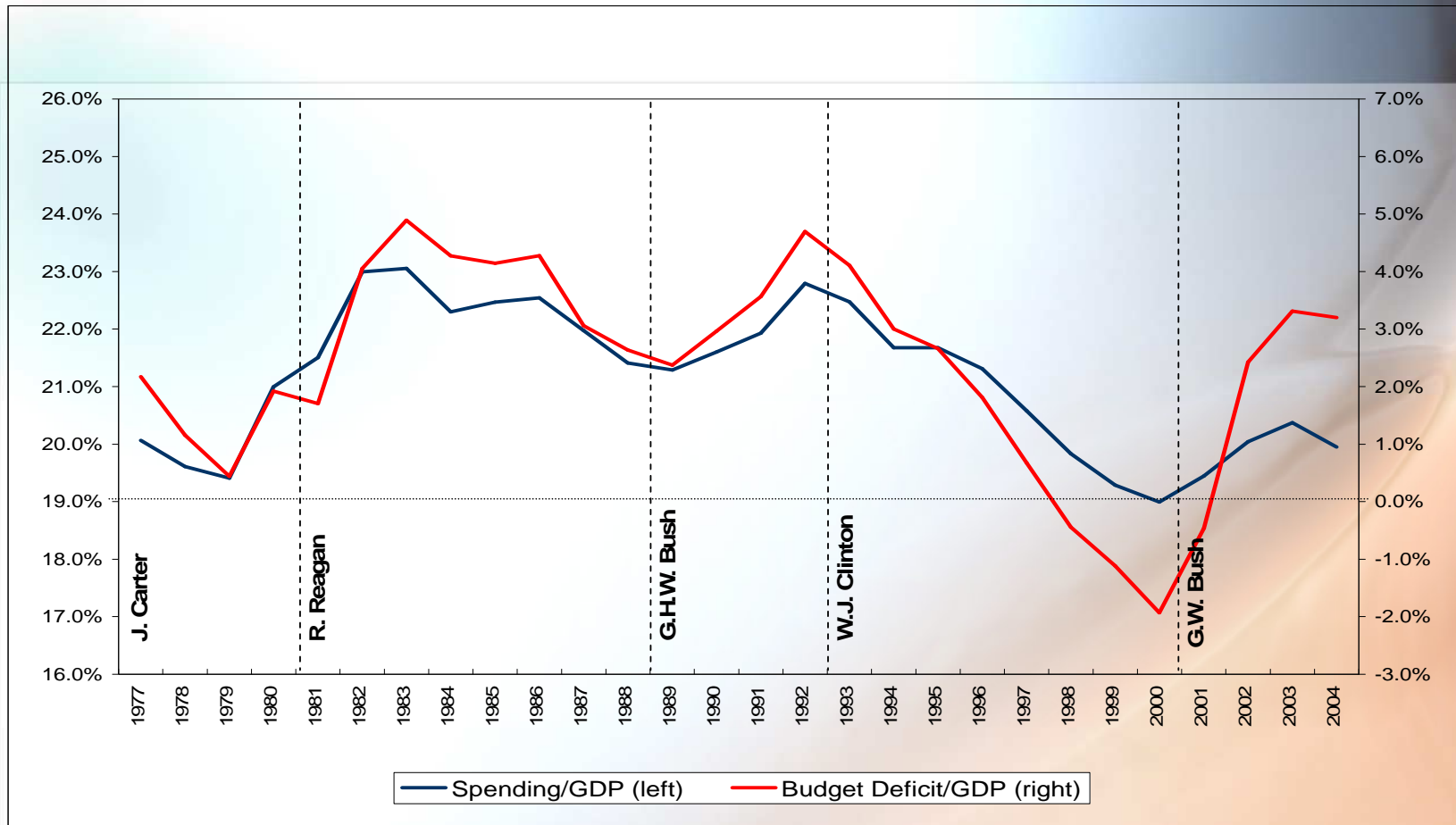




Implications of a large, sustained US budget deficit for Canada

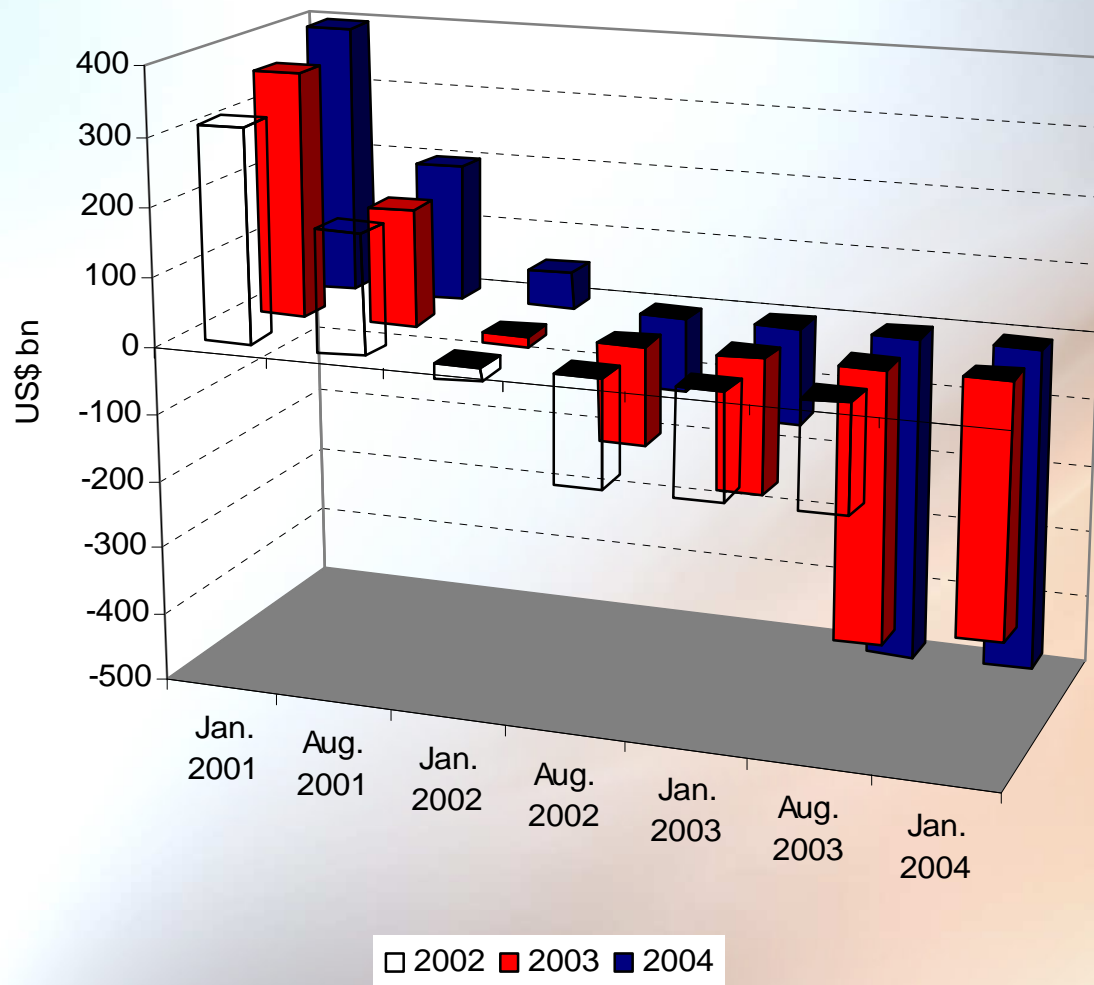
Rahim Khan Daha



Source: <http://ksghome.harvard.edu/~jfrankel/AEP.htm>

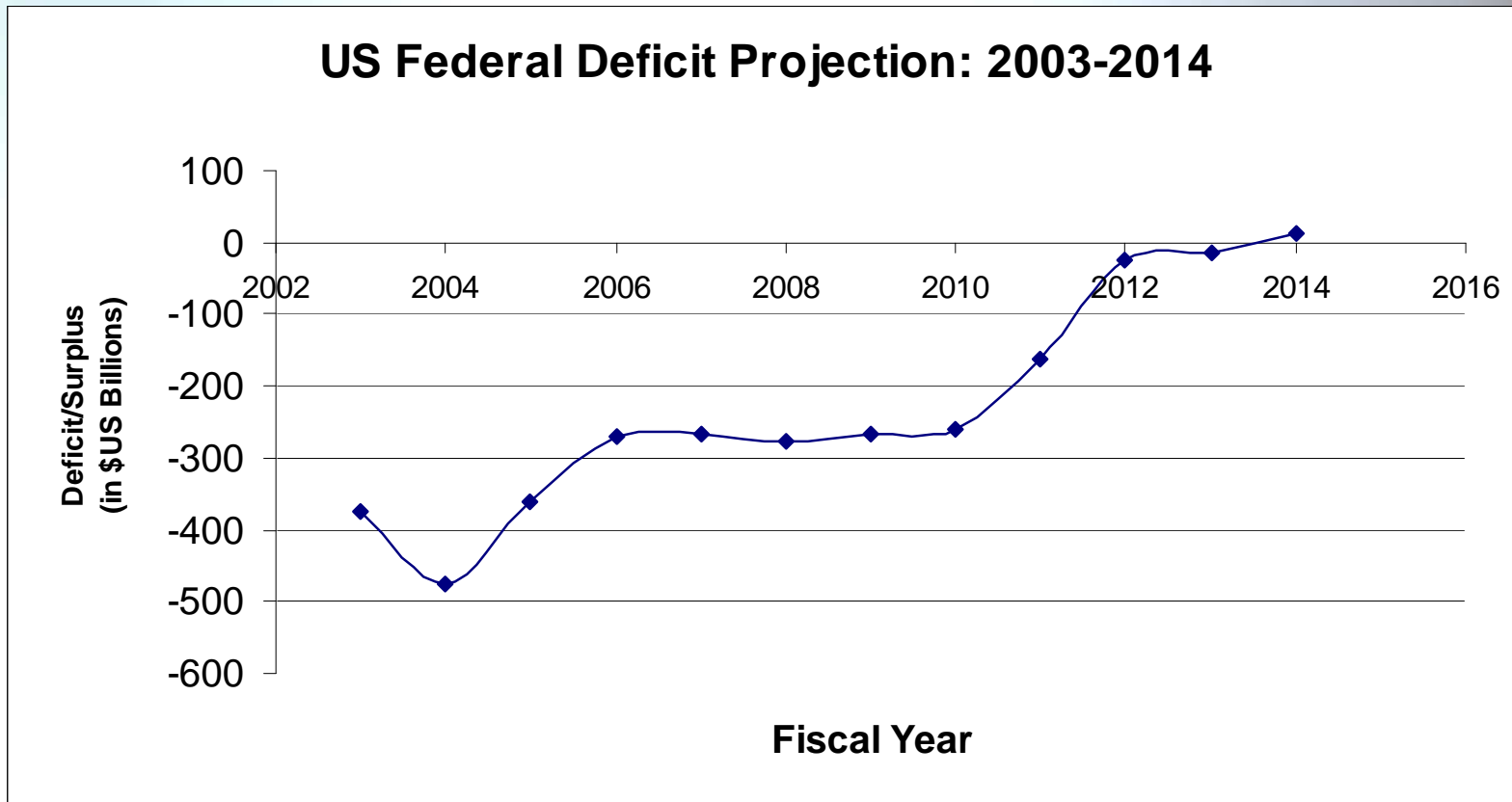
- From an extremely strong position in the fiscal year 2000, the US fiscal position has deteriorated rapidly
- The US budget has shifted from a surplus of 2.5% of GDP (\$236 billion) in 2000 to a deficit of 3.5% of GDP (\$412 billion) in 2004
- Tax cuts and spending have created record budget deficits

Three years of budget forecasts that soon proved too optimistic



Source: Office of Management and Budget

As of 2005, official budget forecasts are still too optimistic



Source: Li, Martin "A realistic outlook for the US budget"

Projection shows gradual decreasing deficit from 2004 onwards; small surplus starting 2014

Traditional vs. Ricardian

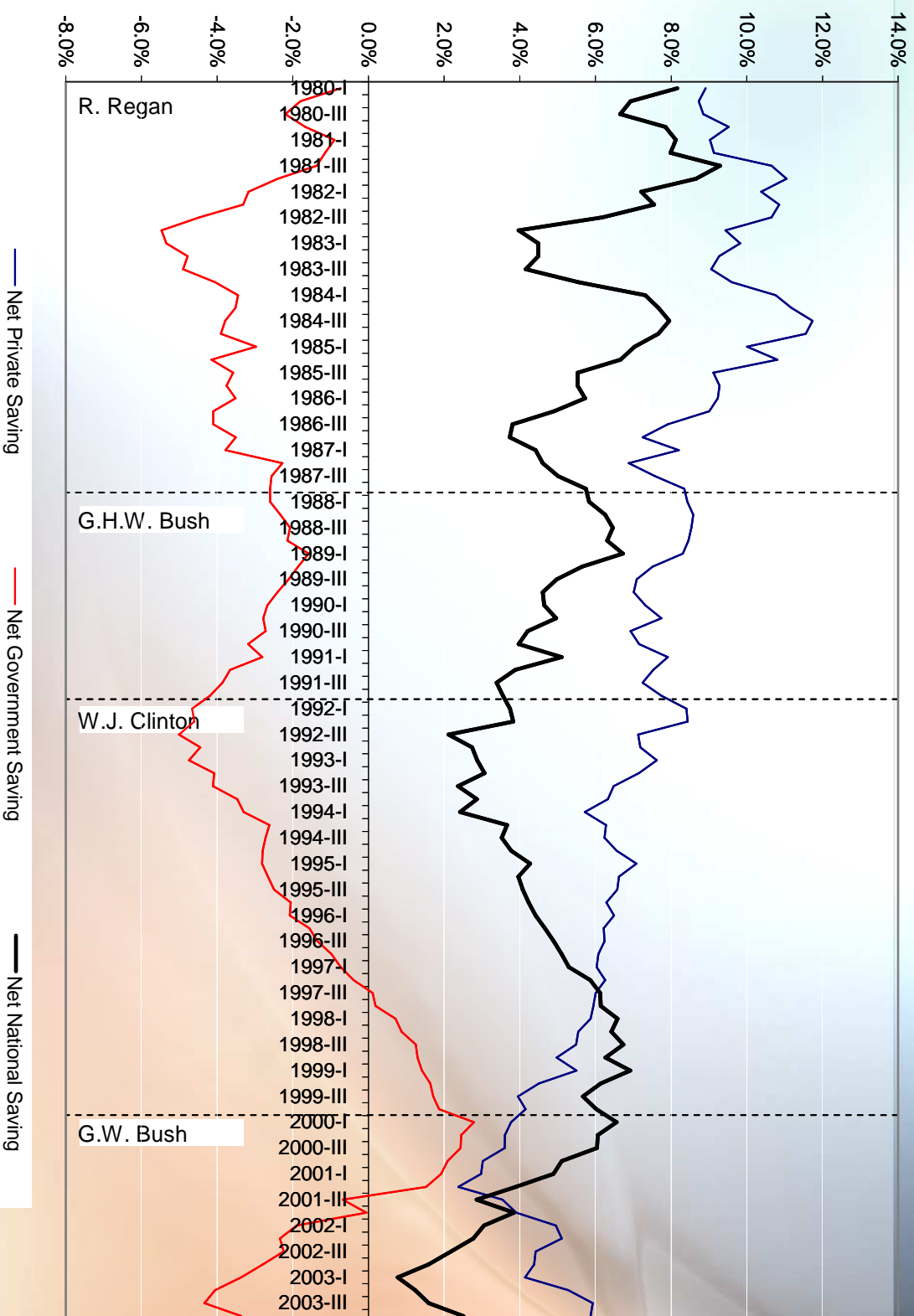
Traditional View

- Presumes that when the government cuts taxes and runs a budget deficit, consumers respond to their higher after-tax income by spending more

Ricardian View

- Consumers are forward-looking and, therefore, base their spending not only on their current income but also on their expected future income
- Consumer understands that government borrowing today means higher taxes in the future
- Future taxes are equal to current taxes
- Households save extra disposable income
- Increase in private saving just offset the decrease in public saving so the national saving remains the same

Saving as Percentage of GDP



Source: <http://ksghome.harvard.edu/~jfrankel/AEP.htm>

Private saving fails to rise to offset budget deficits; rather national saving falls

Conventional analysis of sustained budget deficits

- Budget deficits decrease national savings, which reduces domestic investment and increases borrowing from abroad
- Reduction in the national savings raises domestic interest rates, which dampens investment and attracts capital from abroad
- Reduction in domestic investment lowers productivity growth and future national income
- Increase in the current account deficit (which requires more of the returns from domestic capital stock accrue to foreigners) reduce future national income
- Twin deficits -- external borrowing is reflected in a larger current account deficits, creating a linkage between budget deficit and current account deficit

$$S = I + CA \quad (1)$$

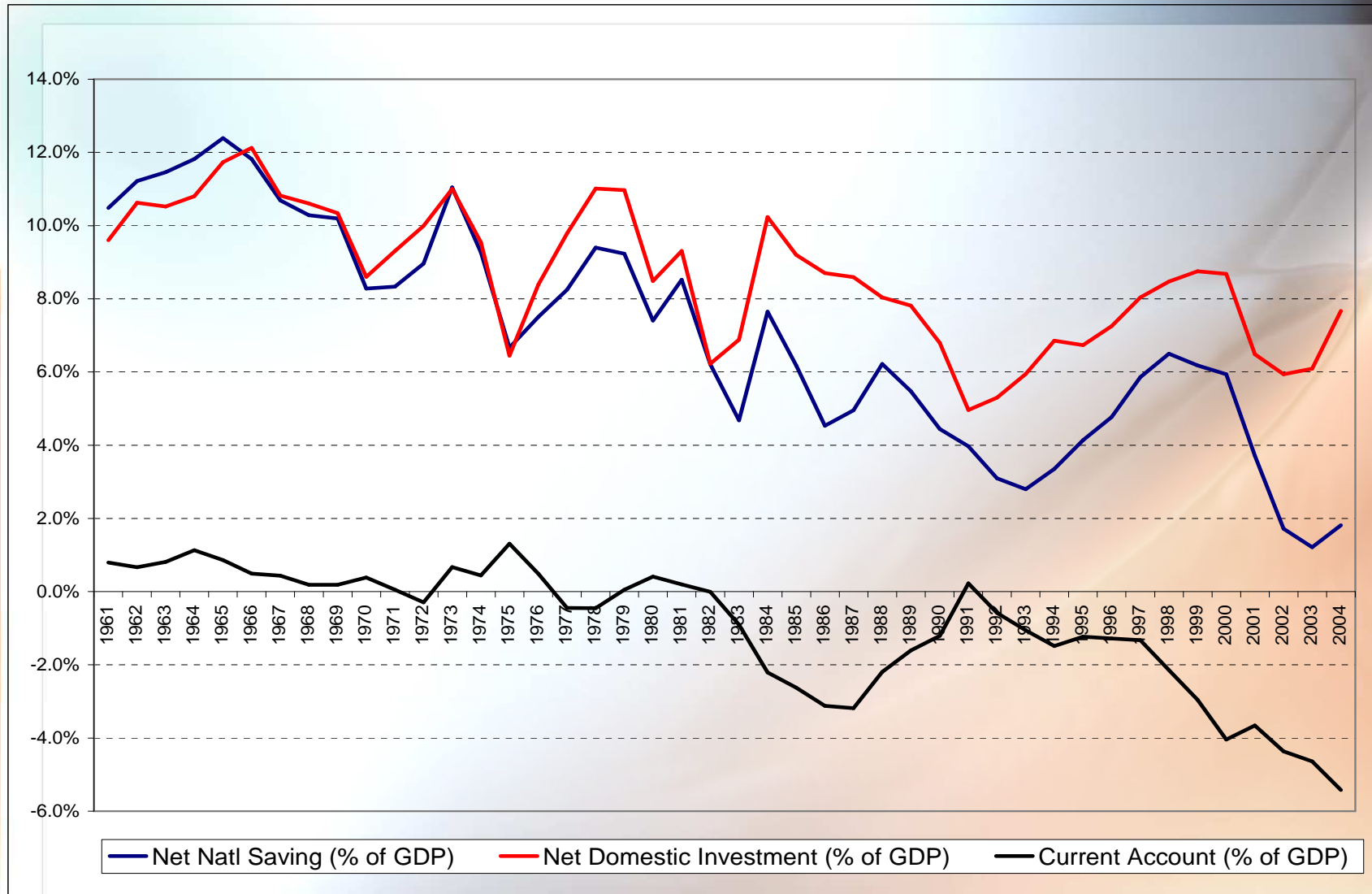
$$S^p = Y - T - C$$

$$S^g = T - G$$

$$S = S^p + S^g = (Y - T - C) + (T - G) \quad (2)$$

$$\downarrow CA = S^p - I - (G - T) \uparrow \quad (3)$$

Budget deficit ↑ > National Saving ↓ > Current account balance ↓



Source: <http://ksghome.harvard.edu/~jfrankel/AEP.htm>

Current account deficit has soared from \$390 billion in 2001 to 666 billion in 2004

Optimistic Views

- **Bernanke (FRB)**
 - Argues that underline cause of the trade deficit was not insufficient domestic saving, but rather a global saving glut
 - Since the trade deficit is “not made in the U.S.A”, policy steps to reduce budget deficit or raise private saving were unlikely to reduce trade deficit
- **Cooper (Harvard)**
 - Argues that a \$500 billion current account deficit is sustainable indefinitely
 - There is no alternative to the US where they can put their money
- **Dooley – Garber (Deutsche Bank)**
 - Argues that today’s global monetary system is new Bretton Woods, with East Asia playing the role that Europe played in the 1960s.
 - It is the collateral generated by the US current account deficit that supports Asian countries development strategy
 - RMB peg is a deliberate development strategy for China
- **Mankiw (Harvard)**
 - Trade deficit is a “symptom” of a sluggish growth abroad (Japan & Europe)

Worried Views

- The loss of investor and creditor confidence may cause investors and creditors to reallocate funds away from dollar based investments
 - Further depreciation of US\$
 - Rise in interest rates
 - Reduce stock prices and household wealth
 - Low confidence can discourage investment and real economic activity
 - The effects can feed on each other to create a mutually reinforcing cycle
 - Eventual hard landing!
- It is impossible to know at what point market expectations about fiscal imbalance could trigger these types of dynamics

Dornbusch's Overshooting Model (short-run)

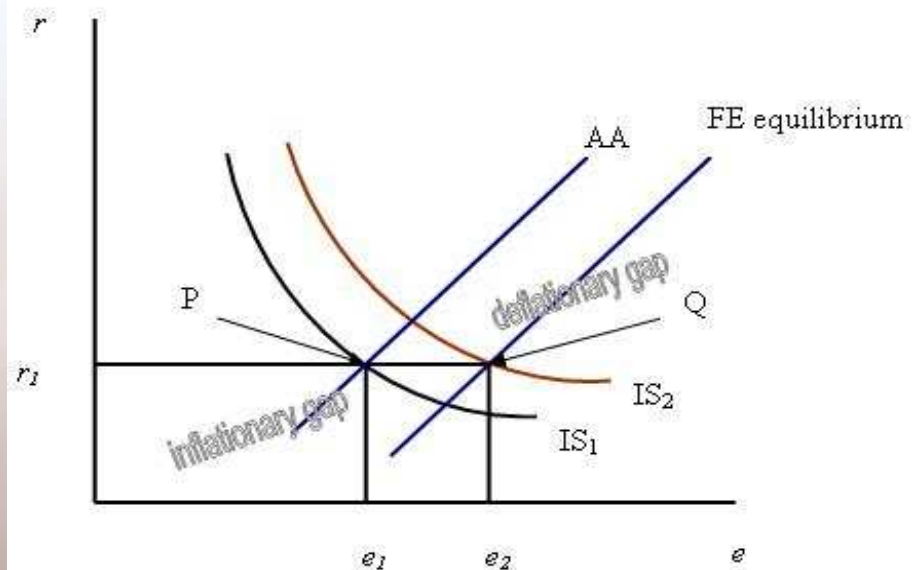
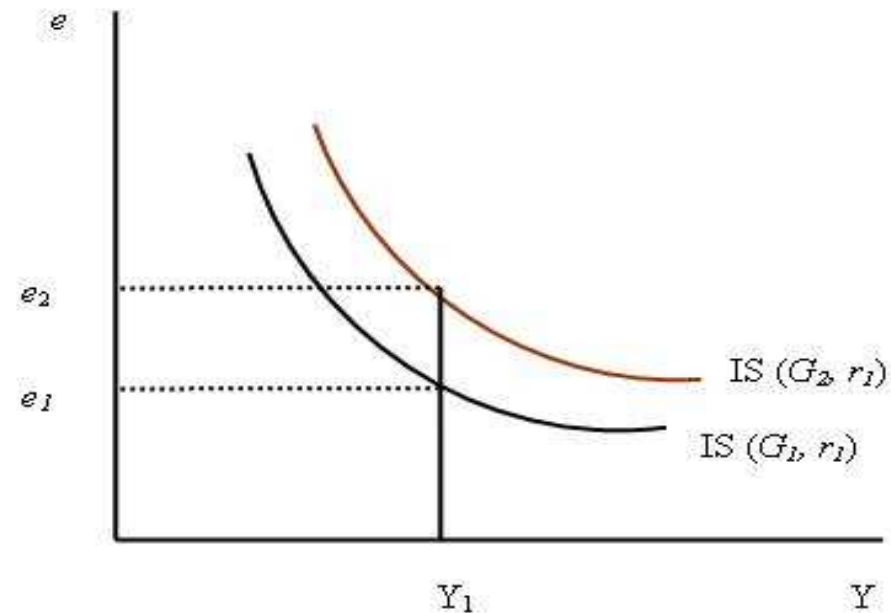
Uncovered Interest Parity (UIP)

$$R = R^* + \frac{E^e - E}{E}$$

Covered Interest Parity (CIP)

$$R = R^* + \frac{E^f - E}{E}$$

- Fiscal expansion – IS curve shifts to the right
- Initial equilibrium is point P ($r_p e_1$)
- Since demand for domestic goods and services is permanent, it causes long-run appreciation of currency
- The resulting rise in expected exchange rate pushes AA to the right
- New equilibrium at point Q ($r_p e_2$)



Long-run

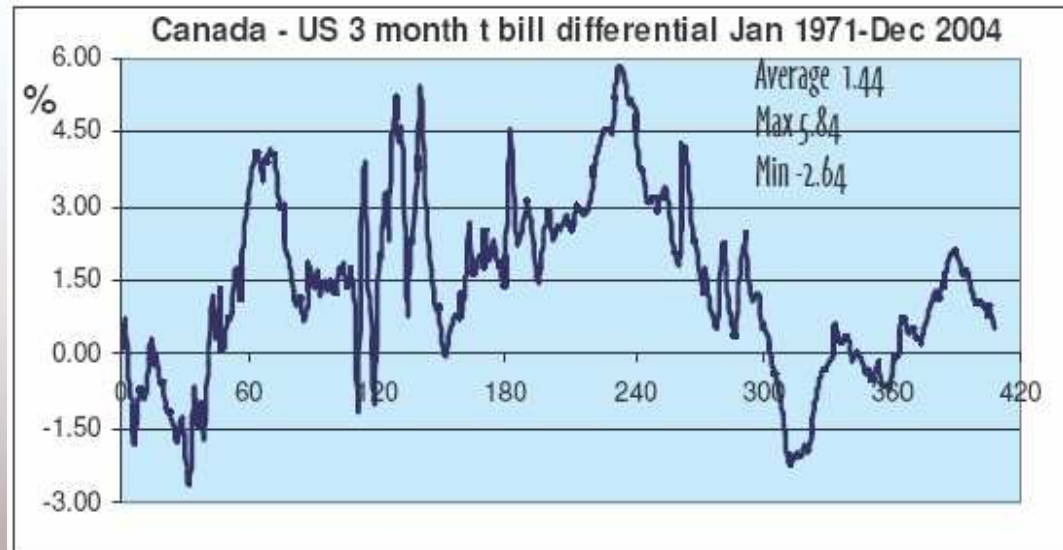
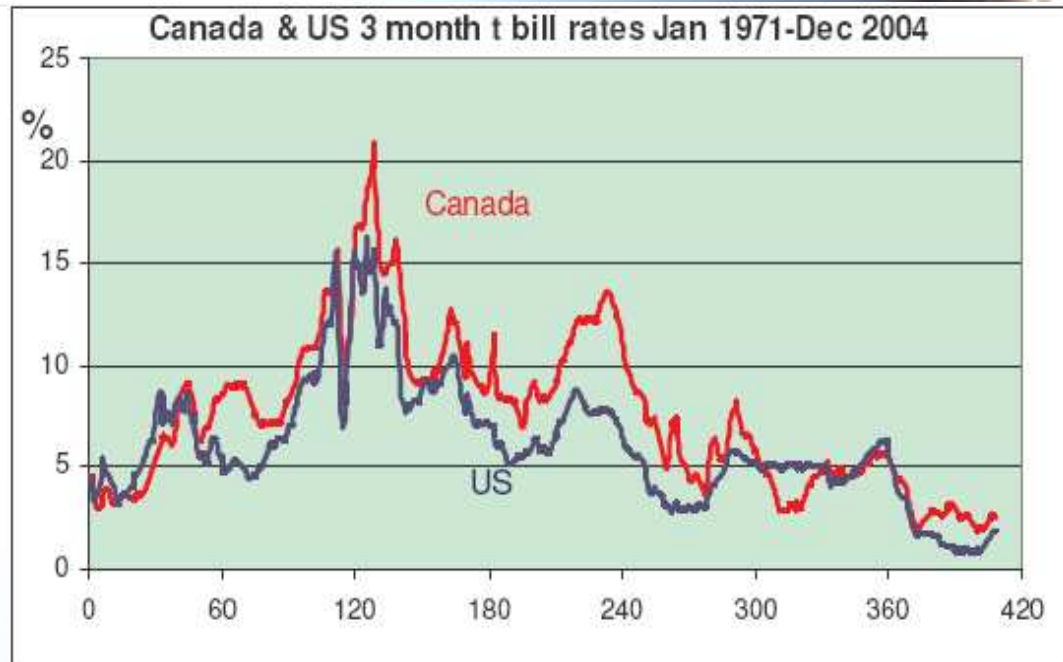
- The short-run impact of fiscal expansion looks favorable
 - People receive increased government services or a tax cut
 - Since the exchange rate rises, cost of imported goods and services fall
 - There is a short-run drop in inflation
- However, in the long-run
 - Higher debt accumulation would create higher interest payments creating outflow of interest payments
 - At any given level of exchange rate the current account deficit would increase as a result of these payments
 - Debt/GDP ratio would start to rise
 - Which in turn would depreciate domestic currency

Then why are long-term interest rates so low now?

- **Easy US monetary policy**
 - Housing market bubble
- **Capital inflows from Asian central banks**
 - Willing to provide capital at low interest rates to hold exchange rate constant
- **Over optimistic forecasts regarding future budget deficits**

Limitations

- Risk premium
- Perfect Capital Mobility
- Home biasedness
- Perfect asset substitutability



Source: <http://www.econ.queensu.ca/pub/faculty/clintonk/econ491/>

Comparison with Reagan tax cuts

- Remarkable parallels between fiscal expansion of the 1980s and the current decade
 - Twin deficits of the 1980s are back
 - In both cases, the administration launched permanent tax cuts (although Reagan rolled back tax cuts in second term)
 - In both cases the result was record budget deficits
 - Large Capital inflows
- In some ways, current fiscal expansion is worse than the 1980s
 - Retirement of baby boom generation
- Difference between the two decades
 - Interest rates were almost double during the 1980s
 - US dollar began to depreciate in 2003
- Likely to change
 - ↑ Interest rates (housing market crash will reinforce this)

Implications for Canada

US

Short-run:

- US dollar appreciates

Long-run:

- US dollar depreciates
- US interest rates increase

Canada

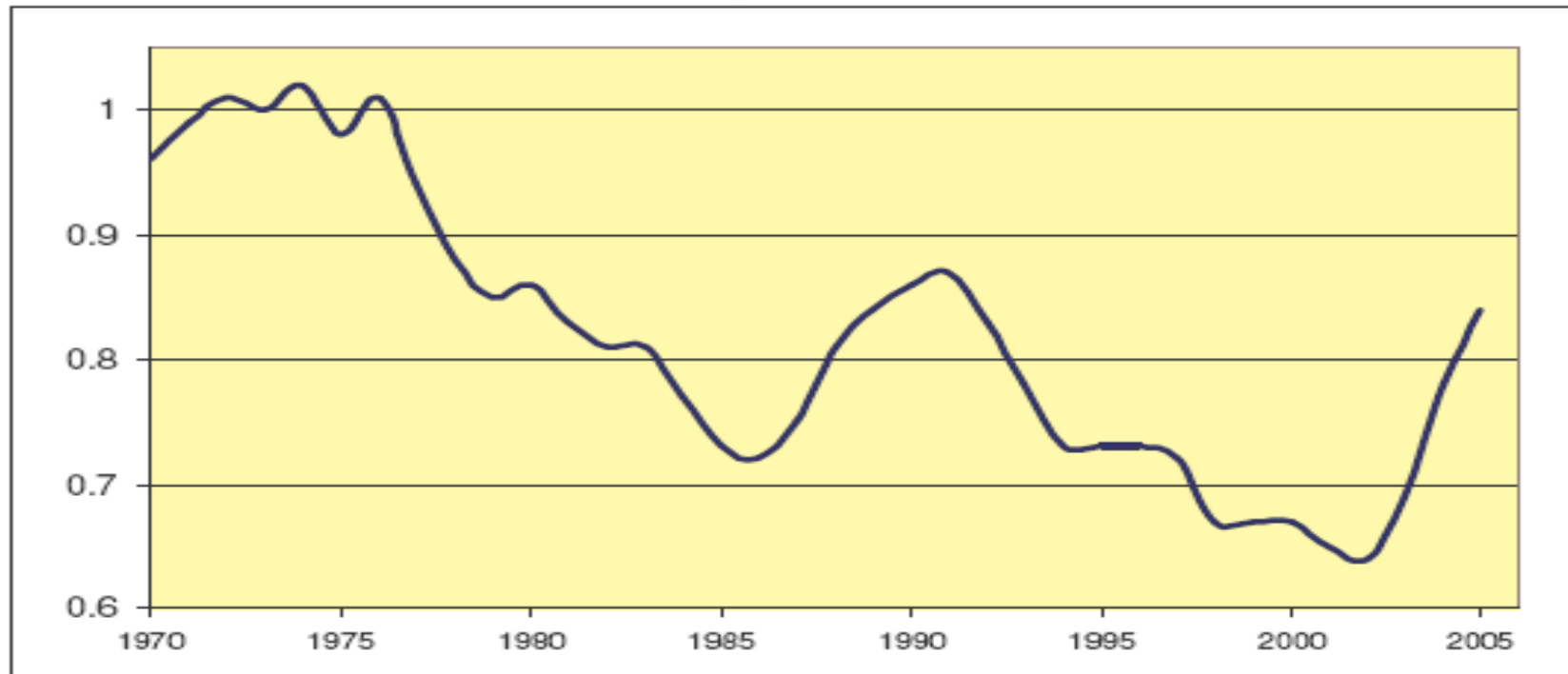
Short-run:

- Canadian dollar depreciates

Long-run:

- Canadian dollar appreciates
- World interest rate increase

US\$ price of C\$



What should Canada do?

- Most of our trade is with the United States, which is why exchange rate is especially important
- High commodity prices are partly responsible for recent appreciation of Canadian dollar (C\$ is a commodity currency)
- Monetary Policy:
 - The objective is price stability
 - The instrument is overnight rate which requires a floating exchange rate
 - US & Canada are at full equilibrium (unemployment rate in Canada is around 6.5%, lowest in three decades)
 - As of September 1998, the bank of Canada no longer intervenes in the foreign exchange market

- **Suppose the Bank of Canada decreases overnight interest rate to ↓ C\$**
 - Since the economy is already operating at full employment level, this would put upward pressure on inflation
 - Given that the Bank of Canada follows strict inflation targeting policy, it might also create a policy dilemma
 - The more central bank tries to smooth exchange rate, the more volatile is the exchange rate (Lucas critique)

Long-run equilibrium

$$Y = C + I + G + NX$$

$$GNP = Y + NFP$$

Where **NFP** is net factor payments from abroad

↑ interest rates > ↑ interest payments for US

➤ ↑ **NFP** for Canada

– There is not much that Canada can do other than to keep it's budget balanced

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