

THE IMPLICATIONS OF USING EXCHANGE RATE AS A
POLICY INSTRUMENT IN A SMALL OPEN DEPENDENT
ECONOMY LIKE THE BAHAMAS

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Introduction

The structure of the Bahamian economy is predominantly tertiary. Tourism, the most dominant sector accounts for some 60% of Gross Domestic Product, with the United States market generating over 75% of total visitors, the implications of which will be discussed later in the paper. The manufacturing sector which accounts for an estimated 10% of GDP, consists of a small number of foreign owned export-oriented companies and a few small local manufacturing concerns. The bulk of output in the former category is earmarked for the United States market, with the latter producing mainly for the domestic market.

While agricultural output has seen some growth in recent years, the agricultural sector is still in the embryonic stage of development. The consequences of the absence of a sound industrial and agricultural base are reflected in a growing trade deficit as the propensity to import is very high. Over 75% of the nation's trade is with the United States. Imports of goods and services constitute over 75% of GNP. Indeed, while gross receipts from tourism are high, the net gain is relatively low because of the import-intensiveness of the industry.

The structural weaknesses inherent in a small, open, dependent economy like the Bahamas and the ramifications arising therefrom are reflected in the current account of the balance of payments.

We have seen the current account move from a strong surplus position, owing largely to high tourist earnings, to a growing deficit in the post-1979 period. This situation resulted from the combined effects of a slowdown in tourist receipts, rising oil prices, high inflation overseas, particularly in the United States and increased domestic investment activity, both in the public and private sectors. These developments have led some to advocate devaluation as an appropriate policy response to improve the current account imbalance. This argument stems from the view that the United States dollar, with which the Bahamian dollar is on par, is highly overvalued. However, others have argued to the contrary that, having regards to the structural rigidities and the very close trade links with the United States, an exchange rate adjustment will not only be an ineffective policy tool but totally counter-productive.

The basis thrust of this paper will be to examine the implications of an exchange rate adjustment on a small, open and dependent economy like the Bahamas with a fixed exchange rate. The paper will be organized as follows. Section I provides a framework for the analysis with a discussion of the various approaches to balance of payments adjustment. Section II will examine developments in the current account of the balance of payments, with particular focus on the years 1980-1983 when the balance shifted to a deficit. Section III will give a qualitative analysis of the likely impact of devaluation on the current account, focusing on the trade balance and the travel account. Section IV concludes with a look at other policy measures along with those taken or proposed by the authorities to ease the pressure on the current account of the balance of payments.

Section I

There are basically five approaches prevailing in the literature which attempt to explain the process of balance of payments adjustment. Each approach views the balance of payments in light of the prevailing circumstances and problems of the time. The classical approach and the elasticities approach focus on the role of prices in the adjustment process, while the multiplier and absorption theories examine the role of income and expenditure. The monetary approach, on the other hand, stresses the role of money and domestic credit expansion in the adjustment process.

In essence, the classical approach which is based on the purchasing power parity theory emphasises the role played by temporary changes in price levels under a fixed exchange rate regime. According to this theory, if domestic prices in country 'A' rise relative to foreign prices, through commodity arbitrage, imports into country 'A' will increase and its exports will fall. In such a case, temporary changes in the relative prices of tradeable goods provide a mechanism for adjustment in the trade balance. The elasticities approach also rests on the price mechanism, but focuses on the changes in the external and internal terms of trade brought about by adjustment in the exchange rate.

Commodity arbitrage plays a role in both of these approaches. Firstly, to the extent that the prices of identically traded goods are not equalized in terms of currency, with due allowance for transportation costs and tariffs, there would be unexploited profit opportunities to be eliminated by commodity arbitrage. Secondly, the depreciation of a currency tends to cause a temporary fall in export prices in terms of foreign currency and a rise in import prices in

terms of the devalued currency. This temporary price differential leads to commodity arbitrage which tends to cause a shift in production and consumption mixes, with the volume of imports into the devaluing country falling and the volume of its exports rising. However, it must be borne in mind that the expected effects of such an adjustment can be realized only if they are fully or partially reflected in the prices of traded goods, rather than being offset by proportional changes in the level of domestic prices.

Any change in the volume of trade as a consequence of a devaluation does not necessarily lead to an improvement in the trade balance as this in turn depends on the price elasticities of the devaluing country's demand for imports and foreign demand for its exports. Finally, the elasticities approach shows that if the sum of the elasticities of the devaluing country's demand for imports and the foreign demand for its exports is larger than 1, a devaluation will improve the trade balance, while an exchange rate appreciation will worsen it. However, devaluation cannot improve the overall balance of payments if there are destabilizing capital movements.

The multiplier and absorption approaches, which stress the role of income and expenditure attempt to explain the effects of the trade balance on national output and expenditure. The multiplier approach introduces income into the analysis and attempts to show how the income effect may partially remove some of the improvement in the trade balance resulting from the price effect of a devaluation. The absorption theory shows the importance of expenditure changes on the trade balance. Both are based on the proposition that changes in the trade balance cause changes in the volume and the composition

of national output and expenditure, which in turn have significant feedback effects on the trade balance. If a devaluation of a country's currency causes a shift in the internal terms of trade in favour of exports and import substitutes, the volume and composition of the national output and expenditure will also change and may reduce or eliminate an initial improvement. According to the absorption approach, for a devaluation to be successful or for the trade balance to improve, the change in real income must exceed the change in absorption.

Basically then, the income/expenditure analytical framework attempts to show that devaluation cannot be used in isolation to effect any lasting improvement in the trade balance. If devaluation is to be effective it must be coordinated with other macroeconomic policies. Assuming favourable elasticities of demand for imports and exports, a devaluation is more likely to improve the trade balance if demand management and other policies are also used to restrain domestic aggregate demand for imports; for non-tradable goods, so as to prevent any rise in domestic prices relative to that for exports and import substitutes and the demand for exportable goods, so as to facilitate a rise in export volumes.

All the approaches discussed above involve short-term adjustment of the trade account via the terms of trade and the income/expenditure mechanisms. The monetary approach on the other hand, is concerned with adjustment in the longer run. It emphasises the impact of changes in the stock of money or in the rate of exchange on the overall balance of payments via the 'real cash balance' effect. According to this approach, persistent balance of payments deficits can occur only if a country's credit policy is out of line, which

means that the stock and/or the rate of growth of money is too large relative to the demand. Under this approach, an autonomous increase in central bank credit that leads to an excess supply of real cash balances will be translated into an increase in the prices of domestic assets relative to those abroad. This in turn will precipitate commodity arbitrage leading to an increase in imports and a resultant deterioration in the overall balance of payments. However, this imbalance will be self-correcting if the monetary authorities do not neutralize the effects of changes in international reserves. The result will be a decline in the money stock to its previous level with individuals again holding the desired real cash balances.

Section II

For the purpose of this paper, the focus in this section will be on developments in the current account. Since 1975-1978, the current account maintained a large and fairly steady surplus, but showed signs of weakening in 1979. The surplus recorded over the years resulted solely from high and rising receipts from tourism. Owing to the absence of a strong, viable agricultural and industrial base, the trade account has historically recorded a deficit.

Reflecting the extreme openness of the Bahamian economy, the balance of payments came under severe pressure when oil prices, which had already quadrupled in 1974, rose by an average of 150% during the second oil shock, 1979-1980. High rates of inflation in the United States, the major trading partner, further exacerbated the situation as seen in the sharp rise in the value of merchandise imports during the period 1978-1980. The fall-off in economic activity coupled with rising unemployment, particularly in the United States in the early eighties caused a sharp slowdown in tourist receipt. This contributed significantly to the turnaround in the current account from a surplus to a widening deficit position.

In 1980, the current account shifted to a deficit of \$15.2 million and remained in deficit up to 1983, with a marked deterioration in 1981 to \$74.3 million. The deficit, though lower in 1982 and 1983, remained relatively high at \$45.1 million and \$52.1 million respectively (See Table I).

The turnaround in the current account in 1980, was of the marked slowdown in the rate of growth of net travel receipts

TABLE I BALANCE OF PAYMENTS
(B\$ Millions)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Current Account (Net)	66.1	41.2	15.8	-15.2	-74.3	-45.1	-52.1
Merchandise Trade	(-190.5)	(-245.1)	(-337.8)	(-425.6)	(-457.5)	(-416.4)	(-450.3)
Travel	(358.0)	(433.7)	(508.1)	(524.8)	(547.9)	(539.2)	(608.0)
Other Services	(-88.2)	(-132.6)	(150.5)	(-112.5)	(-161.9)	(-171.7)	(-216.9)
Transfers	(-13.2)	(-14.8)	(-4.0)	(-1.9)	(-2.8)	(3.8)	(7.1)
Recorded Capital Flows	50.4	-13.6	-15.1	5.1	158.9	71.4	-
Net Errors & Omissions	-96.8	-35.9	14.6	8.6	-81.6	-12.8	62.2
Overall Balance	19.7	- 8.3	15.3	-1.5	3.0	13.5	10.1
Special Transactions	-	-	4.5	15.5	4.5	-	-
Changes in Net Official International Reserves (increase = (-))	-19.7	- 8.3	-19.8	-14.0	-7.5	-13.5	-10.1

coupled with a growing trade deficit. Despite a reduction in domestic oil imports and sluggish non-oil import growth, the current account deficit increased almost five-fold in 1981, owing largely to a widened trade gap. Although net travel receipts actually fell in 1982, the current balance showed some improvement as exports recovered and oil imports fell. In 1983, the deficit increased by \$7 million, as the growth in net travel income was not sufficient to offset the rise in non-oil imports and outflows on the services account.

The merchandise trade account moves in tandem with the travel account owing to the very high import intensiveness of the tourist industry. The value of oil imports grew at an average annual rate of 42% during the years 1977-1980, reflecting by and large, the more than doubling of oil prices following the second oil shock. (See Table II). From 1981 onwards, oil imports declined moderately as the rate of increase in prices slowed considerably, with a concomitant reduction in volume (See Table III).

The estimated value of non-oil imports rose by only 3% in 1981 and by approximately 2% in 1982, after increasing at an average annual rate of 20% over the period 1977-1980 (See Table II). This deceleration in imports was due in part to the slowdown in tourism and the fall-off in domestic investment, with the completion or near completion of some investment projects. The sharp rise in imports in 1983 reflected in part, the upsurge in tourism and tourist activities following the recovery of the U.S. economy.

The estimated value of exports grew at an average annual rate of 14% during the year 1978-1980, largely as a result of an increase in cement and salt production. In 1981, however, the

(B\$ Millions)

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Current Account	66.1	41.2	15.8	-15.2	-74.3	-45.1	-52.1
Non-oil Merchandise Trade (Net)	-146.0	-189.7	-242.6	-297.0	-334.1	-297.4	-337.4
Exports	(135.9)	(146.4)	(170.5)	(200.5)	(176.2)	(221.6)	(244.7)
Imports	(-281.9)	(-336.1)	(-413.1)	(-497.5)	(-510.3)	(-519.0)	(-582.1)
Net Oil Imports	-44.5	-55.4	-95.2	-128.6	-123.4	-119.0	-112.9
Travel (Net)	358.0	433.7	508.1	524.8	547.9	539.2	608.0
Receipts	(412.4)	(494.7)	(561.7)	(595.5)	(639.1)	(643.5)	(703.5)
Payments	(-54.4)	(-61.0)	(-53.6)	(-70.7)	(-91.2)	(-104.3)	(-95.5)
Transportation (Net)	-3.1	-8.2	-16.4	-4.0	-8.8	-16.0	-9.7
Local Expenses of Offshore Co's	57.2	62.0	71.3	119.3	118.0	111.2	95.0
Other Services (Net)	-142.1	-186.4	-205.4	-227.8	-271.1	-266.9	-302.2
of which:							
Interest, Dividends & Profits	(-74.2)	(-112.2)	(-123.4)	(-113.6)	(-138.8)	(-114.9)	(-123.2)
Transfers (Net)	-13.2	-14.8	-4.0	-1.9	-2.8	3.8	7.1
Private	(-18.6)	(-22.2)	(-15.8)	(-19.7)	(-13.9)	(-17.7)	(-10.3)
Official	(5.4)	(7.4)	(11.8)	(17.8)	(11.1)	(21.5)	(17.4)

TABLE III DOMESTIC OIL IMPORTS

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Value (B\$ Millions)	44.9	55.4	95.2	128.6	123.4	119.0	112.8
Volume (Millions of barrels)	2.78	3.52	4.04	3.71	3.15	3.16	3.24
Average price (B\$ per barrel)	16.15	15.74	23.56	34.66	39.17	37.66	34.81

value of exports fell sharply by 12% as external demand weakened with the onslaught of the global economic recession. While export earnings did recover in 1982, this was due for the most part to the introduction of a new pharmaceutical company. In 1983, the growth in export receipts slowed to 10% (See Table II).

The fall-off in economic activity coupled with rising unemployment, particularly in the United States in the early eighties caused, a sharp slowdown in tourist receipts. After increasing at an average annual rate of 16% in the period 1977-1979, growth in tourist earnings slowed to 6% in 1980, moving up to 7% in 1981. Tourist income grew by a mere 0.7% in 1982, reflecting the impact of the recession in the world economy in general and the United States in particular, coupled with the appreciation of the US dollar against the major European currencies. With the rebound in the United States economy in 1983, gross tourist receipts expanded by 9%.

The deficit on the 'other services' account increased at an annual average rate of 13% over the review period, mainly indicative of higher outflows of investment income which, for the most part, was in direct response to higher interest rates abroad. Net factor payments almost doubled in 1978 to \$112.2 million, with an increase of 10% in the following year. In 1980, net payments fell to \$113.6 million; peaked in 1981 at \$138.8 million and declined slightly in 1982, before rising to \$123.2 million in 1983.

The figure for offshore companies local expenses in the services account gives some indication of the foreign exchange

inflows arising from their local operations as they are required by the Exchange Control Regulations to convert foreign currency to local currency to meet their operational expenses. Offshore companies local expenditures declined by 5% in 1977, but increased by an average annual rate of 12% in 1978 and 1979. In 1980, inflows were significantly higher by 67% due to increased royalty payments and other expenditures by a local oil company. Local expenses fell by 1% in 1981 and were down by an average annual rate of 11% in 1982 and 1983, as two companies ceased operations and that of two others were considerably reduced.

Net transfer payments declined substantially over the years 1977-1981, with a net inflow of \$3.8 million realized in 1982 and \$7.1 million in 1983. Private sector remittances varied over the years with net outflows declining to a low of \$10.3 million in 1983, after reaching a peak of \$22.2 million in 1978. Official transfers, which include certain tourism taxes, registered a cumulative net inflow of \$92.4 million over the review period. Receipts were boosted in 1982 by \$10 million, representing mostly oil exploration fees.

The foregoing discussion brings into sharp focus the extreme vulnerability of the Bahamian economy. The implications of this for the success or failure of an exchange rate adjustment policy will be discussed in the next section.

Section III

The ultimate objective of a devaluation is to improve the trade balance by making a country's exports cheaper in foreign currencies and imports more expensive in domestic currency, thereby increasing export and decreasing imports. However, given the extreme openness of the Bahamian economy and the absence of a strong viable agricultural and industrial foundation, the expected decline in import may not be realized. The Bahamas has a very low price elasticity of demand for imports since the possibility of substituting domestic for foreign goods is very limited. It is not likely that imports will show any significant decline since a considerable amount of imports are used in the production of both non-tradables and tradables. Any attempts to reduce imports, therefore, must be carefully weighted because of the implications for growth and development.

This is not to say that the demand for some luxury or non-essential consumption goods may not fall. However, the price effects from the devaluation would have to be quite large to discourage consumption of these items as experience has shown that the demand for such goods in the Bahamas is highly price inelastic. Consequently, any fall-off in demand that a devaluation may trigger will not be sufficient to effect any significant impact on imports generally.

An import substitution strategy will also be largely unsuccessful, since in the absence of adequate natural resources and limited human resources, most inputs for production would have to be imported. Although the potential for import substitution in the agricultural sector is great as over 78% of our foodstuff is imported, in its present rudimentary state, it is not in a

position to respond positively so as to benefit from a devaluation. Even though some progress has been made towards encouraging increased agricultural production, there are still many barriers to be overcome.

While devaluation may not have any real impact on imports, it will certainly increase domestic inflation as the prices of both tradables and non-tradables would rise. This has serious implications for internal production costs, most of which is comprised of wages. Since wages are tied to the cost of living index, this would lead workers both in the public and private sector to demand an increase in nominal wages to compensate for some of the loss in real wages. The implications of this for the tourist sector, particularly, will be discussed below.

Given the structural rigidities of the Bahamian economy, therefore, the question is how effective would a devaluation be in bringing about structural change? On a general level, devaluation is expected to cause a shift in the internal terms of trade with domestic production becoming more profitable hence providing incentive to stimulate exports. However, in the short run this may not materialize as the export sector may not be able to respond immediately to the stimulus that devaluation seeks to provide. If output is dependent on imported inputs and if wages rise in response to the inflationary effects of a devaluation, then the anticipated wealth effect or economic rent from the devaluation would be greatly reduced.

The structure of the industrial sector in the Bahamas is

such that little or no benefits will be derived from a devaluation. The sector is very small and consists mostly of foreign-owned firms and subsidiaries of multinational corporations. The demand for their output is determined purely by external factors and/or through bi-lateral arrangements with their parent company. A devaluation of the Bahamian dollar would have no impact on the exports of these firms. Indeed, under the present situation, their export earnings do not have any impact on the trade account. For purposes of balance of payments compilation, only their net foreign contribution to the economy is recorded. As far as the local manufacturing sector is concerned, very little real gain will be derived from a devaluation as production is mainly for the local market. For those firms that presently supply the export sector, the increased cost of imported inputs, together with higher wage demands would wipe out any gains from a devaluation.

The services account and in particular, tourism, will not benefit from a devaluation. The cost competitiveness of the industry will worsen as import prices and wage demand rise. This would increase the cost of the tourist product and discourage travel to the Bahamas, and hence lower tourism earnings.

From the foregoing therefore, it can be seen that devaluation would not be a useful tool to bring about any improvement in the trade account and would indeed lead to an overall deterioration of the current account. The fundamental causes of the current account imbalance in the Bahamas are the high rigid demand for imports, the absence of a vibrant industrial or a agro-sector to

effectively stimulate import substitution and/or export promotion and the heavy dependence on a volatile industry like tourism. These structural weaknesses cannot be changed or significantly altered by a devaluation.

Section IV

The desired improvement in the current account may be accomplished either through an increase in exports or a reduction in imports of goods and services. On the trade side, this means reducing the demand for imports and/or increasing the supply of exports. On the services account, we are mainly concerned with increasing the supply of touristic services as the demand for such services are externally determined.

As an article VIII member of the IMF, the Bahamas cannot impose direct restrictions on current payments. The Central Bank's basic policy thrust, therefore, has been one of credit restraint. The Bank used moral suasion to encourage commercial banks to restrain credit for consumption purposes and to increase lending to the productive sectors. However, in an open economy such as the Bahamas where the trade deficit is significantly affected by the level of domestic activity, it is very difficult to impose measures to restrict imports of consumer goods without adversely affecting imports of producer goods. Consequently, any attempts to restrain imports through demand management measures are likely to reduce the level of output. While it may be possible to constrain demand for some goods, the impact would be devastating if the overall level of imports decline.

In conjunction with the Central Bank's effort, Government also sought to curtail its expenditures. However, since the Government plays such a dominant role in the economy, the extent to which its demand is restrained has political, social and economic implications. Needless to say, these measures undertaken proved unequal to the underlying pressures generated by adverse

exogenous factors.

Recognizing the limitations of using monetary policy to restrict demand, certain fiscal policy measures have been taken and/or proposed by Government aimed at increasing supply. In an attempt to promote increased import substitution, particularly of imported foodstuff, several agro-industrial projects such as food processing and canning, garment manufacturing and metal and plastic fabrication are being investigated. Ultimately, it is hoped that a surplus could be produced for export. Greater emphasis is also being placed on upgrading the quality of agricultural products and improving marketing methods. Continued efforts are also being made to promote industrial production and small scale manufacturing operations. Plans are underway for the establishment of a second free trade zone. This should become operative in 1985/86.

As far as tourism is concerned, Government is presently engaged in an ambitious and aggressive promotional strategy which aims to diversify the tourist market by attracting more visitors from non-US markets. Steps are also being taken to ensure the maintenance of a high quality tourist product to keep the Bahamas competitive.