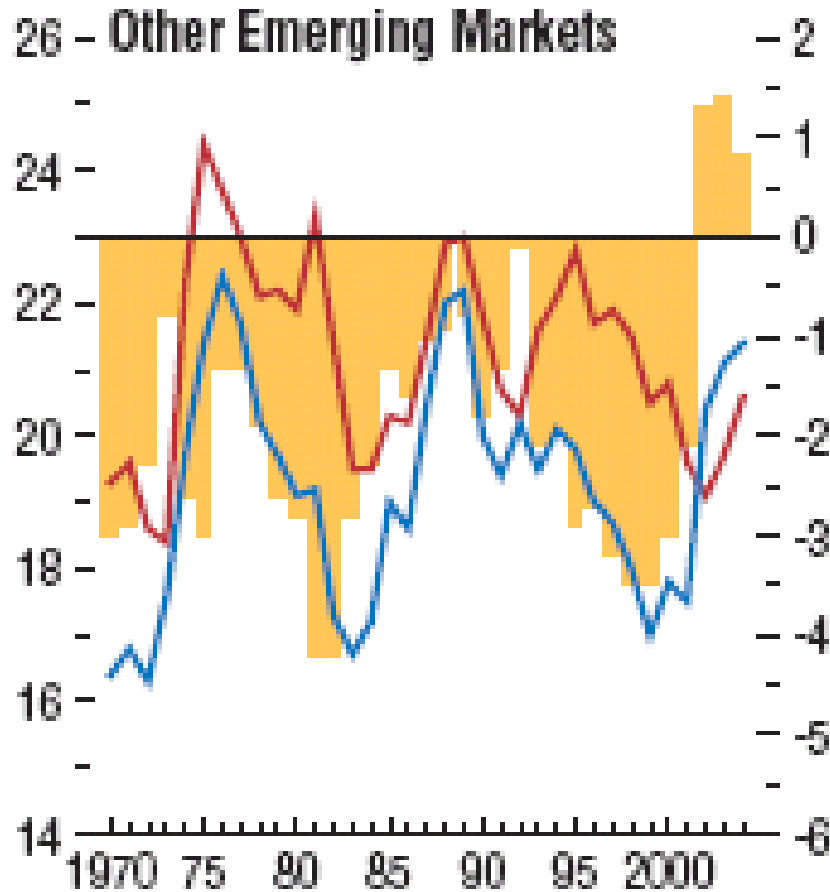
— Saving — Investment ■ Current account (right scale)



Savings and Investment in East Asia and China



S, I, in Other Emerging Market and Oil Producing Countries

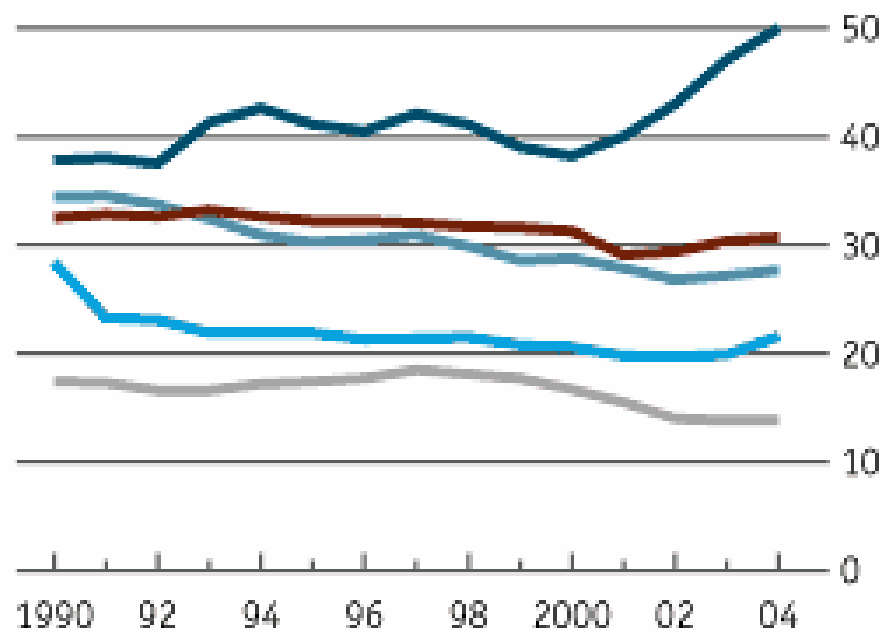


Champion Savers and Investors

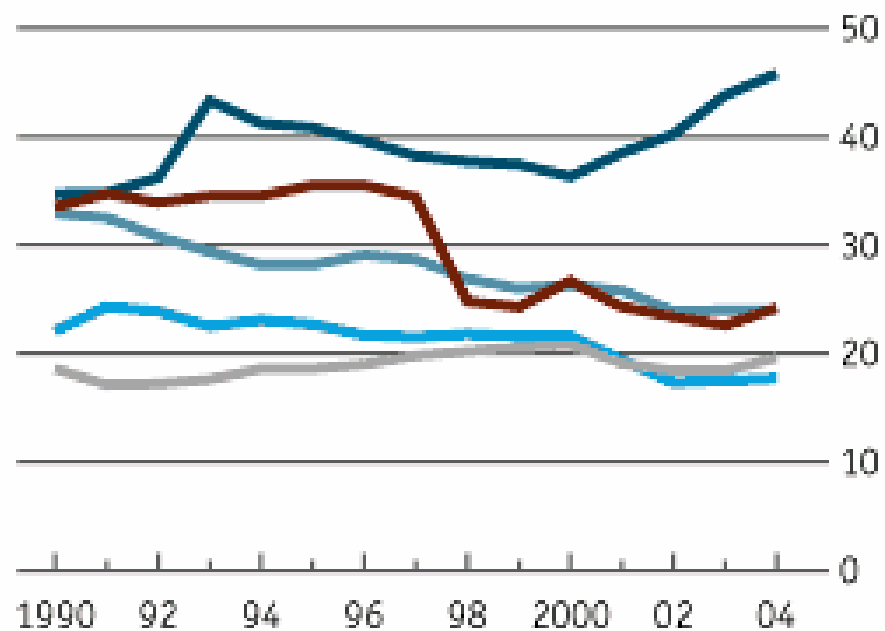
In a league of its own

China Japan Asia excluding China and Japan United States Germany

Gross national saving as % of GDP



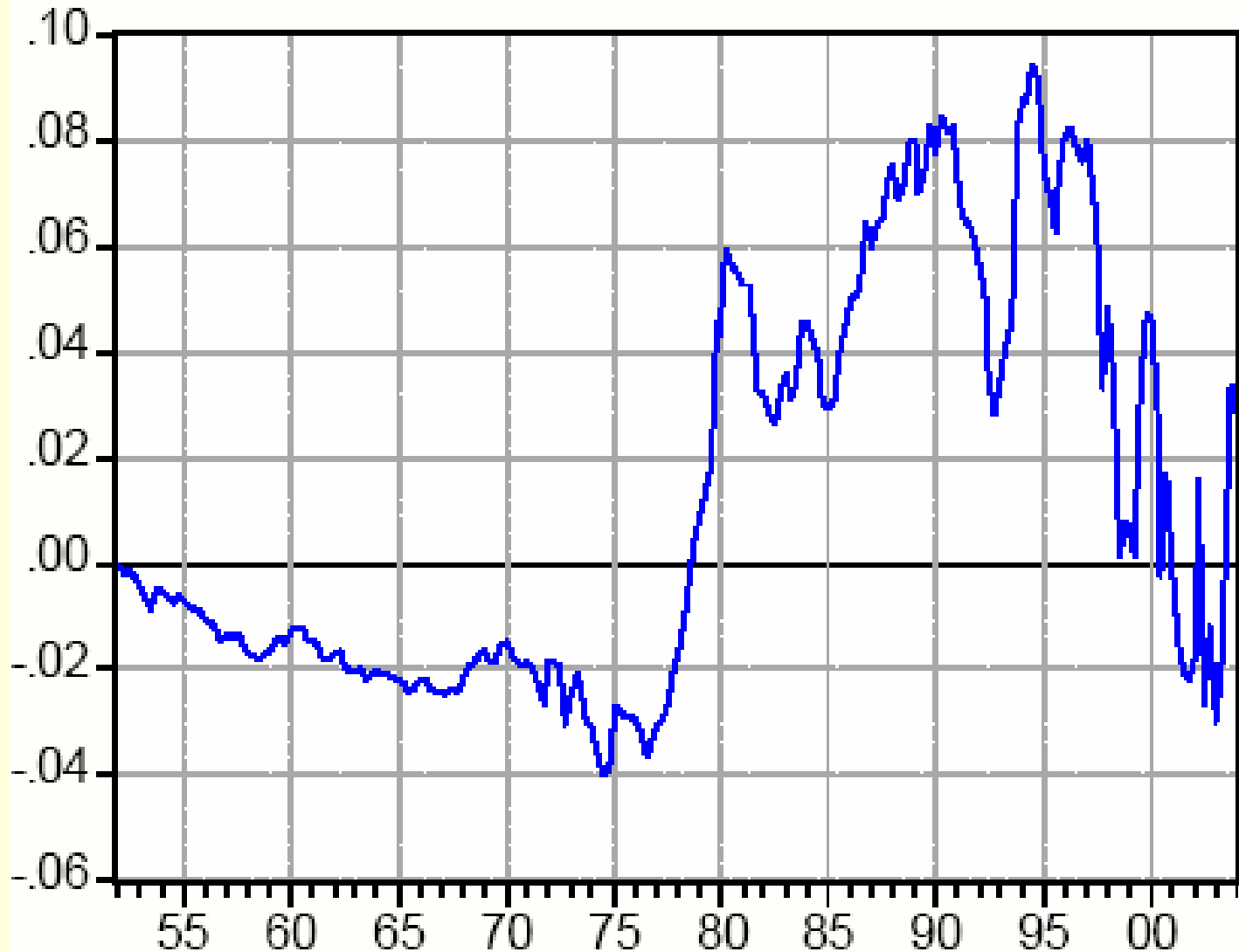
Gross domestic investment as % of GDP



Source: IMF

Net Valuation Component (relative to GDP)

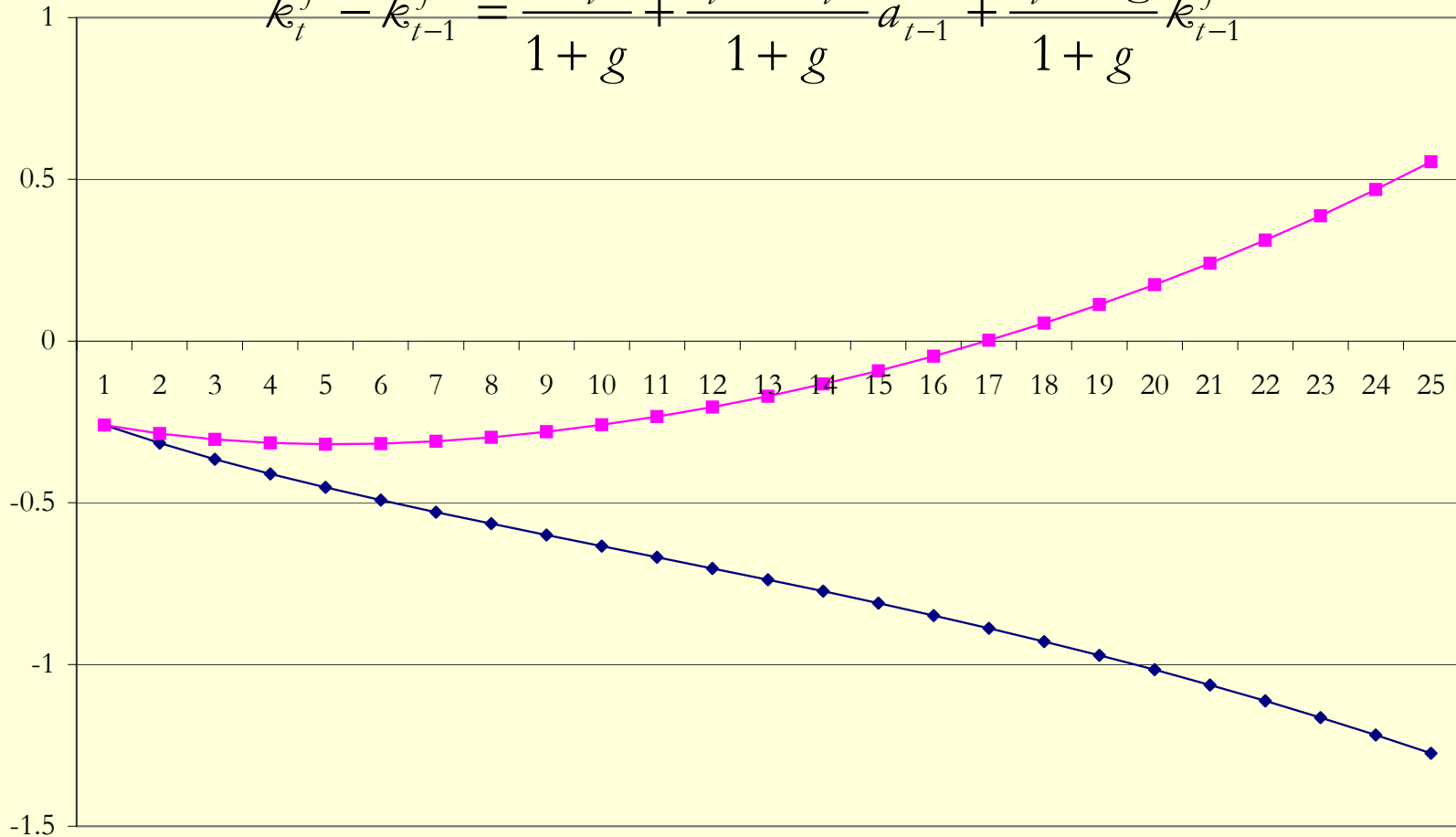
$$\equiv NFA^* - \sum CA$$



NFA and the Valuation Effect (3% of GDP)

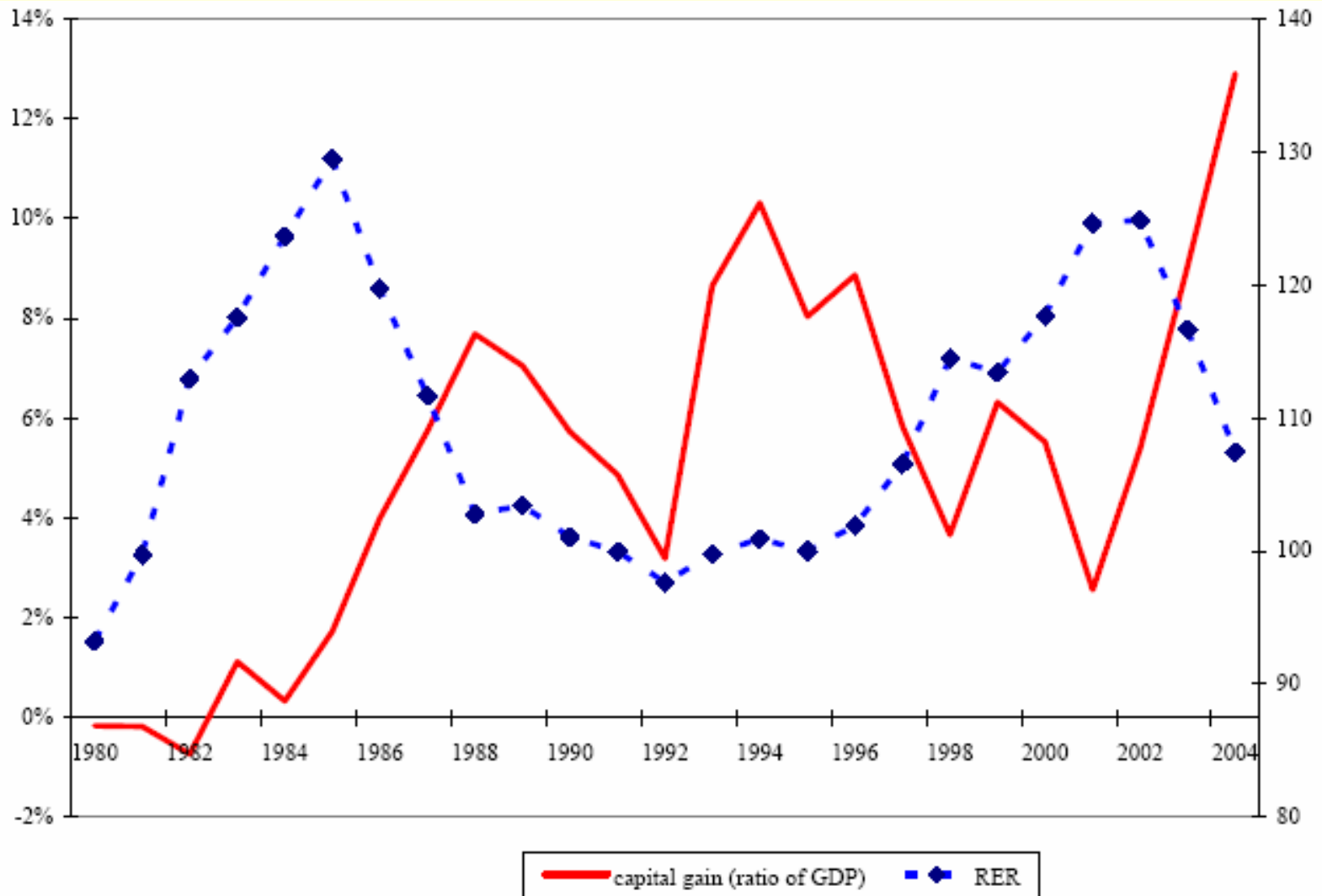
$r = .08, g = .02$

$$k_t^f - k_{t-1}^f = \frac{tb_t}{1+g} + \frac{r_t^A - r_t^L}{1+g} a_{t-1} + \frac{r_t^L - g}{1+g} k_{t-1}^f$$

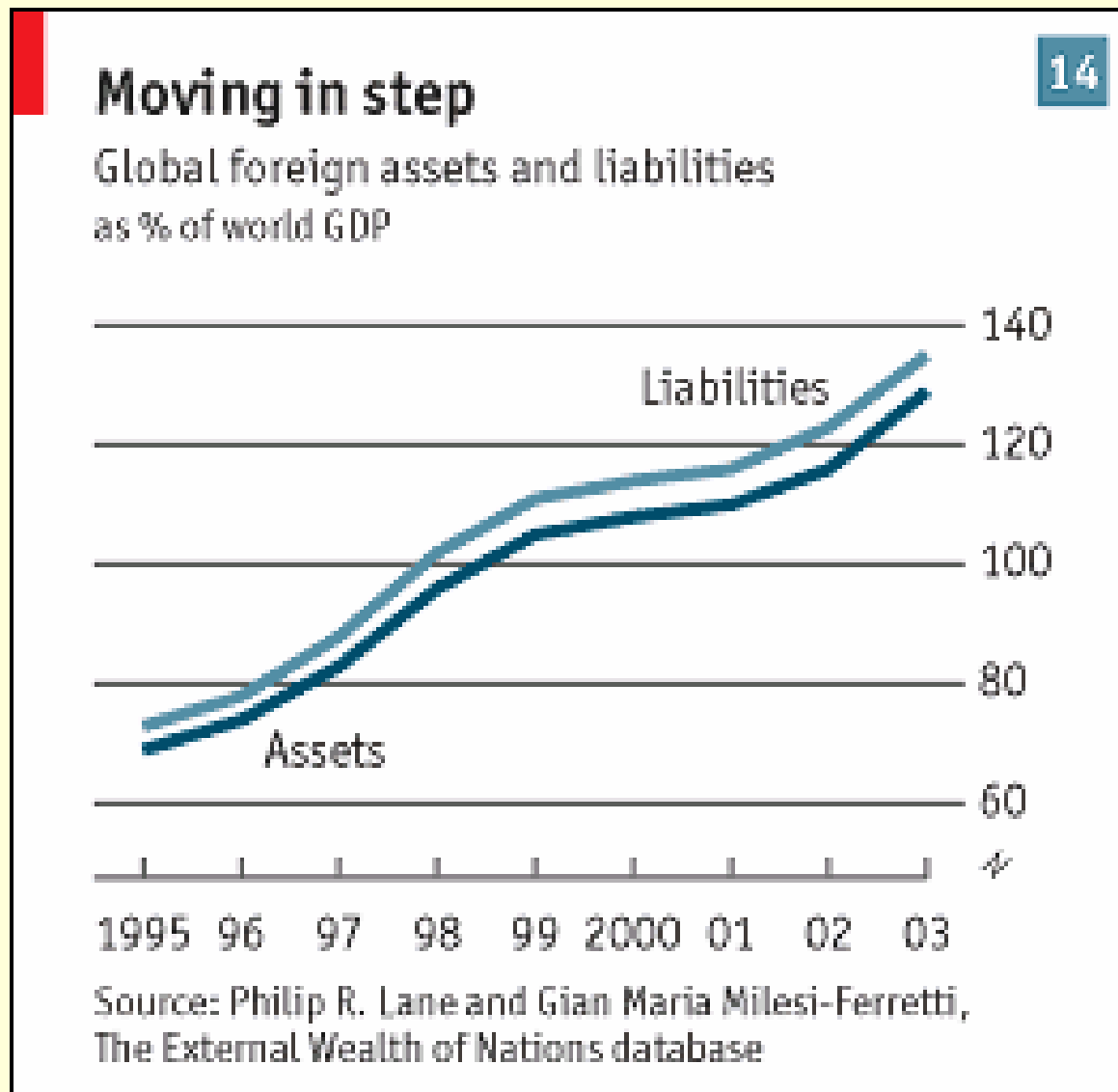


◆ nfa with gradual 1.5%
 ■ nfa with gradual 1.5% with 3% valuation effect

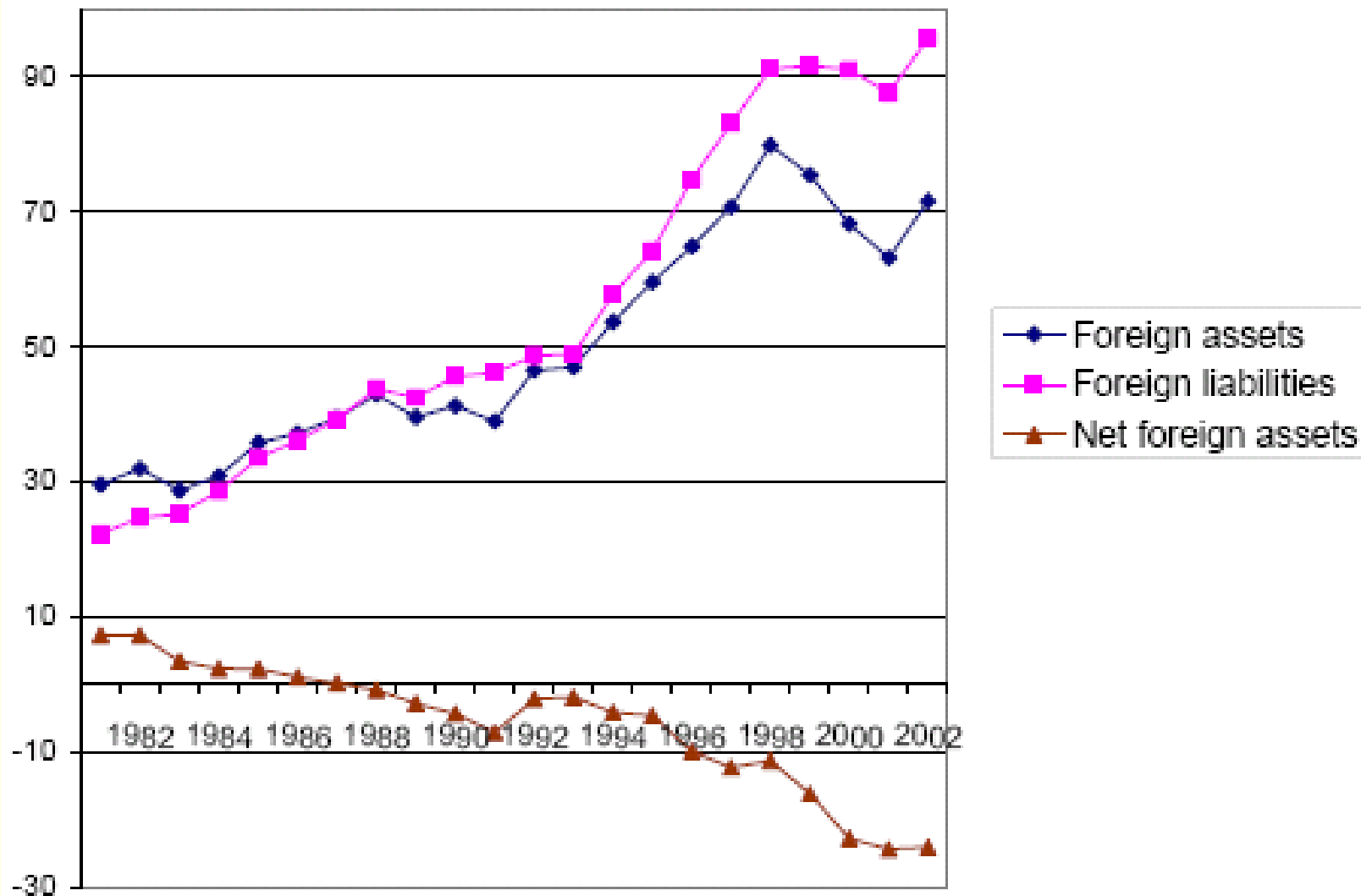
US Capital Gains and the Real Exchange Rate



Global Foreign Assets and Liabilities



US Foreign Assets, Foreign Liabilities, and Net Foreign Assets, 1982-2003 (percent of GDP)



International Investment Positions of Selected OECD Countries, 2003 (Ratio to GDP)

	Assets	Liabilities	Net Position
Canada	0.75	0.93	-0.18
France	1.79	1.72	0.07
Germany	1.48	1.41	0.06
Italy	0.95	1.00	-0.05
Japan	0.87	0.48	0.39
U.K.	3.26	3.29	-0.02
U.S.	0.71	0.96	-0.24
Switzerland	5.03	3.67	1.35
Euro Area	1.07	1.18	-0.10

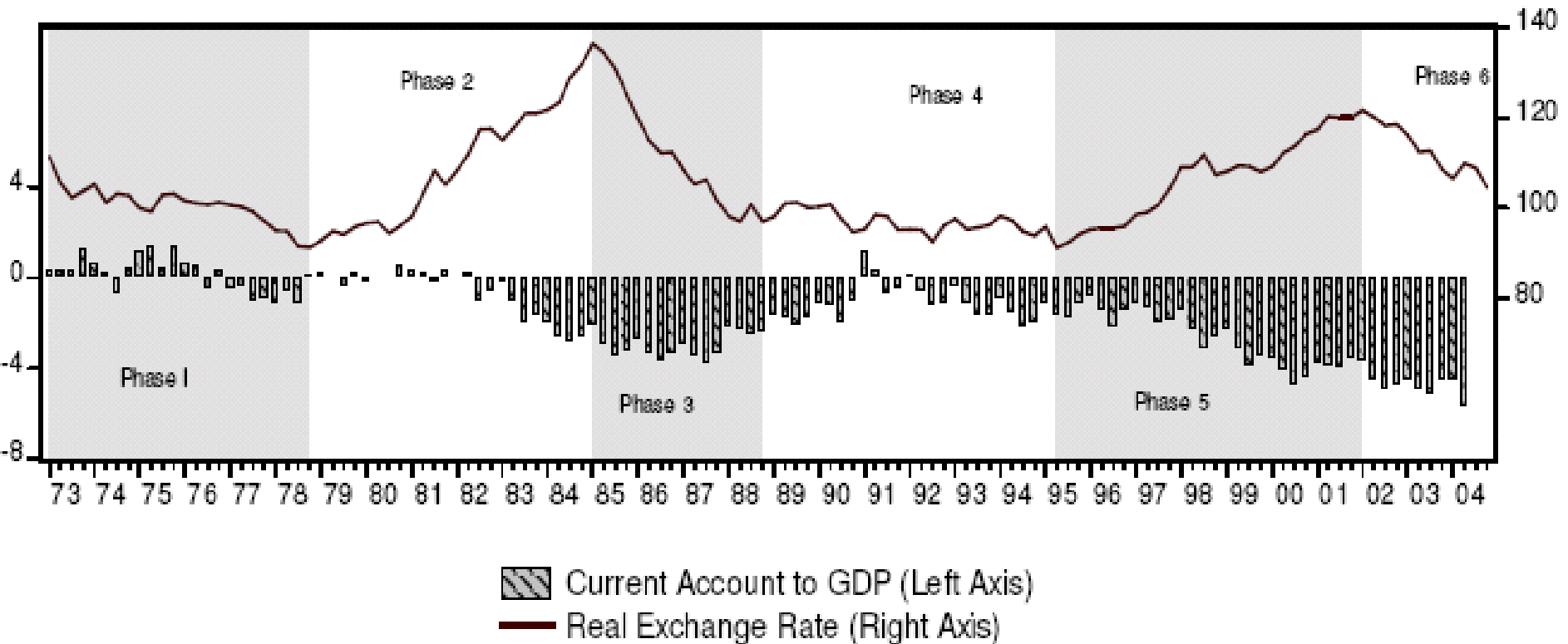
Source: International Monetary Fund, *International Financial Statistics*.

World Savings, US Current Account and Oil

	U.S. CA balance (% GDP)	World saving (% world GDP)	Oil price (\$/barrel)
1997	-1.6	24	19.27
1998	-2.4	23	13.08
1999	-3.2	23.2	17.98
2000	-4.2	23.9	28.24
2001	-3.8	23.2	24.33
2002	-4.5	23.1	24.95
2003	-4.8	23.9	28.89
2004	-5.7	24.9	37.76

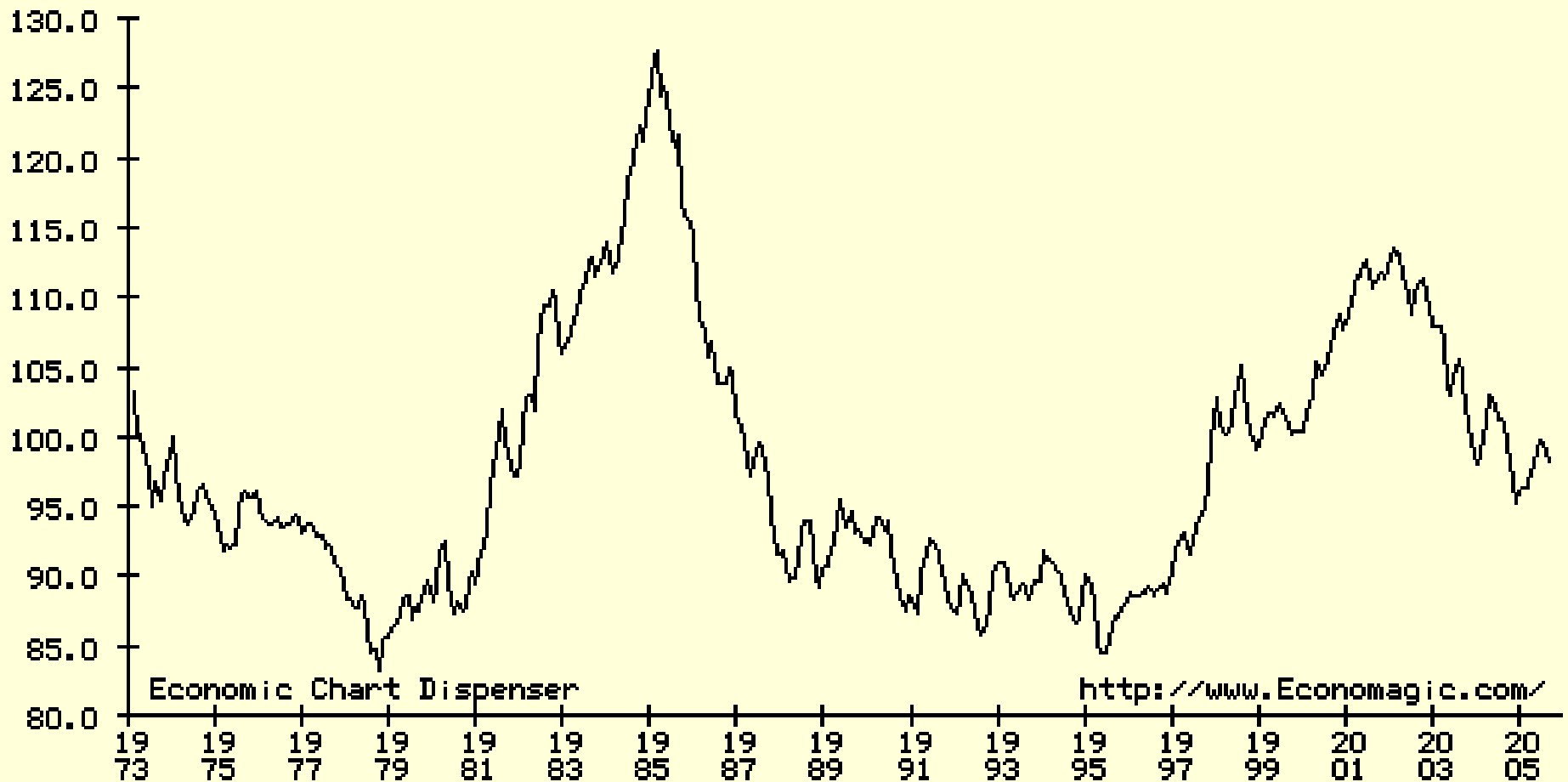
Source: International Monetary Fund, *World Economic Outlook*, various issues. The world saving measure is the weighted average of national gross saving rates, where country weights are the share of PPP-adjusted GDP in world PPP-adjusted GDP.

Real Exchange Rate and the Current Account

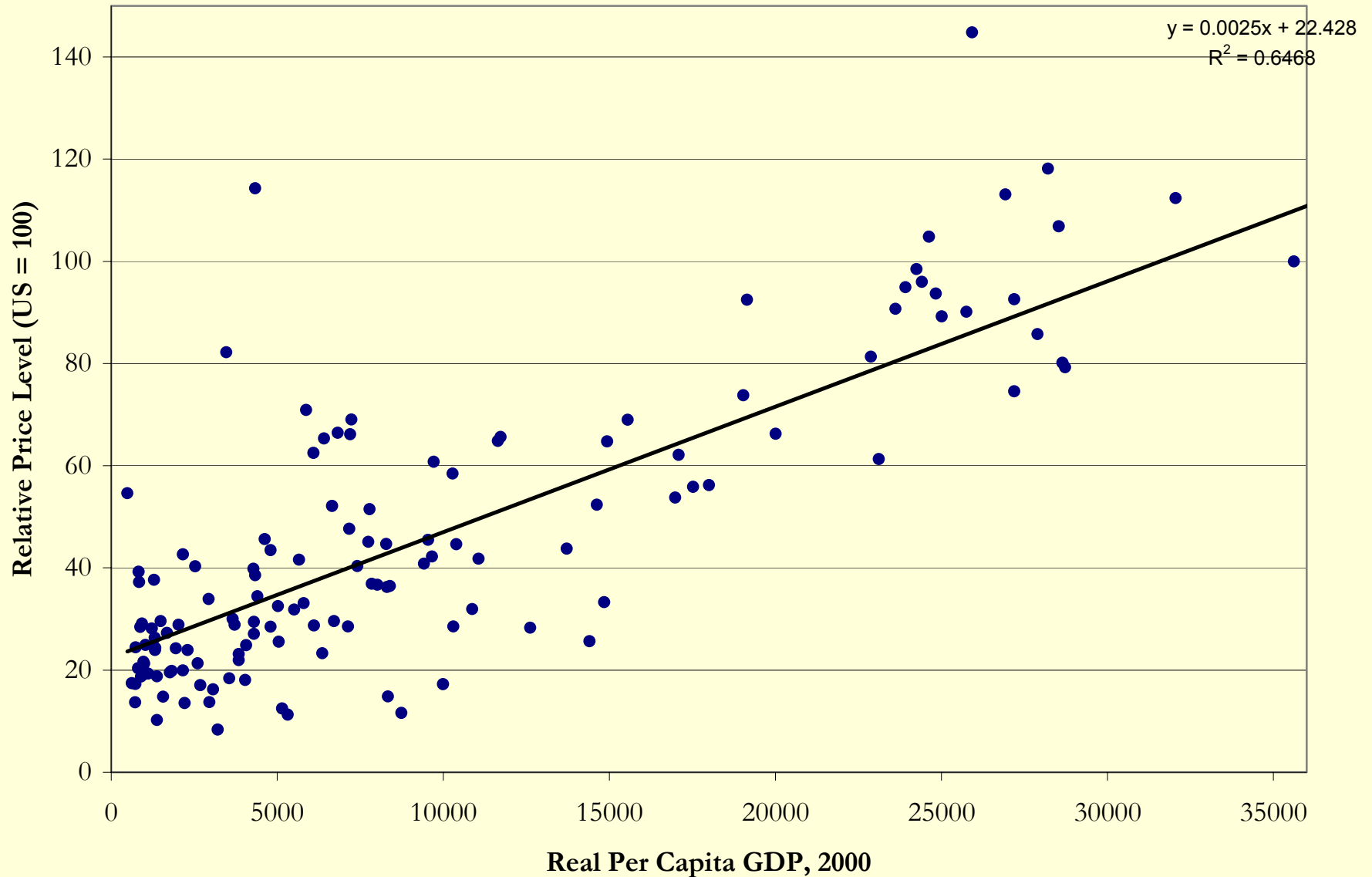


Real Exchange Rate

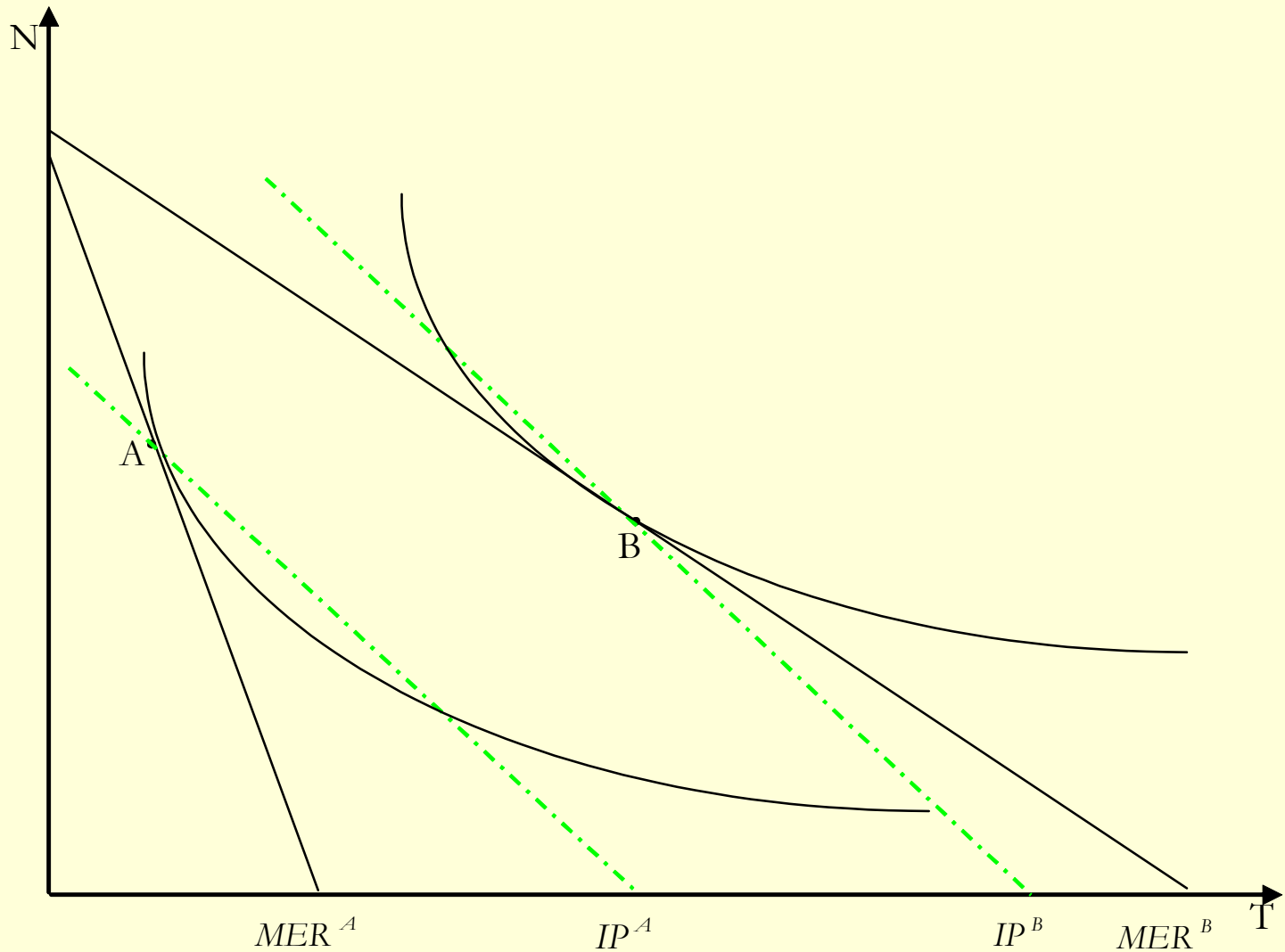
Dollar Index Price-adjusted Broad



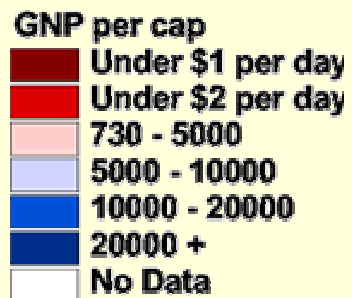
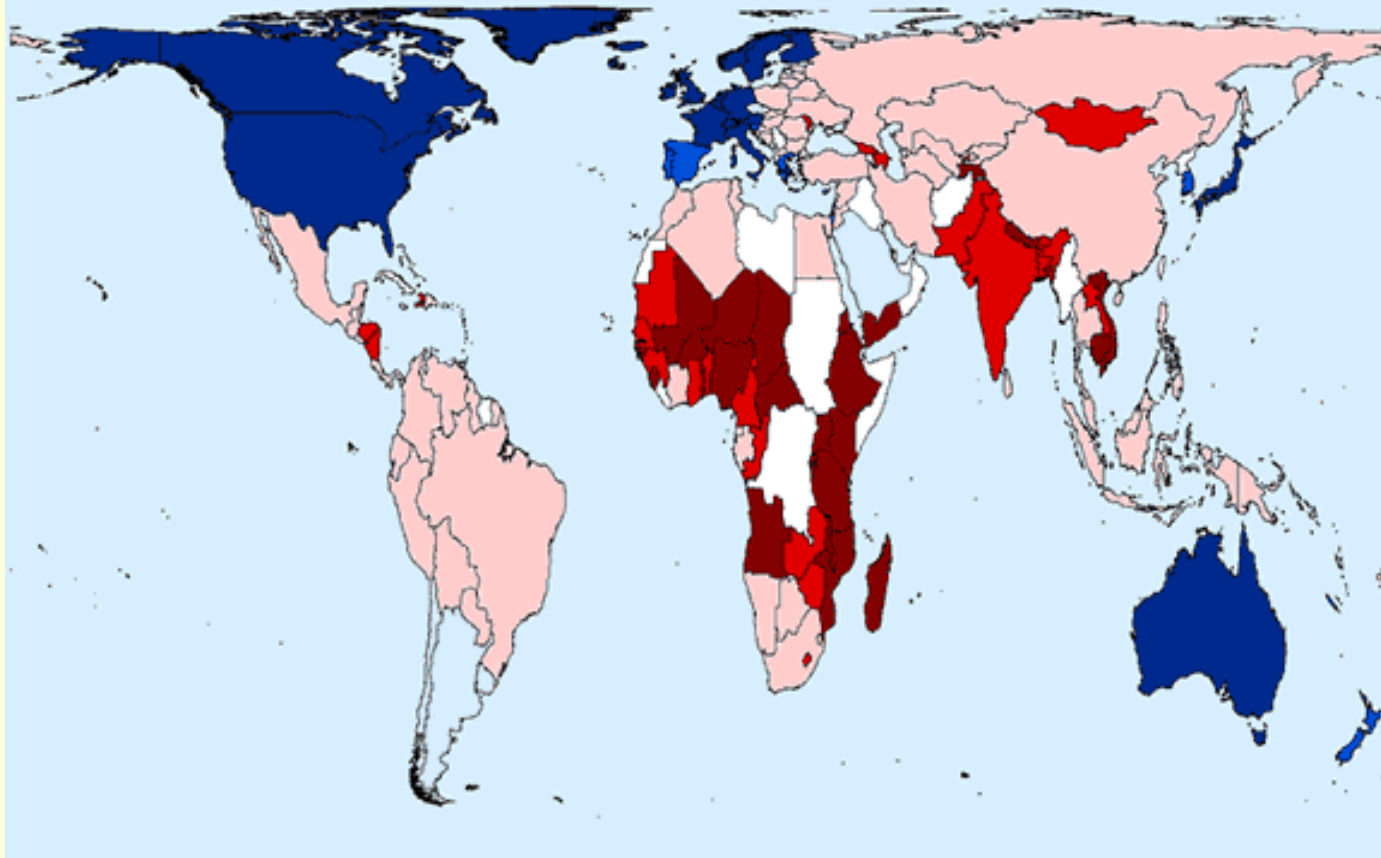
Real per capita incomes and the price level



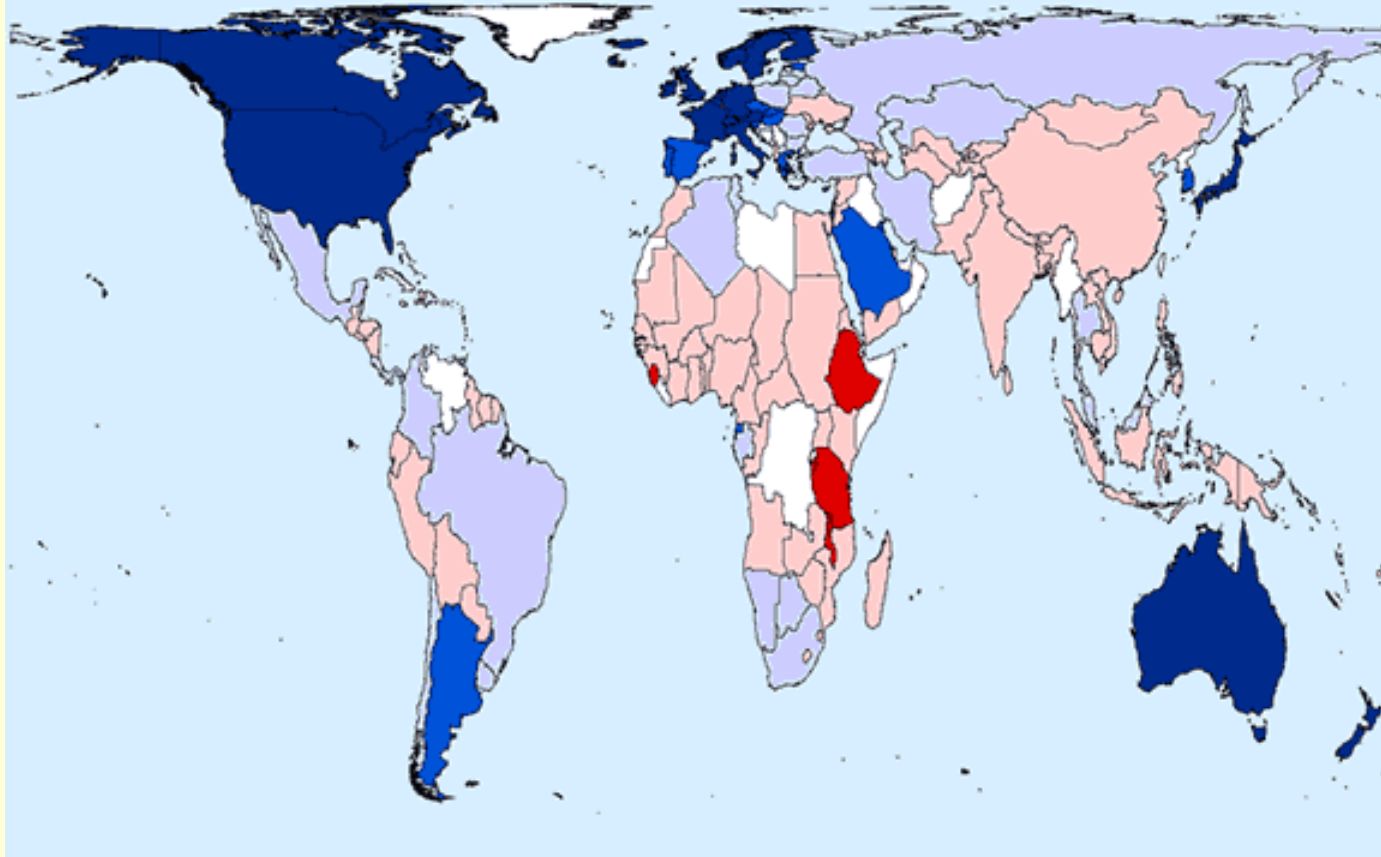
Market-Exchange Rate vs PPP Comparisons



GNP per capita 1999



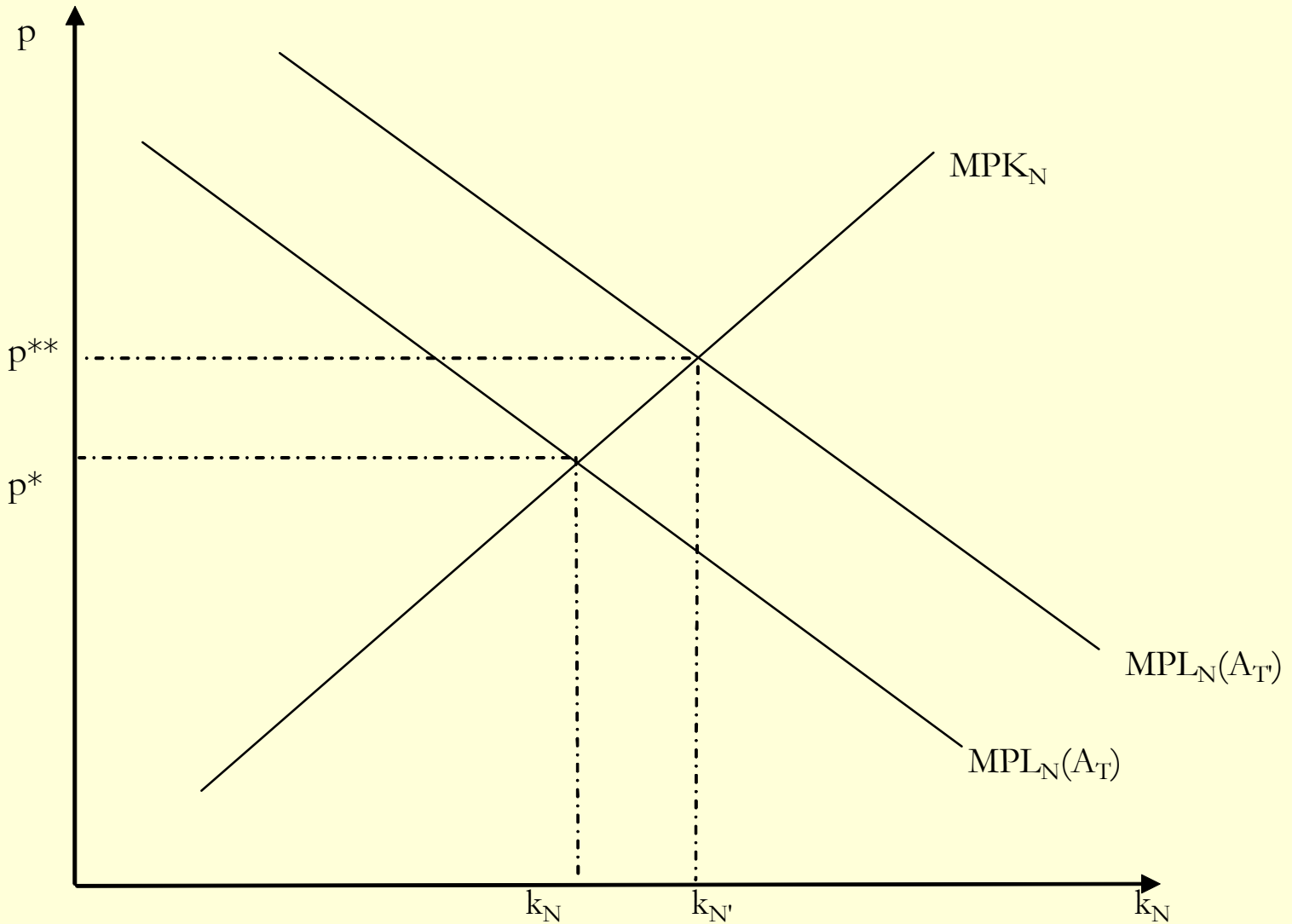
GDP (PPP) per capita 2000



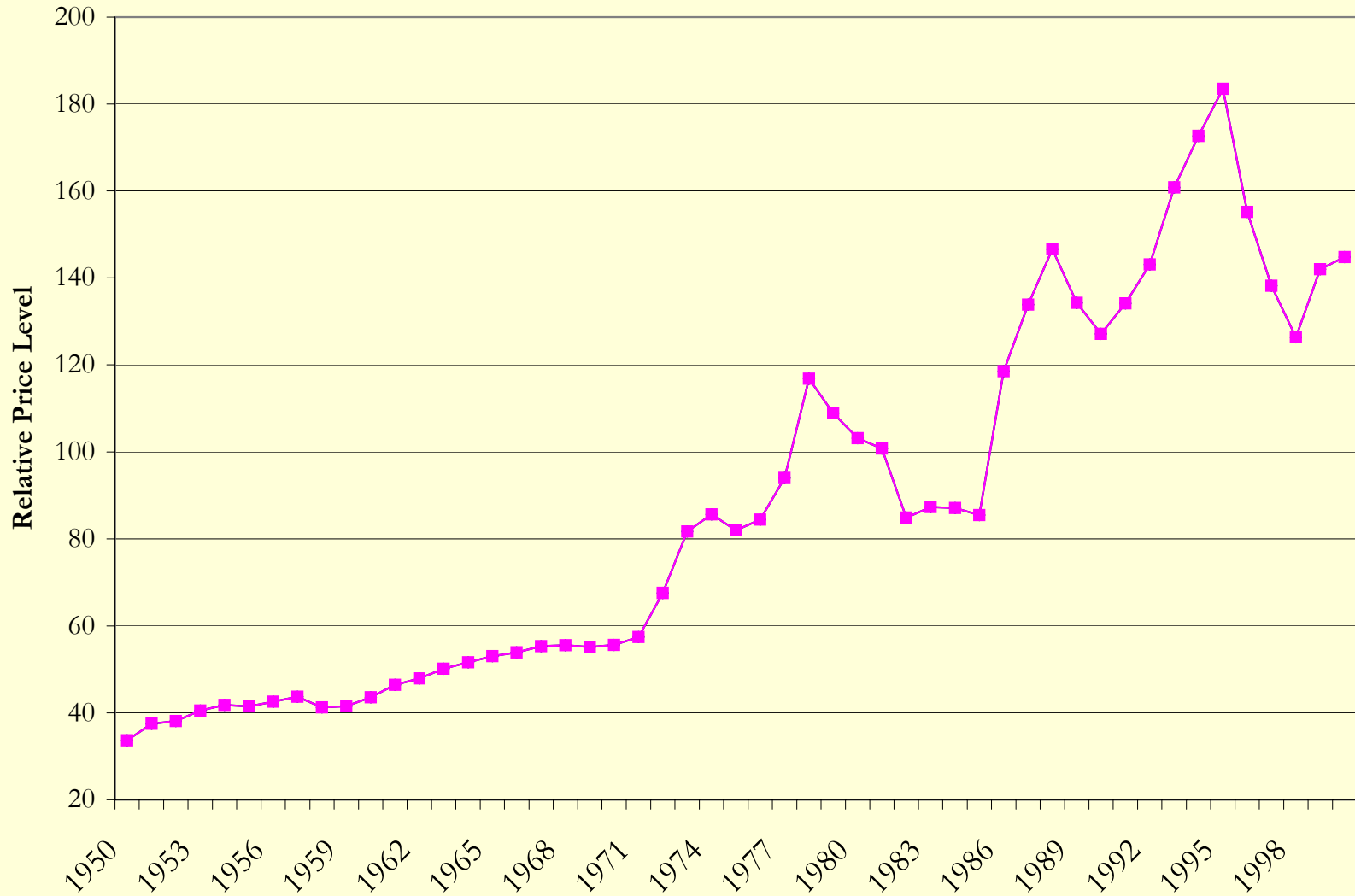
GDP per capita



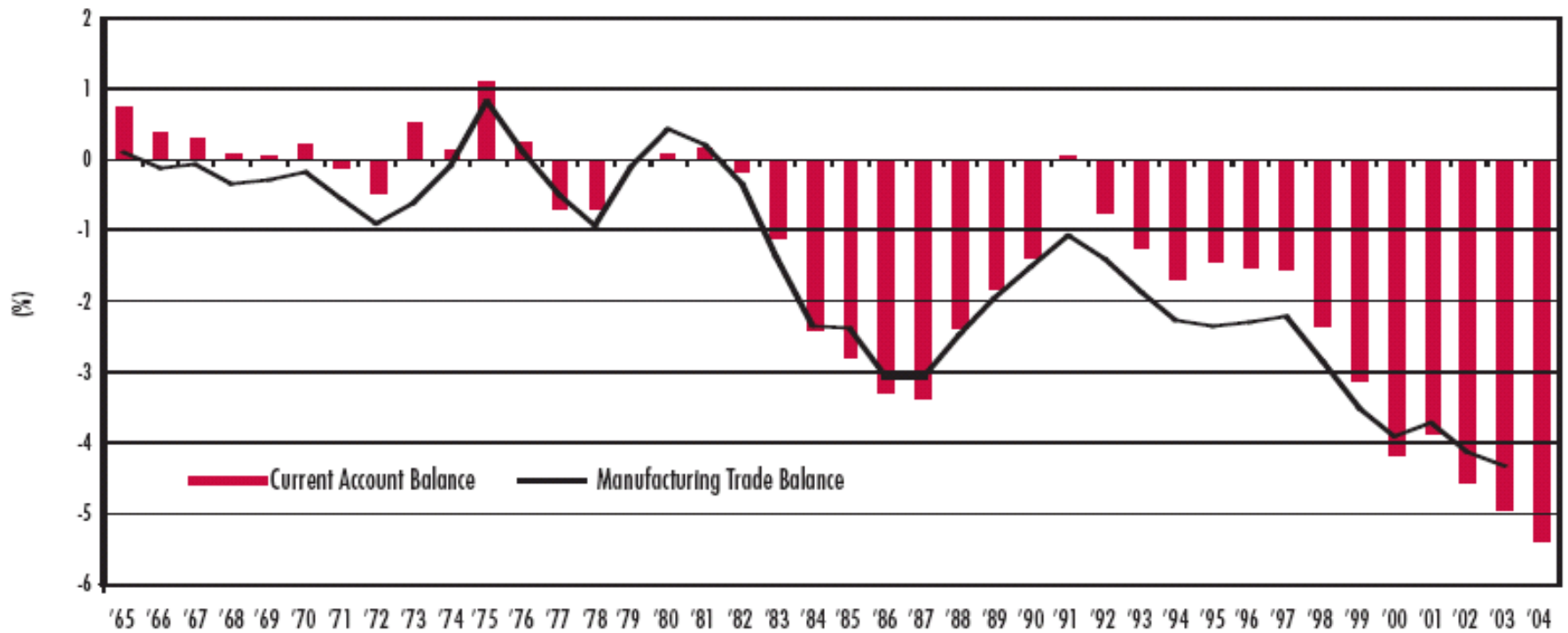
Relative Price of non-tradables



Japanese Relative Price Level



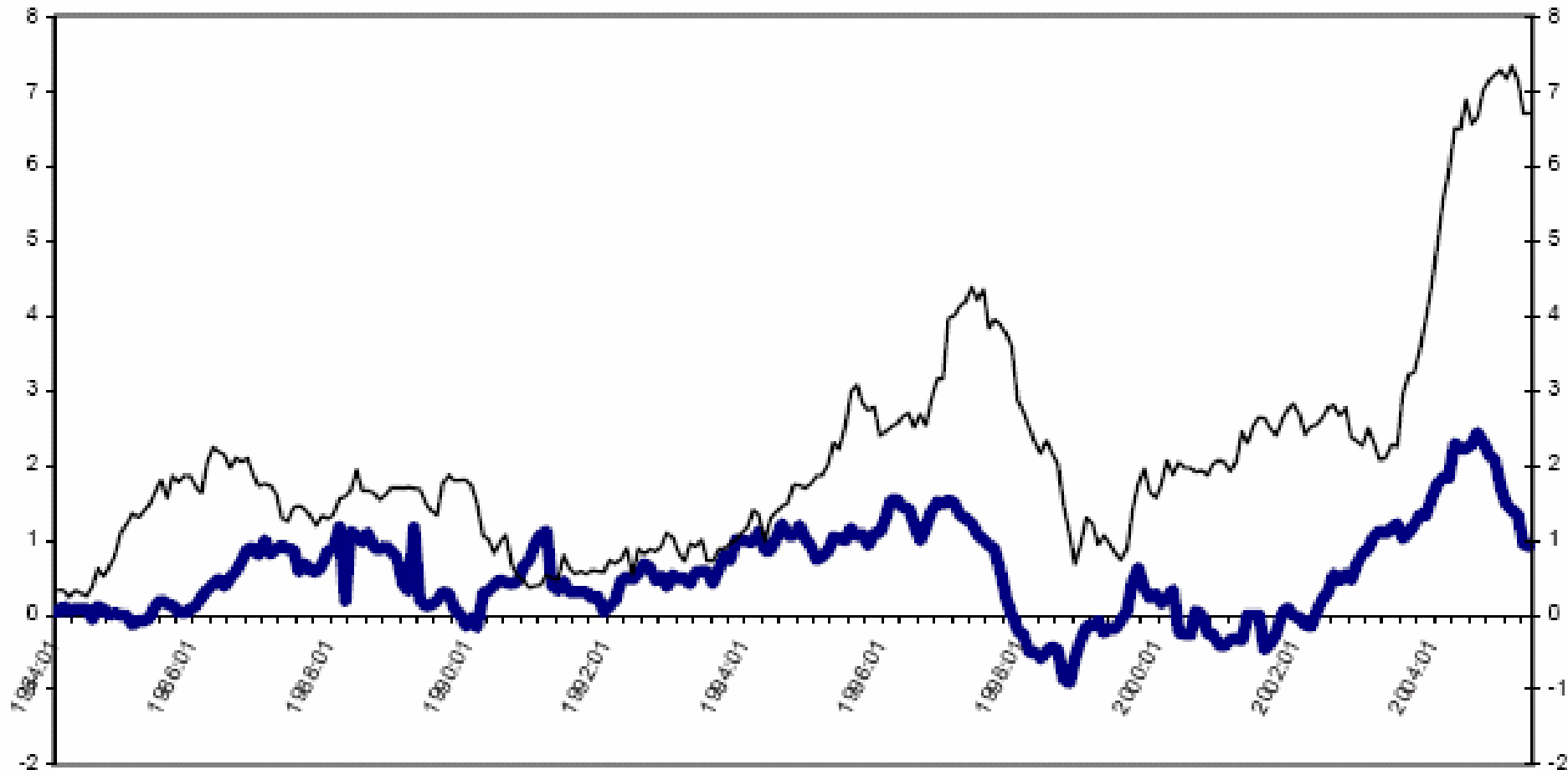
CAB and Manufacturing Trade Balance



Source: Bureau of Economic Analysis

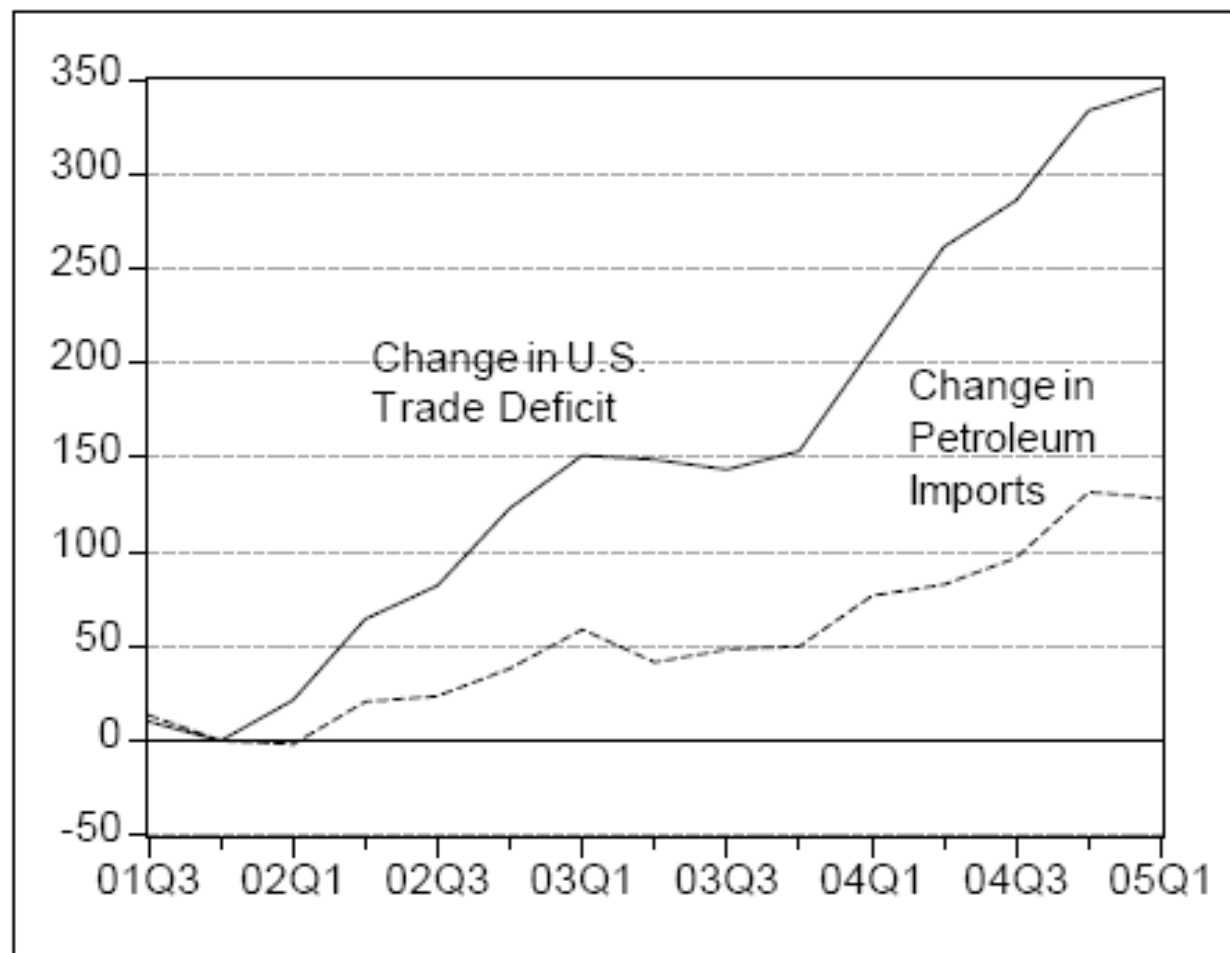
Foreign Official Purchases of US Treasuries and Total Foreign Purchases of US Bonds

(as a percent of lagged GDP)



Foreign Official
Total Bond Inflows

Trade Deficit and Oil



Source: Bureau of Economic Analysis; see <http://www.bea.gov/bea/dn/home/gdp.htm>.

Some tedious algebra is now needed. Notice that from (43) we can write $py = pa + (a^* - y^*)$.

But we can substitute for $a^* - y^*$ using (47) yielding:

$$py = pa + m^*a^* - pma$$

or

$$py = pa(1 - m) + m^*a^* \tag{48}$$

now collect the terms with p ,

$$py - pa(1 - m) = m^*a^*$$

$$py + pam - pa = m^*a^*$$

or

$$p[y + a(m - 1)] = m^*a^* \tag{49}$$

We can now substitute for a^* in expression (49) since from (44) we know that $a^* = y^* + p(y - a)$, so we can write (48) as

$$p [y + a(m - 1)] = m^* [y^* + p(y - a)] \quad (50)$$

collecting terms with p on the LHS we have $p [y + a(m - 1)] - m^* p(y - a) = m^* y^*$ or

$$p [y + a(m - 1)] - m^* p y + m^* p a = m^* y^*$$

or

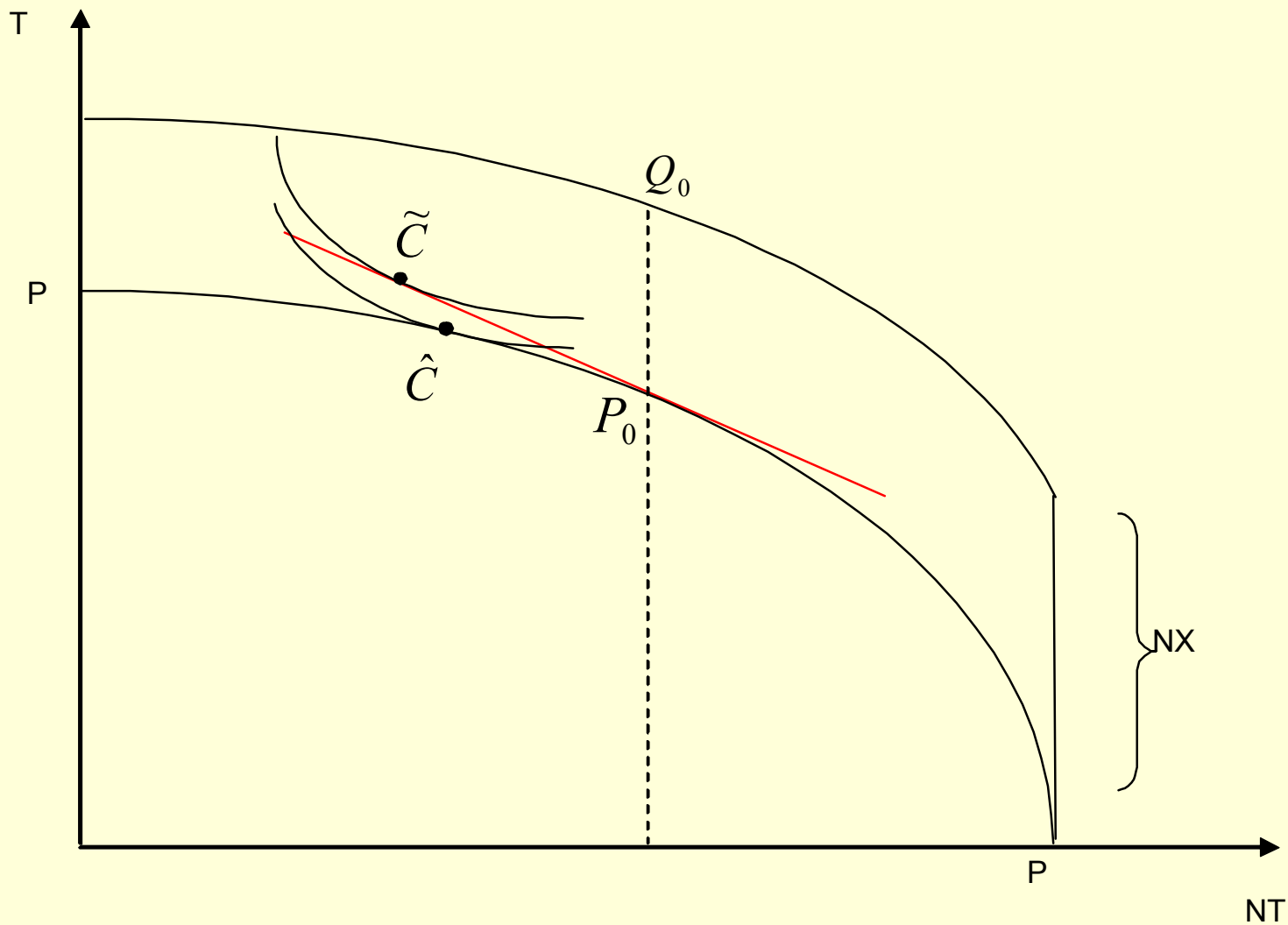
$$p [y(1 - m^*) + a(m + m^* - 1)] = m^* y^*$$

Thus we have

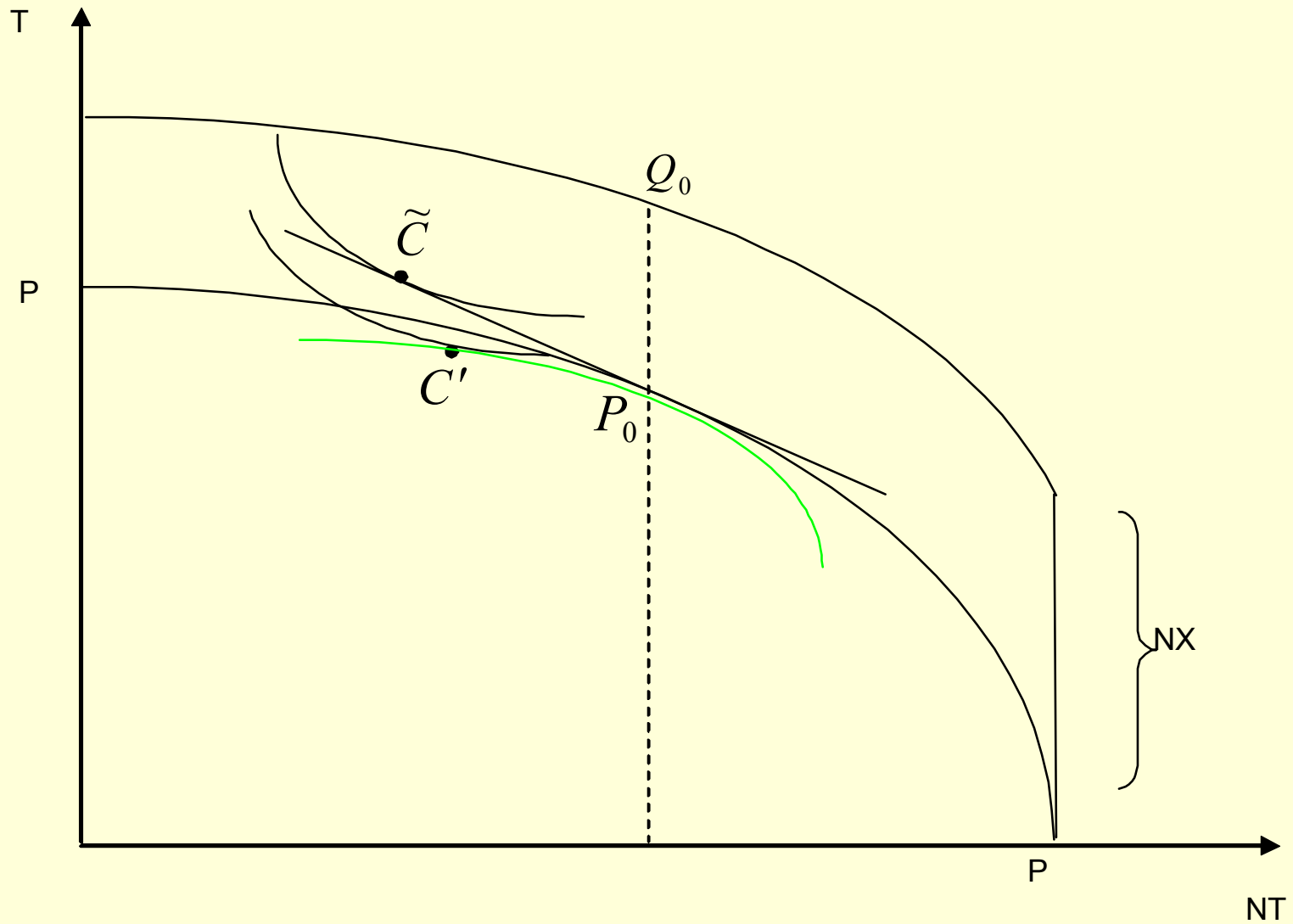
$$p = \frac{m^* y^*}{D} \quad (51)$$

where $D \equiv [y(1 - m^*) + a(m + m^* - 1)]$. Expression (51) is what we are after. It tells us how p varies with a , and how the presence of home bias, $m + m^* < 1$ impacts the result.

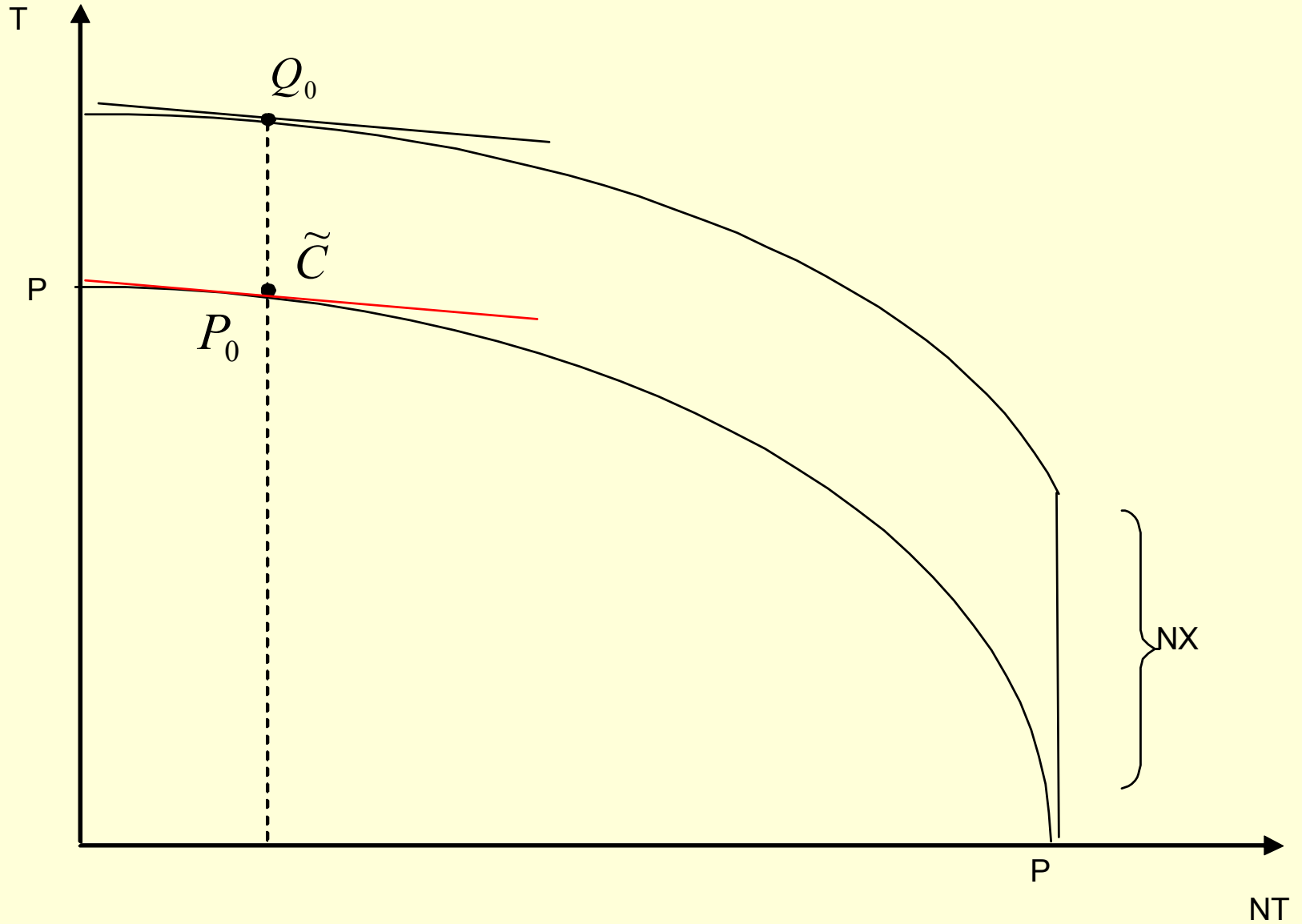
Adjustment with Nontraded Goods



Adjustment with Short-run Rigidity



Adjustment in a more Open Economy



Is Dollar Depreciation a Sufficient Instrument?

