Handout 4: The Current Account

1 The determination of the trade balance (TB) and the current account (CA)

Current Account = *Trade Balance* + *Net Factor Income* from abroad (+ unilateral transfers)

$$CA = TB + NFP$$

$$TB\ (= NX) = Trade\ Balance$$

$$GDP = C + I + G + TB$$

$$GNP = GDP + NFP$$

$$\Rightarrow \quad GNP = C + I + G + TB + NFP = C + I + G + CA$$

$$Domestic\ Absorption = C + I + G$$

2 The traditional approach

$$CA = TB + NFP = Exports - Imports = EX\,(q, y^*) - IM\,(q, y)$$

$$q_t = \frac{s_t\, p_t^*}{p_t}$$

y , y^* : domestic and foreign income respectively

p, p^* : domestic and foreign price indices respectively *s* : nominal exchange rate

Prediction: Strong economic activity at home relative to abroad and a strong domestic currency worsen the trade balance

Example: US in the 90s relative to Europe. The large US trade deficits have been attributed to the fast economic growth experienced by the US relative to that in Europe

Implication: In order for the US *TB* to improve, the US terms of trade must worsen ($q\uparrow$) and/or economic activity in the US must slow down relative to that in the rest of the world. The former can be accomplished if

a) either the $ depreciates

b) or productivity grows faster in the traded sector in the US relative to the rest of the world, allowing American firms to lower prices.

3 An alternative approach

$$CA_t = A_{t+1} - A_t = r_t A_t + Y_t - C_t - I_t - G_t = T_t - G_t^R + S_t - I_t = r_t A_t + (EX_t - IM_t)$$

Prediction: A **high** rate of private **domestic investment** relative to private domestic savings contributes to a **weak** *CA*.

A **budget deficit** also tends to **worsen** the *CA*

CA > 0, the domestic economy increases its international net asset position ("lends" to the rest of the world)

CA < 0, the domestic economy decreases its international net asset position ("borrows" from the rest of the world)

<u>The effects of various shocks</u>:

a) An expected increase in the return to domestic capital (say, due to an expected tax reform) ⇒ *CA* deteriorates
b) A natural disaster or a war ⇒ *CA* deteriorates
c) A temporary increase in income ⇒ *CA* improves
d) A permanent changes in income ⇒ *CA* does not change
e) A reduction in taxes ⇒ *CA* deteriorates

<u>A qualification:</u> For a reduction in current taxes, the deterioration of the *CA* may be smaller than that predicted by the standard Keynesian (IS-LM) model when people think that, in the absence of any offsetting change in government expenditure, a current tax reduction will be accompanied by higher taxes in the future

<u>An often misleading question</u>: How does an increase in domestic real interest rates affect the *CA*? - Interest rates do not change by themselves. Something causes them to change. One must know the **source** of the change in the real interest rate. Example: A tax increase vs an increase in the productivity of capital. Both increase real interest rates. In the former case the *C*A improves while in the latter it worsens.

<u>Is the US the largest debtor country in the world</u>? - *Yes* in terms of absolute value of its external debt ($1.25 t. in 1998). *No* as a percentage of *GDP* (15% = 1.25/8.5 , US *GDP* in 1998=8.5 tr)

The corresponding shares in LDCs are much higher

<u>Are reported *CA* figures to be taken seriously</u>? - A *mis-measurement problem*. The use of original (historical) prices rather than actual prices. Using actual values, it appears that the net asset position of the US relative to the rest of the world was approximately zero in 1990

3.1 Two important questions

- **Are large, sustained trade deficits bad?**

  This is equivalent to asking whether borrowing heavily is generally a bad idea.

  The answer depends on the reason for the debt and on how the borrowed funds are used.

The source of trade imbalance:

A boom in investment leading to a persistent current account deficit and foreign debt accumulation cause in general no problem. But there exist some qualifications

What type of investment? In which sector? (for instance, traded vs nontraded goods, Productive vs non-productive (real estate development)?

- **Can a country run large trade deficits indefinitely?**

  No. A borrower must in the end pay back. Repayment will take the form of trade surpluses and will require lower growth relative to the other countries and/or an adjustment in the terms of trade.

4 The terms of trade and the current account

The empirical evidence: Mixed but a strong trade position is more often than not associated with a strong currency. But there is no theoretical presumption about this relationship. Different shocks induce different correlations between these variables