BOP Problems and Marshall Lerner condition and J-curve

Section 4.7 of Matt McGee’s Economics In Terms of the Good, the Bad and the Economist
Chapter 27, Blink and Dorten’s IB Course Companion: Economics
OUTLINE

• Advantages and Disadvantages of a current account surplus or deficit
• Methods to correct current account deficits
  • Managed changes in the exchange rates
  • Protectionism/Expenditure Switching policies
  • Reduction in Aggregate Demand/Expenditure Reducing Policies
  • Change in supply side policies to increase competitiveness
• Advantages and Disadvantages of a capital account surplus or deficit
• HL: Marshall Lerner condition and J-curve effect
Advantages and Disadvantages of a Current Account Deficit

• A current account deficit is going to have a capital account surplus (selling domestic assets to the foreign sector).
• A current account surplus will have a capital account deficit (net foreign assets have increased)
• If a country has a current account deficit, it is paid for by:
  • Loans from abroad
  • Investment from abroad
• Possible negative effects in the LR of a net debtor nation:
LR Negative Effects of a Net Debtor Nation:

• **Borrowing from abroad means that loans have to be repaid with interest:** (1) Continuous current account deficits will be looked down upon by international business and financial community and the ability to pay off might be questioned. (2) Worried investors might choose to avoid a weak economy and this will lower the demand for the home currency causing downward pressure on the currency. (3) In case the home currency depreciates, the debtor nation could suffer a severe shock as they need more home currency to pay off their loans. (4) The home country also needs to offer high interest rates.
LR Negative Effects of a Net Debtor Nation:

- Depreciated currency and higher interest rates makes future debt payments as a serious issue.

- **The domestic economy may be forced to increase interest rates to attract foreign investors and keep a desired exchange rate (how?)** The domestic economy is letting foreign firms fund domestic investment. Later, this will cause outflows in the form of repatriated profits and dividends which may make the current account deficit worse. Also, an increase in interest will have a deflationary effect on the domestic economy. How? Can you show me?
LR Negative Effects of a Net Debtor Nation:

- **The incoming funds on the capital account might be due to speculative inflows** meaning it can easily go out of the country once there is trouble.

- **There is always a risk that foreign capital starts to exit.** If inflows of FDI and portfolio investment seek other markets, the home country can find itself in the situation where domestic unemployment rises as capital leaves. There might also be a big decrease in imports.
Positive Effects of a Net Debtor Nation:

• **A current account deficit allows a country to enjoy greater consumption than production** even if it is from borrowed money. If the deficit is short (a few years or so), then there will be little economic damage. If inflows in capital account are partially used for investment, then it will actually be good for the country.

• **Even a LR current account deficit may be harmless:** The CA deficit must be related to the country’s fundamental ability to pay the money back—size of its national income.
Positive Effects of a Net Debtor Nation:

- **Even a LR current account deficit may be harmless (cont):** As long as borrowed funds go to investment, the debt will be paid by future generations who have been enjoying the higher living standards due to the loan. Foreign investors think that the risks are smaller and the returns greater in investing in a lively and innovative US economy than at home. Foreign capital flows benefited the US economy by creating funds for investment which lowered unemployment and increased GDP.
Positive Effects of a Net Lender Nation (Current Account Surplus):

- A current account surplus means that there is net outflow of capital account (the home country’s net foreign assets have increased).

- Advantages:
  - Foreign assets can be viewed as another form of saving for the home country which can be used for increased future consumption
  - Capital will go to countries with a higher rate of return than the home country. This enhance resource allocation and increases profits for domestic firms
  - Increase in foreign holdings will in time generate income in the form of profits, interest received and dividends.
Negative Effects of a Net Lender Nation (Current Account Surplus):

- **Disadvantages:**
  - **Current consumption possibilities for the home country decrease** as resources are transferred abroad.
  - **The home country is switching investment from the domestic market to the foreign market.** Loss of jobs (debatable), skills and technology gains are lost.
  - **Loss of tax revenues:** Portion of tax bases-investment, output and wages will be taxed outside the home country.
  - **Political problems:** There is also a political element in running continuous current account surpluses for many years (example: Japan and US; China and US)
Methods to correct Current Account Deficits:

• A current account deficit is considered to be a form of BOP disequilibrium and thus must be solved.
• Short-run policies will aim to lower the ratio of the price of domestic goods to imported goods (subsidy or tariffs) then importing spending will decrease and improve the current account
• Long-run policies focus on increasing domestic competitive abilities like increasing productivity, increasing R&D and introducing innovation, improvement in quality, etc.
Methods to correct Current Account Deficits:
1. Managed Changes in Exchange Rate

- Under a managed exchange rate regime (pegged exchange rate system), they can devalue the currency to stop a current account deficit. By making the exchange rate lower, relative price of domestic good falls. However, a lower price does not mean more revenue (remember elasticity?) Example: (1) China has a current account deficit; (2) Government devalues the yuan from 1 RMB=0.12 USD to 1 RMB=0.11 USD. (3) A coat costs 1000 RMB, how much in USD before and after devaluation?; (4) What happens to exports and imports?; (5) What happens to current account deficit?
Methods to correct Current Account Deficits: Managed Changes in Exchange Rate

- In summary:
  - RMB devaluation ➔ price of exports down ➔ export volume up ➔ export revenue up (assuming price elastic exports).

- Floating exchange rate: Same basic outcome is possible in a floating exchange rate regime—dirty float (managed float). Central bank can sell home currency on the foreign exchange market in order to increase supply and lower the exchange rate. How will this look like?
HL: Marshall Lerner Condition

- In theory, if a country’s currency depreciates or is devalued, it should lead to an increase in exports (they become cheaper in foreign markets) and a decrease in imports). This should result in an improvement in the current account, but this is not necessarily the case.

- The effect of a price change on spending or revenues depend on the PED (recall your TOT).
The Marshall-Lerner condition is a rule that tells us if a depreciation/devaluation will help improve the current account deficit. The condition states that it will only be successful if the total value of the PED for exports and imports is greater than one. 

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\text{PED exports} + \text{PED imports} > 1
\]
**HL: Marshall Lerner Condition**

- If PED exports was inelastic and price fell due to the ER depreciation/devaluation, total export revenue will fall.
- If PED imports was inelastic and price of imports increase due to the depreciation/devaluation of the currency, then total import spending increases.
- Current account becomes worse.
HL: In the SR, BOP deficit will worsen...

- If the government is facing a current account deficit, it may reduce the exchange rate and if the Marshall-Lerner condition is met, it will lead to an improvement in the current account.

- In the SR, this will not be the case and the current account can actually become worse before it becomes better...this is known as the J-curve effect.
Why is there a J-curve effect in the SR?: PED
Exports is low (inelastic)

- Let us assume that a country has a current account deficit and they lower the ER.
- The price of exports will fall but (1) communication is not perfect and it will take time for other countries to know that the goods of this country is cheaper. Also, (2) some countries have purchase contracts that are still valid. Even if the price of a country’s exports fall, (3) the other countries cannot change their suppliers immediately.
Why is there a J-curve effect in the SR? PED of imports is low (inelastic)

- This means that in the SR, PED for exports is inelastic and the fall in the prices will lead to export revenue falling as well.
- For imports, imports will become more expensive but (1) buyers cannot find substitutes in the SR and (2) contracts have been entered into so they will need to wait till the contracts expire. In this case, PED imports is also inelastic and so will lead to higher import spending.
Why is there a J-curve effect in the SR?

- In time, the PED exports and imports will increase. By the time the current account reaches a certain point (Y in the graph) the PEDs will increase and when added together will satisfy the Marshall-Lerner condition and an improvement in the current account because of the depreciation/devaluation.
The economy starts at a current account deficit (X) and undertakes devaluation/depreciation of the ER. Due to time lags, the current account becomes more deficit (Y) until it improves to (Z).
Methods to correct Current Account Deficits:
2. Protectionism/Expenditure Switching

• Review: Protectionism is any policy where the ratio of the price of domestic goods to imported goods falls (imports become relatively more expensive). Devaluation and interventionist devaluation both serve to change the country’s demand by lowering demand for imports and increasing demand for domestic goods.

• Another method, now illegal under WTO is the use of tariffs and quotas to limit imports and force domestic consumers to buy domestic goods.
Methods to correct Current Account Deficits: Protectionism/Expenditure Switching

- Definition: Expenditure switching policies aim to divert (substitute) domestic expenditure away from imports towards domestically produced goods. Trade barriers and/or intentionally lowering the exchange rate (devaluation) are examples of such policies.
- These policies are often met with retaliatory protection and reciprocal devaluations.
- “an eye for an eye”
Methods to correct Current Account Deficits:
3. Lowering AD/Expenditure Reducing Policies

- Consumption is greatly affected by income. Some of the income is also spent on imports. So, lowering AD will lower demand for imports.
- Deflationary (review this) fiscal and monetary policies can be used to correct a current account deficit—this is an expenditure reducing policy.
- Examples of contractionary policies are increasing interest rate and/or decreasing government spending.
- Important Note you should remember!!!
Methods to correct Current Account Deficits:
Lowering AD/Expenditure Reducing Policies

• If the government causes deflation in an economy... lower inflation might cause domestic consumers to substitute imports with domestic goods.
• It is also possible that a reduction in AD lowers inflation and improve current account by increasing demand for exports.
• However, remember this:
  “By lowering AD in order to improve the current account, there will be a secondary effect of causing unemployment and lowering growth in the economy”
4. Changes in supply side policies to increase competitiveness

“Use of deflationary policies to correct a current account deficit shows the difficulty in macroeconomic issues—the possible trade-off (choice) between high growth and employment and external balance.”

• Increase LRAS by increasing the ability and propensity of firms to produce and laborers to supply. By lowering labor costs, adding labor skills, investment in technology and productivity, a country can increase its international competitiveness. This will increase exports and also change some spending from imports to domestic goods. ONE PROBLEM....
Changes in supply side policies to increase competitiveness

- PROBLEM: Supply side policies commonly take several YEARS to implement and EVEN LONGER before the effects are visible in the BOP.

CONSEQUENCES OF A CAPITAL ACCOUNT DEFICIT:
- Capital Account Deficit: the country has increased its net holdings of property, capital and financial assets abroad.
  - Advantage: Outflows of money will create profits and returns which will flow into the current account.
  - Disadvantage: Increased foreign wealth may lead to currency appreciation in the LR due to current account surplus.
CONSEQUENCES OF A CAPITAL ACCOUNT DEFICIT/SURPLUS:

• Disadvantage (con’t.): Outflows in capital account deprives the domestic economy of investment funds and lower growth and employment opportunities.

CONSEQUENCES OF A CAPITAL ACCOUNT SURPLUS:

• Capital Account Surplus: the country is receiving net money inflows—matched by outflows for imports in the current account. In effect, other countries are funding the home country’s imports to some extent.
  • Advantage: Little need for a country to worry about these net capital account inflows if in the SR or if most funds are used for investment and not for consumption...
CONSEQUENCES OF A CAPITAL ACCOUNT SURPLUS:

- Disadvantage (con’t.): When big sums of money being borrowed abroad are used for consumption for longer periods then capital account can be a threat to the home economy. Debts will be repaid, exchange rate might depreciated (due to negative expectations from foreign investors), interest rates might increase to keep speculative flows coming and foreign capital might start to leave causing lower growth and increased unemployment.