

**What conditions are necessary for a devaluation to improve the BOP? Can a small open economy successfully devalue?**

Devaluation happens when official action is taken to raise the domestic currency price of foreign currency under a fixed exchange rate environment. Under fixed exchange rates, central banks buy and sell foreign currency to peg the exchange rate. They do this by running down or adding to their reserves of foreign currency. This essay will explore the running of a devaluation and conclude that the Marshall-Lerner condition needs to be satisfied in order for a devaluation to improve the BOP.

From the end of WW1 until 1973 many of the major countries in the world had fixed exchange rates. For example in the 1960s, the French central bank, the Banque de France was set at 4.90 FF (French Francs) per U.S. dollar and the German central bank, the Bundesbank was set at 4 DM (Deutsche Marks) per U.S. dollar. These currencies among most other major currencies were made flexible in 1973. However there are still some smaller countries with fixed exchange rates.

The Balance of Payments (BOP) is the record of the transactions of the residents of a country with the rest of the world. The BOP is split into two accounts. The current account describes the transactions in goods, services and transfers. The capital account covers transactions in assets. One of the main macroeconomic objectives of most economies is to run a small current account surplus. This essay will now explain why.

It is considered to be a bad sign to have a current account deficit. For example a current account deficit may be the result of a low saving rate, which results in a high current consumption leading to lower future consumption, implying that future generations bear the burden of low national saving. Other possible causes of a current account deficit include a declining comparative advantage, high propensity to buy imported goods, high dividend payments as a result of foreign investment in the domestic country, lack of productive capacity of domestic firms, falling surplus in an important resource or a high propensity to buy imported goods and services. Clearly these causes are all undesirable, and thus an economy should aim for a current account surplus. However the following analysis will explain why a large persistent current account surplus is undesirable.

One disadvantage of a current account surplus is that one country's surplus is another's deficit. The BOP for the world must balance; so all the countries cannot run surpluses simultaneously. If countries with persistently large surpluses do not try to reduce them, then deficit countries will not be able to reduce their deficits. Deficit countries may then resort to import controls, from which all countries will suffer. The Dutch Disease Effect is another disadvantage of a surplus. It gets its name from the discovery of large quantities of natural gas in the 1950s in the Netherlands. Most of this natural gas was exported, leading to a large, Dutch trade surplus. As a result the exchange rate rose, pricing Dutch manufactured goods out of export markets. Many economists believe that the discovery of North Sea oil by the UK has led to this effect in this country. Finally a large persistent surplus is highly likely to lead to domestic inflation. A surplus on the BOP tends to increase the money supply, causing the country's currency to be in short supply on the foreign exchange markets, leading to a rise in the exchange rate. To prevent the exchange rate rising, the government must

sell their own currency and buy other currencies, which are then added to the reserves. But because more of the country's currency is issued, the money supply must >circulation (V) and Number of Transactions (T) are constant then explains that money price levels will rise, causing inflation.

As a result of this analysis, an economy should aim for only a small surplus on the current account of the BOP.

Devaluation is one possible way of achieving this BOP objective. It is an expenditure switching policy. Given the nominal prices in two countries a devaluation reduces the relative price of exports from the devaluing country and increases the relative price of imported goods in the devaluing country. The idea is that a devaluation will cause the demand for imports to decrease and the demand for exports to increase. The hope is that as a result the balance of trade will improve, making current account deficits smaller and surpluses greater.

The BOP is about the value of exports and imports, not just their quantity. Thus to assess the impact on the BOP of a devaluation we need to consider how much exports rise and imports fall. Price elasticity of demand (P.E.D) for exports and for imports will clearly impact on the result. The more elastic the P.E.D for imports and exports the larger is the positive impact on the BOP. If both import P.E.D and export P.E.D are elastic, then a devaluation will improve the BOP. The percentage rise in price will be smaller than the percentage decrease in quantity demanded, thus sterling expenditure on imports will fall. The foreign price of British exports will fall, resulting in a large rise in sales. With the sterling price of each export unchanged higher sales will mean a large increase in sterling revenue. It is not however necessary for both import and export P.E.D's to be elastic, the condition needed is the martial learner condition. This states that the BOP will improve following a devaluation if:

$$PED_x + PED_m > 1$$

In words, the sum of the P.E.D of exports and the P.E.D of imports need to be greater than one for an improvement in the balance of payments to occur. If they were exactly equal to 1, then the BOP would be unchanged by a devaluation. If they were less than 1, then the BOP would have adverse affects. Nevertheless this condition is likely to be only satisfied in the median term. In the short-term the 'J-curve' affect may be observed.

A diagram (Diagram 1) of the J-curve is shown below. It shows the impact of devaluation over time. It gets its name from the shape of the curve. Assume initially that the current account is in deficit, and as a result at time X the government decides that a devaluation should be implemented to correct this deficit. The immediate time period after a devaluation shows the current account deficit worsening, before the devaluation takes affect and the 'J' is fully painted.

The J-curve effect was observed following Britain's exit from the Exchange Rate Mechanism (ERM) in 1992, where the current-account worsened initially before improving after approximately 18 months. The reasons for this short-term worsening will now be explored.

Following the devaluation exporters may seek to expand production, in order to meet the increase in export demand. However since supply is relatively inelastic in the short-term, output may not expand greatly at first. It may take time to hire new workers and invest in new capital. Also firms may wait to check that the devaluation is not temporary. Thus the initial increase in exports might be quite modest.

The devaluation may reduce the quantity of imports due to higher import prices, however it may prove difficult for consumers to change their patterns of consumption in the short-term and businesses may be committed to purchasing imports for some time to come due to contracts. This short-term inelasticity of demand may mean that imports do not fall greatly and expenditure on imports may well rise.

With a modest increase in export revenue and a rise in import expenditure it is possible that in the short-term a devaluation could actually worsen the current-account of the balance of payments. As the growth of free trade occurs, and the demand for imports and exports becomes more elastic, in the longer term a move towards the satisfaction of the martial lerner condition, according to the 'J-curve' theory will be observed.

The long-term effects of a devaluation are also not without problems however. The problem in this case is the possibility of inflation. One reason for this is that a devaluation will raise the price of UK imports. This will raise prices in Britain directly and indirectly via increases in the costs of production (import cost push inflation). This inflation will reduce workers' real incomes and thus they will attempt to raise wages. If successful this may lead to further rounds of cost push inflation, known as a wage-price spiral. Another cause of inflation lies on the demand side. If the devaluation boosts exports it may create an upward multiplier effect. Those in the export industries will have extra income and this will lead to extra spending, shifting the aggregate demand (AD) curve to the right. This may be inflationary if the economy is nearing full capacity as suppliers may raise prices to choke off excess demand. If devaluation creates inflation it will reduce UK competitiveness at home and abroad due to higher prices and remove the earlier benefits.

The overall flow of trade in goods and services is the result of millions of individual spending and saving decisions. This therefore makes it very difficult for economic policy to fully control a balance of payments deficit. James Meade suggests that it is necessary to combine expenditure-switching policies and expenditure-reducing/increasing policies in order to meet both internal balance and external balance targets. The internal balance refers to "the achievement of as high a level of demand and employment as is consistent with avoidance of the stimulation of unacceptable inflationary pressure." (Williamson & Milner). External balance is where the balance of payments is in equilibrium. In a case of no capital mobility, a balance of the current account amounts to the same thing as an overall balance of payments equilibrium. The problem is that policies to create employment typically worsen the external balance, and policies to create a trade surplus will affect employment. The economy needs to achieve relatively low inflation with sufficient productive capacity to meet the domestic demand from consumers. Many economists recognise that it is desirable to combine a devaluation with restrictive monetary or fiscal policy. Because the exchange rate is fixed, fiscal policy has no effect. As a

result, a devaluation should be combined with monetary policy. This is an expenditure reducing policy, designed to disabsorb. It will lower the demand for domestic goods and services “non-tradables”. The price of non-tradables will fall relative to tradables whose price is fixed by world prices and the exchange rate. As a result this relative price effect will increase the incentive to supply tradables and reduces tradable demand. Imports are likely to be reduced, as the domestic economy will be able to satisfy more of domestic demand, and thus consumers and firms don’t need to look to foreign trade for goods and services.

Countries with fixed exchange rates tend to delay devaluations. For example Mexico devalued in 1994, which was delayed. Firstly, to reduce the BOP deficit it has to make imported goods more expensive, relative to domestic goods so that domestic residents purchase fewer imports. However this increases the prices of goods that use imports as raw materials. Secondly Devaluations are often self-fulfilling prophecies. – E.g. if expect currency to devalue “(e.g. if you expect the peso to fall from 3.5 to the dollar to 6 to the dollar, you will buy dollars as soon as possible for only 3.5 pesos, expecting that you will later make a profit in pesos by selling the dollars at a higher (peso) price. But as you buy dollars, you deplete the country’s peso reserves and make it harder to maintain the exchange rate)– government tends to reassure the public that devaluations won’t occur – preventing devaluation. However when a devaluation becomes necessary the government official’s look foolish – and therefore another reason why they delay too long.

Overall government’s should bear all this analysis in mind, they should assess the elasticities of import and export demand to test the likelihood that the Marshall Lerner condition will hold. They should combine both expenditure reducing policies with the expenditure switching devaluation, in order to achieve both an external and internal balance. They should also avoid inflation.

Open economies are economies that trade with others. Being open involves having trade and finance linkages with other economies. The countries in the world that currently have fixed exchange rates are all relatively small. It is natural to think that small economies actions won’t affect the economy much, and therefore a devaluation will be unsuccessful. However many small economies specialise in a certain good or service, and therefore their actions will effect the world’s prices and outputs in that commodity, which will then impact on the prices of the rest of the goods in that economy. In conclusion small open economies are able to successfully devalue their currency. This is not to say that all small open economies will be successful upon implementation. The above analysis of the Marshall Lerner Condition and the Internal-External Balance still applies.

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