

# Chapter 13

## Discussion II: Implications for Policy

The purpose of this chapter is to discuss the policy implications of the features of the Ghanaian economy discussed in the previous chapter. We approach this task from three mutually complementary angles.

Firstly, we look at the components of a structural adjustment package as described in Chapter 2, and based on the understanding of the Ghanaian economy we have gained in the past chapters, ask the question whether each of the policy measures therein was likely to have the consequences intended by the program, no consequences, or consequences that were entirely unexpected or opposite to the program intent.

Secondly, we turn to the three main research questions formulated in Chapter 1. Of these, the last, namely the applicability of standard model assumptions and theories to the Ghanaian economy, has been addressed in the previous chapter. Thus, only the first two remain, namely the causes of the poor macroeconomic performance in the 1990s and the distributional consequences thereof – these are the questions we will address.

Finally, we formulate a set of policy recommendations that would retain the positive aspects of the historical policies while improving upon them in the areas where they were deficient. As we have seen in Chapter 3, the Ghanaian economy did not undergo any dramatic structural change during the 1990s, therefore these policy recommendations are likely to be applicable to the present day as well.

### 13.1 What were the likely consequences of Structural Adjustment Policies in Ghana?

In this section, we go through the structural adjustment measures one by one and contrast each measure's intended impact with its likely actual impact, given our understanding of the Ghanaian economy as discussed in Chapter 12.

**Decrease government deficit** This measure is supposed to have a plethora of positive impacts. Let's go through them one by one.

Firstly, the resulting decrease in total demand is supposed to improve the balance of payments through decreasing the demand for imports. That is a realistic expectation, as import demand is proportional to GDP, other things being equal. As we have seen that the government was the major source of net demand, and that a large part of the economy is demand-driven, decreasing

government deficit would doubtless be recessionary and therefore decrease the demand for imports. However, this decrease would be transient - as soon as the GDP would start growing again, be it because of government spending or private sector initiatives, import demand would surge right back up. A sustainable decrease in import demand can only be achieved through relative price adjustments and provision of domestic alternatives, both issues we will shortly return to.

Secondly, the decrease in total demand caused by smaller government deficits is supposed to improve the balance of payments by freeing up domestic productive capacity to supply more exports (as the IMF analytical approach, the Financial Programming Framework (FPF), implicitly assumes the total production is unaffected by the stabilization program). This argument is not valid in Ghana. In the case of agriculture, decreasing domestic demand could indeed somewhat stimulate exports. as agriculture is facing an aggregate productivity frontier. However, as food crops are a very large component of aggregate demand, and the relative scarcity of food has been increasing from 1995 onwards, it would take a very large decrease in GDP indeed for such an effect to take place.

In the case of industry, the argument has even less traction as domestic industrial production is demand-driven, thus an increase in domestic production will do nothing to harm exports.

The other hoped-for benefits of government deficit reduction are supposed to work depending on the source of funds to cover the deficit.

If the deficit is financed by borrowing from the central bank, i.e. by printing money, its reduction is expected to contribute towards inflation control. This argument certainly applies to Ghana.

If the deficit was financed by foreign borrowing, its reduction will improve the balance of payments. This argument is correct as far as it goes, as long as the amount of foreign borrowing can be determined by the government. However, in the case of poor countries such as those in the Sub-Saharan Africa, one could argue that the amount of capital inflows (largely consisting of foreign aid) is not directly under the government's influence, and is determined by the donors according to a variety of factors, with high government deficits actually more likely to be branded as "fiscal irresponsibility" and to decrease the aid inflows.

Finally, if the deficit was financed by borrowing from the domestic financial sector, deficit reduction is supposed to free up resources for private investment. This argument's applicability to Ghana is limited in that the actual availability of loanable funds did not appear to be the limiting constraint on investment in Ghana (remember the banks had persistent excess liquidity and saving exceeded investment throughout). The limiting constraints on investment appeared instead to be high interest rates, lack of infrastructure, and lack of investor confidence.

Are any of these three constraints likely to be affected by a government deficit? If the interest rates are determined by the market to be just high enough for the market to accept the outstanding government debt, then a decrease in that debt (or at least in its rate of growth) would indeed have a decreasing influence on the interest rates, and thus stimulate investment. On the other hand, if the decrease in deficit is achieved by curtailing of investments in infrastructure such as roads, then the net effect on investment might well be negative. The final factor, namely investor confidence, is not defined well enough, and perhaps too controversial for us to discuss it here.

The final, and in our view most convincing, argument for decreases in government deficits is that such decreases would lead to lower interest payments in the future, and thus leave less funds for more productive uses. That is hard to disagree with, but is also less imperative than some of the other arguments, as we are explicitly forced to weigh off a decrease in today's government services against a decrease in future government services.

Summing up this somewhat lengthy section, in our opinion the only convincing macroeconomic arguments for control of government deficit in Ghana are firstly, the need to control growth in money supply so as to control inflation (applying to debt financed by borrowing from central bank), secondly, the need to keep the interest rates reasonably low (applying to debt financed by borrowing from the domestic banking system, and only if the interest rates are market-determined to just accommodate the government debt), and thirdly, the need to keep future interest payments reasonably low.

**Curtail support programs such as input procurement and input subsidies for agriculture** One of the measures to achieve a reduction of government deficit was a reduction or cancellation of government programs such as input procurement and input subsidies for agriculture. Besides the positive revenue impact, an intended consequence was to create a space for the private sector to fill that niche instead of the government, supposedly leading to greater efficiency.

In our view, that policy has achieved the reverse of its intended purpose. First of all, the private sector has apparently not sprung up to fill the gap, according to both the references in Chapter 3 and to the fact that since 1995, Ghana's food crop supply was increasingly scarce. This can be expected to have a row of adverse consequences. Firstly, as most of the poor in Ghana are food farmers, and most of the food farmers are poor, reduction in government support of agriculture has directly hit the poorest segment of society.

Secondly, as food production has not been able to keep up with demand, it is very likely that the shortfall was made up through imports. That, in turn, led to a worsening of the balance of payments and therefore higher depreciation rate. As we have seen that probably about a quarter to a third of Ghana's broad money supply is foreign currency-denominated, the increased depreciation translated into increased money supply growth and thus directly into higher inflation. Thus we come to the conclusion that curtailing government support of agriculture could well have damaged agriculture and *still* led to higher, or at least not lower, medium-term growth of money supply and inflation.

Our argument here worked the way it did because agriculture is experiencing an aggregate supply constraint. The story for domestic industry, which is demand-driven, is quite different, as we will see in the discussion of current account liberalization.

**Reduce money supply growth** This is supposed to control inflation. While the connection between money supply growth and inflation is contested theoretically, our econometric investigation of the Ghanaian case leads us to conclude that broad money supply growth is indeed the key driver of inflation. Our econometrics show that an increase in broad money supply translates almost one-to-one into a CPI increase (with the impact spread over a year and a half), in agreement with the constant velocity of money hypothesis that the monetarists (including the IMF) normally use.

Furthermore, it appears that the exchange rate's influence on inflation also works through the money supply (revaluation): as the exchange rate depreciates, the local currency value of foreign currency-denominated assets grows, increasing the total money supply and thus inflation (at a rate of about 0.31% total extra inflation per 1% extra depreciation, spread over about a year).

Thus, control of broad money supply is indeed the key to inflation control in Ghana. The question then is what level of inflation is to be targeted; this a question of policy choice rather than theory and thus cannot be decided in isolation, but must be weighed off against other policy goals. Now that we have econometric estimates of the strength of the connection, it becomes possible to discuss tradeoffs between inflation and other policy targets (the pursuit of which would

lead to money supply increases).

**Increase Interest Rates** There are three often quoted reasons for increasing interest rates (meaning in the first instance interest rates on government bonds, but deposit and lending rates broadly follow the bond rates). Firstly, increasing the interest rates is supposed to stimulate savings, and thus provide more funds for investment. As we have already discussed, in the case of Ghana the problem lies with investment demand, not savings supply, and thus increasing interest rates is counterproductive for stimulating investment.

Secondly, high interest rates are supposed to prevent excessive depreciation of the currency, according to the Uncovered Interest Parity theory of interest rate formation. Unfortunately, the impact of interest rate on the exchange rate was *positive* in the regressions we ran. Thus at least in the Ghanaian case high interest rates do not appear to be a useful instrument for combating exchange rate depreciation.

Finally, high interest rates are supposed to lower the growth of money supply, with the consequences for inflation as discussed above. While controlling the growth of money supply is indeed a worthy goal, in the case of Ghana our econometrics indicate a very weak response of broad money supply to interest rates, with an interest rate increase of ten percentage points resulting in a one-time reduction of 8% in the money supply. The likely reason for that is a very thin financial system, resulting in little “portfolio rebalancing”. Apart from its small magnitude, the money supply response to interest rates only happens at the time they are being raised; keeping them high thereafter has no influence on subsequent money supply growth rates, but has adverse effects on investment, as well as on the expenditure on interest payments to the government.

This latter side effect of high interest rates is directly in opposition to one of the goals of lowering government deficits, namely, lowering government interest payments. As interest rates on government debt are pushed above the market-determined rate, the cost of servicing that debt also goes up, reducing funds available to the government for other purposes.

Summing up, increasing interest rates (beyond the market-determined rate necessary to accommodate the government debt to the domestic banking system) is not an effective tool either for control of money supply growth or for support of the exchange rate. However, it has substantial negative consequences: depressing investment, increasing government interest payment obligations, and creating inflationary pressures.

**Introduce floating exchange rates and depreciate the currency** The resulting increase in domestic prices of exports and imports is supposed to make exports more competitive and to redirect demand away from imports. The overall reduction in domestic demand from reductions in government spending is supposed to make sure there is nonetheless no excess demand for domestic goods.

Our verdict as to this measure is that Ghana really has no choice in the matter. Firstly, given the persistent foreign currency shortage, the Bank of Ghana really does not have enough reserves to withstand even a mild currency attack, so fixing the exchange rate is not an option. Secondly, import demand is very responsive to relative prices, so Ghana couldn't really afford an overvalued exchange rate even if it could maintain it. A sad example is the end of our period: during years 1997-1999, Bank of Ghana intervened (quite mildly) to prop up the exchange rate, leading to its progressive overvaluation. The result was that just as the Bank of Ghana ran out of reserves in 1999, a terms of trade shock occurred, leading to a particularly nasty depreciation (“freely falling”) episode.

So it seems to us that the only way Ghana could reverse the floating of the cedi is by completely reversing current and capital account convertibility reforms - not by a long way politically feasible even if it was desirable.

Once we accept that there is currently no viable alternative to the floating exchange rate regime, the tendency of the exchange rate to have freely falling periods is still quite damaging and should be avoided, if possible. The only two ways to combat that that we can suggest is firstly, for the central bank to refrain from propping up the currency, hopefully leading to more gradual depreciation regimes; and secondly, achieving a viable balance of payments position in the medium term. As long as the trade account, not even counting the debt service payments, is in the deep red, we cannot expect any currency stability. We will further discuss exchange rate policy in Section 13.3.

**Liberalize the current account and reduce price distortions** According to Aryeetey and Harrigan [2000], liberalizing the current account had the following goals: narrow the gap between official and parallel exchange rate, provide foreign exchange to ease import strangulation, achieve a viable balance of payments position, clear up arrears, and introduce current account convertibility.

With the exception of a viable balance of payments, the objectives appear to have been largely achieved. In general, guaranteeing a sufficient supply of capital goods and intermediate inputs is quite essential for Ghana, whose primary and secondary sector are not self-sufficient in either of these. The jump of GDP growth rates from the first five years of the 1980s to the next five years after that was in fact due primarily to capital goods and intermediate input availability, along with huge aid inflows that financed these.

While availability of imports necessary for production was doubtless a good thing, the concurrent glut of final goods is a different thing altogether. This is best discussed in the context of the next policy measure, namely elimination of price distortions.

“Eliminating Price Distortions” refers to abolishing import quotas and reducing import tariffs, while reducing subsidies to domestic producers. As a combination of tariffs and subsidies can easily be self-financing, it is not quite obvious to us what practical benefits such a policy is supposed to carry; what follows is the best we can do to make sense of the arguments presented.

The usual theoretical arguments are Pareto efficiency and comparative advantage. Yet comparative advantage theorems all presuppose a closed capital account; and the practical benefits of Pareto efficiency are not at all clear to the author. Clearly, absurdly high tariffs (say, several 100%) can have almost the same adverse effects as abolishing imports altogether; but the same can hardly be said for tariffs of several dozen percentage points. Sometimes it is also argued that lower prices for imports benefit consumers; however, as at the same time higher import consumption means less income to domestic producers (especially after taking into account the multiplier effects), this argument is not tenable without further refinement.

We have already discussed the subsidies on agricultural inputs; let us now turn to tariffs on manufactured goods. As we have seen in Chapters 9 and 12, the domestic manufacturing sector is demand-driven, and the distribution of overall demand for industrial output between imports and domestic goods is quite responsive to their relative price. Therefore it is safe to assume that the elimination or lowering of import tariffs had several adverse impacts: firstly, it negatively affected a source of government revenue; secondly, it worsened the balance of payments through increased demand for imports; and finally, it depressed domestic manufacturing, thus lowering the national income. As domestic manufacturing is *not* supply-constrained but demand-driven, depressing manufacturing of goods for domestic consumption did *not* contribute to increasing exports.

Summing up, liberalization of the current account was a quite important policy measure for reviving domestic production, and was largely successful and beneficial. The major exception is the elimination of protection of domestic industries through lowering of tariffs on imported manufactured final goods. This measure had several adverse consequences without bringing any benefits visible to the author.

**Liberalize the capital account** Allowing a higher measure of capital mobility is expected to attract more funds for investment. The most-cited adverse effects of opening up capital accounts are capital flight and boom-bust cycles in the credit markets, Latin America providing an abundance of examples for both. A further theoretical criticism [Daly 1996b] is that arguing for capital account liberalization is logically incompatible with comparative advantage arguments, as the latter are premised on closed capital accounts.

Unlike Latin America, Ghana does not provide much evidence for either of these adverse effects, nor indeed of the expected benefits. Net private transfers into Ghana are positive, owing mainly to remittances from Ghanaians working abroad. Capital flight does not appear to be a major issue, possibly because there was not much capital there to begin with; and the banking system is too thin, and the economy too little industrialized, for credit markets to develop substantial own dynamics that could strongly affect the rest of the economy.

On the side of expected benefits, the only major result appears to be the large investments by foreign-owned mining companies. However, as these investments mainly go towards buying capital goods (not produced in Ghana), the constraints on profit repatriation are weak, and the linkages between the mining sector and the rest of the economy are also quite weak, the net benefit to Ghana from the foreign investment in mining appears to be limited at best.

## 13.2 Answering Our Research Questions

After discussing each of the structural adjustment policy components in detail, we are now ready to address our research questions posed in Chapter 1. As the third of the three questions, namely the applicability to Ghana of commonly used theories, was extensively addressed in the previous section, our concern here is with the remaining two questions, namely the reasons for the slowdown in economic performance in the 1990s and the distributional consequences thereof.

This section does not add any new ideas to the in-depth discussion of the previous section. Its purpose is rather to convert the point-by-point analysis of the previous section into a more compact, unified narrative addressing the research questions.

### 13.2.1 Why Was Macroeconomic Performance Not Sustained?

This section discusses the reasons for Ghana's poor macroeconomic performance in the 1990s, as compared to the late 1980s, specifically its lower GDP growth rate, balance of payments problems, and persistent inflation.

Let us first consider the reasons for the upsurge of the late 1980s. We would say that there are three major reasons: firstly, a major inflow of foreign aid released the acute foreign exchange strangulation that the country was subject to in the beginning of the 1980s, allowing for extensive imports of capital goods and productive inputs. This stimulated domestic production across the board, as these productive inputs were at that point its main limiting factor. Secondly, the aforesaid inflow of foreign aid also served to stimulate domestic demand through multiplier effects. Finally,

more reasonable current account policies (such as devaluing the exchange rate to a realistic value) and larger producer prices offered to cocoa farmers, among with other export promotion policies, led to an increase in export supply.

The side effects of that scenario were firstly, a buildup of foreign debt, as export supply could not catch up with the import demand, especially as the latter was stimulated by GDP growth; and secondly, a surge in inflation from the demand stimulus.

Unfortunately, the scenario as outlined above was not sustainable. On the one hand, as the economy became more and more open, exports and imports continued to grow at about the same rate. However, as they were starting from baselines differing by almost a factor of two, the result were persistent trade deficits. As the interest payments on the growing foreign debt also mounted and the abnormally large aid inflows of the 1980s were not sustained into the 1990s, the “Rest of the World” became, and remained throughout the 1990s, a net demand *sink*, so that now the multiplier effects from the balance of payments worked to *lower* GDP.

Let us now turn to sectoral output. As imported inputs and capital goods became freely available, they were no longer the limiting factors in industrial production; the limiting factor now was low demand (capacity utilization of medium and large factories was around 50% in 1990-1993). Unfortunately, due to the high degree of trade openness of Ghana in that period, any factor that increased demand for domestic manufactured goods also increased demand for imports, so that stimulating domestic industry was only possible at a cost of an even worse balance of payments. This was in fact what happened in 1992-94 (1992 being an election year), when the government ran massive deficits, pushing up money supply growth and further worsening the balance of payments (Figure 9.4).

Unfortunately, even such transient stimuli were negated by very high interest rates (over 40% being not unusual) that aimed to counter the inflationary consequences of the aforementioned money supply growth. While our regressions indicate that inflation control through interest rates probably was not very successful, it did crush the already-low investment-to-GDP ratio.

Turning to agriculture, we conclude that while the initial availability of imported inputs was beneficial, the elimination of government subsidies and procurement services largely negated these benefits. Thus, there was no basis for a sustainable growth in the agricultural sector, and local food supply became increasingly scarce. Though the level of disaggregation of our data does not allow us to directly verify that hypothesis, it seems very likely that shortage of locally produced food crops directly contributed to a larger import demand and thus to balance of payments worsening. The cocoa farmers were positively affected by higher cocoa purchasing prices, but as agriculture was now on a productivity frontier, reallocation of labor towards cocoa supply further contributed towards food crop scarcity.

Having thus understood GDP growth and balance of payments problems, let us turn to the persistent inflation. In Chapter 11 we have seen that the major driver of inflation was money supply growth, amplified by money supply - price level feedback loop, so that the medium-term impact of one percent extra money supply was about one percent extra inflation, corresponding to the monetarist predictions. While government borrowing did of course play an important role in money supply growth, an equally important factor was revaluation of the foreign exchange-denominated component of the money supply. Judging by our regressions, about one third of the money supply is foreign currency-denominated, so that for example a 3% depreciation would lead to a 1% increase in money supply and thus an about 1% increase in the price level, spread over about a year.

In contrast to money supply changes that take about 9 months to fully translate into price level

increases (and to depreciation, whose influence on inflation also works through the money supply), the impact of wholesale food crop prices or fuel prices on inflation was almost instantaneous, taking one to three months. We would conjecture that this leads to higher visibility of inflation due to these causes, and thus to their relative prominence in inflation discussions.

### 13.2.2 What Were the Distributive Impacts of the Structural Adjustment Policies in the 1990s?

In this section, we address the remaining research question, namely the distributional impacts of the structural adjustment policies. As a deep investigation of household survey data was unfortunately beyond the scope of this project, we have to restrict ourselves to drawing conclusions from the sectoral discussion above to distributive impacts on the households grouped by their main source of income.

First of all, the state of the economy in the 1990s, while not stellar, was in many respects vastly superior to the state of the economy in the early 1980s, in the few years prior to the adoption of the structural adjustment program. All population groups have profited from the positive GDP growth and increased availability of imports, both production inputs and final goods. However, on top of that various sectors were affected differently. Employment in manufacturing was adversely affected by low demand, removal of protection, and high interest rates; the displaced workers ended up in the informal sector, mainly providing services. Likewise, agriculture, in particular food crop production, was adversely affected by removal of government support programs and competition from imports. Cocoa producers, while also adversely affected by removal of government support programs, fared comparatively better due to increased cocoa purchasing prices. The sector least adversely affected by liberalization was the informal sector, as it was never government-supported in the first place and produced almost exclusively nontradable goods, so faced no competition from imports.

Summing up, while positive GDP growth profited all population groups to some extent, the food farmers and formal sector employees fared worst of all, while informal sector was least adversely affected (largely by default). Thus the net incentives worked towards reallocation of the labor force into the informal sector, which is indeed what we saw in Figure 3.7.

This is a disturbing trend, as the informal sector is one of the least productive sectors of the economy, and offers few perspectives for development. To have a chance at working its way out of poverty, Ghana must find ways to stimulate its agricultural sector, which still contains the majority of the population and the vast majority of the poor, and its industrial sector, which is the most promising in terms of higher productivity, lowering of import dependence, and supply of high value added exports.

The next section outlines some policy suggestions towards achieving that goal.

## 13.3 Policy Suggestions

The problems Ghana faced in the 1990s were a result of several interlocking issues, most importantly a persistent trade deficit, a government that indulged in high deficits in election years, a supply-constrained agricultural sector, a manufacturing sector strangulated by high interest rates and low demand due in part to competition from imports, money supply that had a large foreign currency-denominated component, and a very strong responsiveness of inflation to money supply growth. This led to other problems, such as external and internal debt buildup and persistent

inflation and currency depreciation. Clearly no single recommendation will suffice to tackle that complex of issues; however, we believe that the package presented here goes a long way towards addressing most of them. Not surprisingly, it involves some easy gains and some tough choices.

### 13.3.1 Trade Policy

We would argue that one of the most crucial issues to tackle is the balance of payments deficit. As long as it persists, foreign debt buildup and thus further hemorrhaging of interest payments will have negative impacts on government finances as well as aggregate demand. Furthermore, the ensuing continuous currency depreciation will result in higher inflation, with a strong possibility of increased use of foreign currency as a store of value and even in everyday transactions. As the share of foreign currency in the overall broad money supply would grow, the impact of depreciation on inflation would become ever stronger in a positive feedback loop, leading to higher inflation and possibly eventual effective dollarization of the country, robbing the government of the ability to use monetary policy as an instrument, an ability it still possesses now.

The balance of payments deficit must be tackled from both sides, import demand and export supply. We will discuss export supply below among the sectoral policy recommendations; let us now turn to import demand.

There are two possible reasons for an increase in import demand: firstly, a relative price shift making imports more attractive, and secondly, the inability of domestic producers to satisfy demand, leading to forced substitution. Insufficient domestic supply can only be addressed by supply-side measures and is thus discussed in the sectoral policies section. Here we only note that it is more likely to be relevant for the supply-constrained agriculture than for the demand-driven manufacturing.

Let us now turn to the influence of relative price on import demand. We have seen in Chapter 9 that the relative price elasticity of demand for industry imports is about -1. Thus, import demand responds strongly to relative price and a moderate increase in tariffs on manufactured consumption goods would be effective in lowering import demand, increasing demand for domestic industry as well as raising extra revenue. That would appear to us one of the easy, low cost/high gain measures. The key to doing it right is firstly, restrict the tariffs to final goods and the few capital goods for which domestic substitutes are readily available; secondly, keep the increases moderate; and finally, restrict the demand-redirecting measures to manufactured goods.

While this is not by itself a sufficient measure, it would provide fast balance of payments relief while stimulating import substitutes; whereas the equally necessary measures to expand export supply would take several years to kick in.

Note that reining in the share of imports in GDP is necessary; a mere expansion of exports (even if all the foreign exchange generated thereby accrues to Ghanaian firms and nationals) would lead to an increased GDP via the multiplier effects, and thus to a proportionate increase in imports, to a large extent negating the positive balance of payments effect of increased exports.

### 13.3.2 Sectoral Policies

While moderate tariffs on manufactured final goods imports will provide a degree of balance of payments relief and stimulus for domestic manufacturing, over the medium term it is necessary to expand the supply of exports and import substitutes.

First, consider industry. We have seen that interest rates are not an effective tool of monetary policy, while high interest rates are a serious impediment to investment. Therefore interest rates

should be market-determined, and therefore positive in real terms and large enough to accommodate the substantial government debt, but not any higher than that. This should go a long way to stimulate investment and manufacturing for domestic consumption.

As industry as a whole is not supply-constrained, any program of support of export industries needs to be specifically targeted to reach these, rather than the whole of the secondary sector. As non-traditional exports are by far the fastest growing export component, the optimal approach to industrial export support is likely to consist in programs specific to each export sub-category, rather than broad macroeconomic measures of the kind that we discuss here.

In agriculture, on the other hand, the binding constraint is not demand deficiency but an aggregate supply deficiency. As at this point export crop and food crop production actually compete with each other for the total productive capacity, agricultural policies should aim to expand the productivity of the sector as a whole. Thus, the optimal policy interventions would be in provisions of infrastructure such as roads and storage facilities, along with credit and reinstatement of input procurement programs and input subsidies. If it is deemed essential that the latter is done by the private sector, then that should be achieved by first making sure the private sector solution works in parallel to the government-run system and only then dismantling the latter.

### 13.3.3 Fiscal Policy

One of the first questions that any policy proposal must address is its own financing. How should the above sectoral interventions be paid for?

Firstly, let us note that a substantial part of the cost of export promotion and agricultural support programs could be paid for by the proposed import tariff. Secondly, we need to remember that depreciation has a substantial impact on money supply growth. Therefore, policies that expand exports (or production of domestic food crops, leading to smaller food crop imports) and thus improve the balance of payments will lead to smaller depreciation and therefore decrease the rate of broad money supply growth. Thus it is quite feasible that cost-effective agricultural support measures, even if partially financed by money creation, might actually lead to lower money supply growth *and* better balance of payments, once the influence of lower depreciation rates is taken into account.

Having said this, it is still true that inflation in Ghana is extremely responsive to money supply growth, so there is a very strong argument for trying to keep the latter down. However, as the above example demonstrates, inflation control targets must be weighed off against the other policy targets, rather than treated as an overriding objective.

### 13.3.4 Exchange Rate Policy

While we were admittedly not as successful in explaining the exchange rate behavior through regressions as was the case with the other relationships, it appears that in broad terms the exchange rate responds to the relative price of domestic goods vs. imports and to the relative abundance of foreign exchange reserves.

Further, the apparent pattern of exchange rate movements were periods when depreciation rate was stable and lagged behind the rate of inflation, alternating with quite violent “freely falling” strong depreciation periods that re-aligned the relative prices while causing another surge of inflation. There were two freely falling episodes during our period. The second happened after a period of attempted exchange rate stabilization by the Bank of Ghana, and was the larger of the two.

The message that we extract from that is that the Bank of Ghana should under no circumstances attempt to prop the exchange rate up. Besides being costly to prop up and immediately increasing import demand, an overvalued exchange rate will correct itself anyway once the Bank of Ghana runs out of reserves, and the ensuing depreciation will be all the stronger for the delay.

In fact, in our view the problem of choosing the right intervention strategy in the exchange rate market might be likened to the optimal strategy of forest fire management. Just as inflation gradually accumulates to make an exchange rate overvalued, the dry wood in the forest accumulates and increases the fire hazard. If one tries to suppress every fire using all the resources one has, eventually there will be enough dry wood around to make the next fire too big to quench, and that maxi-fire could well cause more damage than any of the smaller ones we had suppressed. Instead, the correct method of fire management consists in igniting smaller, controllable fires on purpose as soon as there's a little dead wood around, and thus keeping the fires small.

Likewise, it might be worth while to consider an exchange rate policy that is based on watching some relative price indicator and intervenes to *depreciate* the exchange rate at first signs of overvaluation. There would be several positive consequences to such a strategy: firstly, one could hope to avoid the damaging maxi-depreciations that happen every so often in the "normal" course of affairs. Secondly, that little extra depreciation would help lower imports via relative price effects, thus reducing future depreciation pressures; thirdly, rather than losing money on propping the exchange rate up, the Bank of Ghana might actually make a bit of a profit while keeping it at a more realistic level.

The only downside would be higher import prices; however, slightly higher but more stable prices of imports might well be better than occasionally lower but more volatile prices.

### 13.3.5 Monetary Policy

One of the surprises that has emerged from the regressions is that during the period we investigate the interest rates were nearly useless as an instrument to control money supply growth. Thus the interest rates should be kept as low as the domestic credit market would allow while still being able to absorb the outstanding government debt.

Therefore, the major instrument of monetary policy available to the Bank of Ghana is control of the monetary base, especially of money creation from lending to the government. This should be used with caution, as discussed in the fiscal policy section.

## 13.4 Summary

In this chapter we have seen that the theoretical analysis we have conducted in this thesis was sufficient to answer our research questions as well as to conduct an overall assessment of structural adjustment policies in Ghana in the 1990s, and to make specific policy recommendations. The main reasons for the worsening macroeconomic performance were seen to be an overly liberal import tariff policy, a slowdown in foreign assistance, and a supply constraint in agriculture due to population growth and withdrawal of government support. These factors led to further problems, notably a severely deficient demand for domestic industry output, persistent balance of payments deficits and growing foreign debt. The overall distributional effects of structural adjustment were firstly, an overall increase in well-being compared to the crisis of early 1980s, and secondly, implicit (unintended) net incentives for labor relocation into the informal sector, which is problematic from both the perspective of productivity growth and poverty alleviation.

The recommended policies included stimulating demand for domestic manufactures through a targeted tariff on imported final goods; broad supply-side policies for the agricultural sector, such as infrastructure and input provision; and keeping the exchange rate from becoming overvalued through mild Bank of Ghana interventions.

On the monetary policy side, interest rates were almost useless as a means of controlling money supply, while currency depreciation had a strong impact on money supply growth through revaluation effects. Therefore, interest rates should not be increased beyond market equilibrium values; and measures that improve the balance of payments and therefore decrease depreciation could well lead to lower money supply growth and inflation, even if they are partially financed through money creation.