An Alternative Theoretical Model for Economic Reforms in Africa[1]

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Abstract

This paper offers an alternative model for economic reforms in Africa. It proposes that Africa can still get on the pathway of sustained economic growth if economic reforms can focus on a key variable, namely, the price of non-tradables. Prices of non-tradables are generally less in Africa than in advanced economies, and the typical basket of goods for many Africans will contain more non-tradables, while the reverse is the case in advanced economies. Working through its effect on the real exchange rate and given some plausible assumptions, this paper demonstrates that economic reforms which reduce the price of non-tradables in Africa vis-à-vis the price of non-tradables in advanced economies can lead to real exchange rate depreciation, a rise in net exports, an avoidance of the "Dutch Disease" syndrome and a rise in per capita income. The paper concludes that any economic reforms that either skew consumption in Africa in favour of non-tradables vis-à-vis tradables or that reduce the price of non-tradables in Africa vis-à-vis non-tradables in advanced economies is likely to be welfare-improving.

Résumé

La présente étude propose un modèle alternatif de réformes économiques en Afrique et avance que l'Afrique peut encore emprunter la voie de la croissance économique durable si les réformes économiques peuvent être centrées sur une variable clé, à savoir le prix des biens non échangeables. Les prix de ces biens sont généralement moins élevés en Afrique que dans les économies avancées, et le panier de biens typique de beaucoup d'Africains contiendra plus de biens non échangeables, alors que l'inverse est le cas des économies avancés. En travaillant sur son impact sur le taux de change réel et au vu de certaines hypothèses plausibles, cette étude démontre que les réformes économiques qui diminuent le prix des biens non échangeables en Afrique par rapport au prix des biens non échangeables dans les économies avancées peuvent entraîner une dépréciation

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du taux de change réel, une augmentation des exportations nettes, éviter l'apparition du « Syndrome Hollandais » et une augmentation du revenu par habitant. L'étude en conclut qu'il est probable que toutes réformes économiques qui soit orientent la consommation en Afrique en faveur de biens non échangeables par rapport aux biens échangeables, soit qui diminuent le prix des biens non échangeables en Afrique par rapport aux biens non échangeables dans les économies avancées, ne peuvent qu'améliorer le bien-être des populations.

Introduction

Despite the dominance of long-term growth objectives in the economic strategy of many African countries, achieving the necessary economic growth needed to break the vicious circle of poverty has remained an illusion. In the aftermath of political independence the conformist perception with regard to fiscal prudence and macroeconomic management in African countries was characterised by dirigistic tendencies, namely, large government deficits, repressed financial sectors, inward-looking industrialisation strategies, high inflation and overvalued exchange rates. With the benefit of hindsight, these policies can be seen to be unsustainable, even though they had popular political and economic reasons underlying their adoption. The breakdown of the Bretton Woods (fixed exchange rate) system and the oil price shocks of the 1970s pointed to the need for openness and liberalisation of these economies.

However there are peculiar problems associated with the openness of an economy. In this regard the fundamental macroeconomic puzzle is the simultaneous maintenance of internal and external balance. Internal balance is associated with full or high employment and zero or low inflation, while external balance connotes zero or sustainable current account deficits. The traditional demand management policies have been shown to be inadequate for solving these problems. For example, Hossain and Chowdhury (1998) cite two side-effects that emerge when demand expands in a situation where supply responds with a lag. First, expansionary policies will cause inflation, so that the Keynesian multiplier will only work in nominal terms (Rao 1952). Second, as domestic supply cannot meet demand, the current account deficit will increase. Therefore demand management policies must be accompanied with supply-side policies designed to enhance growth and structural change so that the tradable sector of the economy expands at a faster rate (Corden 1981). But what exactly is the focus of policy makers in the design and implementation of economic reforms in Africa? Why have reforms been largely unsuccessful in many African countries? Are there vantage variables or intermediate targets that African policy makers can exploit to get on the fast track of economic growth? This paper proposes that Africa can still achieve

fast economic growth if reforms focus on a key variable, namely, the price of non-tradables.

Africa and the challenges of openness[2]

There are a number of problems and issues which African economies have to grapple with as a result of economic liberalisation. As previously mentioned, the most abiding question confronting an open economy is the simultaneous maintenance of both internal and external balance. For the purpose of this paper we examine some of the constituent problems which are the aftermath of the openness of developing economies. In general economic parlance these problems are referred to as 'external shocks'. We categorise these problems as demand-related, inflation-related, trade-related, capital-related and re-source-related.

Demand-related problems

Demand-related problems arise because of the susceptibility of developing economies to occurrences in the world economy. This can be easily demon-strated using the familiar national income identity given as:

$$Y = C + I + G + X - Z \qquad\qquad (1)$$

Where Y is gross national product (GNP), C is aggregate consumption, I is aggregate gross investment, G is government expenditure, X is exports and Z is imports. The major channels through which external factors affect the domestic economy are exports and imports. Exports are the excess of aggre-gate demand in the trading partner's economy. If there is a slowdown in that economy, exports will fall, and so will GNP. Arthur Lewis succinctly cap-tured the link between developing countries' exports and prosperity in ad-vanced economies in his Nobel Lecture (1980). According to him the growth rate of world trade in primary products was about 0.87 times the growth rate of industrial production during periods of economic boom in the industrial world. Hence he posits that we need no elaborate statistical proof to show that trade depends on growth in the industrial world. Moroever most devel-oping countries depend on imports for consumption and industrial produc-tion. In the absence of domestic equivalents imports will not fall even if exports fall. This causes a further deterioration in the current account bal-ance. Finally most developing countries depend on foreign aid to meet gov-ernment expenditure. Aid has been found to be procyclical; it tends to rise during periods of economic boom and fall during periods of economic reces-sions.

Inflation-related problems

Inflation can be transmitted into the domestic economy if trading partners adopt expansionary policies. Expansionary monetary and fiscal policies in a trading partner's country can result in increased export demand, and this can lead to inflationary pressures if the exporting country does not have excess capacity or possesses considerable supply lags. Inflation can also result when exports expand and the balance of payments turns into a surplus position. Under a fixed exchange rate system, increased inflows of foreign exchange lead to monetary expansion, if unsterilised. A number of studies (e.g., Triffin and Grubel 1962; Whitman 1969; Iyoha 1973) have shown that open economies are actually able to export some of their inflation to their trading partners.

The purchasing power parity (PPP) doctrine links movements in the nominal exchange rate to changes in national price levels. The PPP ensures that the prices of homogeneous products are equal across international borders once the nominal exchange rate adjusts accordingly. This relationship can be represented as:

$$P_{d=}eP_f \qquad\qquad\qquad (2)$$

where P_d is the price index of domestic goods and services, while P_f represents the price index for foreign goods and services. Although there are several reasons why this may not hold in its strictest form, it points to the reality that foreign price changes can be transmitted into the domestic economy if the nominal exchange rate does not adjust. In fact the high inflation experienced in many developing countries in the 1971–1972 periods has been attributed to imported inflation in terms of domestic currencies, owing to the December 1971 realignment of exchange rates (IMF 1973).

Trade-related problems

The Singer-Prebisch hypothesis reflects intellectual skepticism about the benefits of trade liberalisation. This hypothesis suggests that developing countries experience declining terms of trade because of the nature of their export products. Developing countries mainly export primary products, whereas advanced countries export finished products. However, the prices of primary products do not rise as much as the price of finished products. Since terms of trade are defined as the price of a country's exports relative to the price of her imports, developing countries experience a secular decline in their terms of trade. A country can also experience a decline in its terms of trade when there is a sudden rise in the price of an important import. The classic example is the oil price shocks of the 1970s. Since oil is a complement to capital, a rise in the price of oil can lead to idle capital and a fall in production. This

is equivalent to a fall in capital stock which shifts the production function inwards.

There is also a demand side to the problem of declining terms of trade. When the terms of trade decline, the income of exporters falls. This translates into a fall in purchasing power, aggregate demand and output. Given that many imports of developing countries are essential and have no local substitutes, financing these imports can lead to a rise in the country's debt burden.

Capital-related problems

Developing countries have experienced substantial increases in capital flows in recent times (Dooley et al. 1996; Fernandez-Arias and Montiel 1996). Although capital inflows can be a veritable source of foreign investment, the concern with the recent inflows is associated with the short-term nature of such monies. This is the so-called hot money. There are concerns as to the sustainability of the inflow and to the incipient debt crisis it connotes. More fundamentally huge capital inflows, if unsterilised, can lead to monetary expansion, inflation and rise of the real exchange rate (RER). The appreciation of the RER can also offset any expected benefits from liberalising the economy, since devaluation is an integral part of the policy. In countries where the balance of payments responds significantly to occurrences in the capital account, huge capital flows can lead to unsustainable current account deficits. This is even more so if the inflow is in response to a consumption boom, as was the case in Nigeria following the oil price hikes of the 1970s. Finally rapid reversals of capital flows can cause domestic liquidity problems, and large increases in inflows may jeopardise the safety of the banking system as it rushes to expand credit (Hossain and Chowdhury 1998). In the final analysis such capital inflows cause macroeconomic instability.

Resource-related problems

The movement of productive resources between tradables and non-tradables tends to occur whenever there are large shifts in the level of domestic spending. One common case that has received considerable attention among economists is that of a country which experiences a large change in wealth resulting from a rise in the value of the country's natural resource. The effect of resource discoveries or resource price increases can be very remarkable and has come to be known as the Dutch Disease. As the balance of payments improves with the rise in export earnings, the exchange rate appreciates. However, this has injurious effects on the structure of domestic production. The manufacturing sector loses its international competitiveness as their foreign prices rise. This slows down the transformation of the economy and makes it susceptible to resource price fluctuations.

Furthermore, inflation in many developing countries is higher than in advanced economies. When countries fail to devalue to maintain the real exchange rate, the Dutch Disease can arise. The exchange rate becomes over-valued and the prices of tradables are forced to be low, while those of non-tradables rise relatively. This induces consumers to move to tradables, while productive resources move to non-tradables. As Krueger (1978) shows, the aftermath is a chronic balance of payments problem.

Although these problems have the power to destroy the main structure of an economy, well-conceived reforms can either ameliorate their impact or eradicate them completely. In what follows, we suggest an alternative framework for economic reforms in Africa based on this insight.

A theoretical framework for economic reforms

The process of transforming an economy through any kind of economic reform consists largely of getting prices right. For an open, developing economy one of the most important prices is the RER. Using the definition of the PPP doctrine in equation (1) above, the RER can be given a generic definition as follows:

$$RER = e.P_f / P_d \qquad\qquad (3)$$

where all variables remain as defined earlier. Given this characterisation the *RER* is often taken to represent the country's international competitiveness. Hence high domestic inflation relative to the trading partners' inflation levels, assuming no change in *e*, makes domestic exports expensive and worsens the country's trade balance. The reverse is true for low domestic inflation. However, the realness of *RER* is more succinctly captured in its alternative definition as the ratio of the price of tradables (*PT*) to non-tradables (*PNT*). In this definition the *RER* becomes essentially a summary measure of incentives that guide domestic resource allocation and distribution of aggregate demand across sectors.

Tradables are goods and services which have readily available foreign substitutes, such that their prices are determined by the vagaries of international demand and supply. On the other hand non-tradables comprise goods and services which do not have readily available foreign substitutes and do not enter into world trade; their prices are solely determined by internal costs and demand (Salter 1959). The typical textbook examples of non-tradables are housing rentals, construction and haircuts. But others include land, certain types of capital goods, transport costs, social infrastructure amenities such as electricity, water and roads, real estate, hotel services, banking and insurance services, telecommunication services and professional services such as those of doctors, lawyers, teachers, beauticians and housekeepers.

The definition of the *RER* given in equation (3) can be further decomposed. The domestic and foreign price indices are actually a combination of both prices of tradables and non-tradables. Hence,

$$P_f = \theta P_n^* + (1-\theta)\, Pt^* \tag{4}$$

$$P_d = \theta P_n + (1-\theta)\, Pt \tag{5}$$

where θ represents the proportion of non-tradables in the index while * is designates foreign prices. Substituting (4) and (5) into (3), we obtain a more inclusive definition of the RER as follows:

$$RER = \frac{e.\; \theta P_n^* + (1-\theta)\, Pt^*}{\theta P_n + (1-\theta)\, Pt} \tag{6}$$

Given this definition, the *RER* is thus equal to the nominal exchange rate adjusted by the ratio of foreign tradables and non-tradables vis-à-vis their domestic counterparts. Since developing countries cannot influence the price of tradables, the real value of their currency rises with the nominal value and falls with the home price of non-tradables. Hence movements in the RER are significantly affected by movements in the prices of non-tradables.

The economy's stock of productive resources, that is, capital and labour, is assumed to be exogenous. Assuming full resource utilisation in the short run, the expansion of one sector will require the contraction of the other. Following the specific-factors model, capital is sector-specific in the short run. Hence output expansion in either sector will require additional labour inputs. Assuming conditions of full employment additional workers are either drawn from the pool of unemployed people or from the declining sector. However, in the long run, capital accumulation is the main source of output expansion in both sectors.

Studies have shown that the cost of living, represented by a basket of goods that includes food, housing and consumer goods, is higher in developed countries than in developing ones. Assuming that prices of tradables are equal across countries, then the source of this discrepancy can only come from the price of non-tradables. The prices of non-tradables are typically lower in developing countries. If we adopt this premise, then a unit of the currency of developing countries converted to developed country currency through the *RER* will buy more goods in developed country markets than when converted through the nominal exchange rate (*NER*). African countries have more rural areas and rural dwellers than developed countries, while the reverse is true for developed countries. We also assume that the typical

basket of goods for a rural dweller will contain more non-tradables than tradables. Economic reforms or technological improvements that reduce the prices of tradables are therefore likely to benefit both developed and developing countries because of commodity arbitrage and international trade. However an economic reform that reduces the prices of non-tradables in developing countries vis-à-vis non-tradables in developed countries is likely to be welfare-improving for developing countries.

From the definition of the *RER* in equation (6), a fall in P_n will lead to *RER* depreciation, a rise in net exports and a rise in output in the domestic economy. The foregoing proposition depends on the assumption that the Marshall-Lerner condition holds. Depreciation makes exports cheaper in the foreign market and imports dearer in the domestic market. Consequently the true effect of depreciation on net exports may be ambiguous. However, if the rise in exports demand is greater than the fall in imports, net exports will rise, and there will be an unambiguous improvement in the trade and current account balance. Hence the Marshall-Lerner condition requires that the algebraic sum of the foreign price elasticity of exports and the domestic price elasticity of imports be greater than one. That is, the sum of the price elasticities must be greater than one.

In addition, a fall in P_n will induce a shift of mobile resources from the non-tradables sector to the more competitive tradables sector, while domestic demand will shift from the tradables to the non-tradables sector. In order to gain competitive advantage, therefore, African countries must initiate economic reforms which target the supply side of the economy and force the

Figure 1: Interplay between Prices of Non-tradables and the Economy
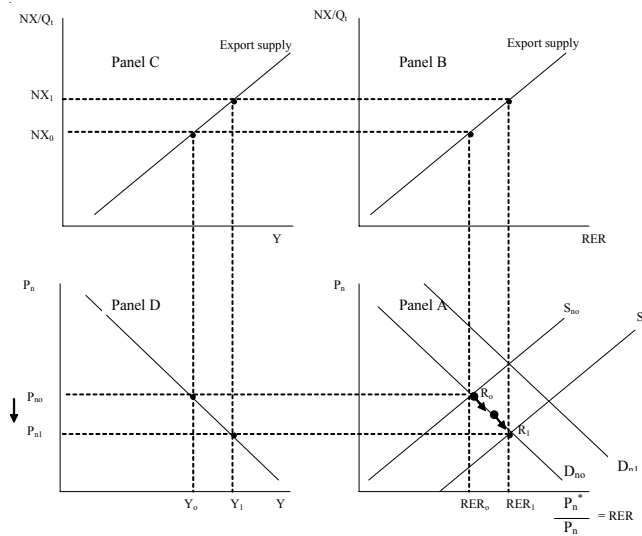
price of non-tradables down. The diagrammatic framework in Figure 1 will help illuminate the basic structure of the economy and the ideas developed above.

In Figure 1, panel A shows demand and supply of non-tradables in the domestic economy. This is measured in the P_n and RER axes. Note that the demand for non-tradables (Q_n) is also measured on the horizontal axis. However, since both Q_n and RER are negative functions of P_n, the graphical representation is still valid. Demand for non-tradables rises as price falls. We adopt the central assumption of the tradables-non-tradables model. Hence domestic demand for non-tradables must equal domestic production, since there are no exports or imports for such goods. Panel B shows the relationship between net exports (NX) and RER. A rise in RER, that is, a depreciation of the RER, will make the country's exports more competitive in the world market and hence increase the country's net exports. Since net exports enter into the aggregate demand function and national income identity with a positive sign, increases in net exports also increase output. This is represented in panel C. Panel D captures the negative relationship between P_n and output, Y. Assuming the economy is at initial equilibrium designated as R_o in Panel A, this corresponds to P_{no}, RER_o, NX_o, and Y_o in the other panels. RER_o is the equilibrium exchange rate because it clears the non-tradables market. This follows directly from our assumption that domestic supply and demand for non-tradables must be equal, since there are no readily available foreign substitutes.

What then will be the impact of an economic reform that targets the price of non-tradables in this economy? Price changes are simply movements along the same demand curve. A reform that reduces the price of non-tradables to, say, point R_1 will have the following implications. Except there are administrative interventions or in the case of inferior goods, a reduction in the price of a good almost always emanates from a reduction in the cost of producing that good. The reform which reduces P_n initially reduces the cost of production. Hence the supply curve shifts rightwards in response to a reduction in cost. This brings the economy to R_1. At this point the RER rises, that is, depreciates to point RER_1 corresponding to point NX_1 in panel B. The rise in net exports represents an increase in output to point Y_1 in panel C, and the interaction is complete in panel D. It shows the relationship between the reform option to reduce P_n and the effect on output.

A sustained rise in income can lead to an increase in per capita income. Assuming this leads to an increase in the demand for non-tradables, this will shift the D_{no} line to D_{n1}. How will this economy react to the rise in P_n arising from the change in demand? The effect of a shift in demand is somewhat different. It simultaneously raises P_n and depreciates the RER. Obviously the

depreciation of the *RER* continues to bestow its advantages on the economy. However, in the case of the rise in P_n, policy makers can resort to the same policies that forced down P_n to correct for the shift in demand.

One should recall that the fall in P_n should have signalled productive resources to move into the tradables sector, while consumers move into the non-tradables sector. Although we have made the rather simplistic assumption that demand for non-tradables must always equal its supply, we must face the question of how to ensure that mobile resources are induced to at least remain in the non-tradables sector to meet increased demand in the sector. First, we underscore the point that the kinds of reforms that reduce the P_n are usually supply-side reforms. Hence these reforms would have reduced the production cost in the non-tradables sector. For example, the provision of electricity actually reduces the price of haircuts because it reduces the cost of that service. In addition, however, government can intervene by providing sector-specific incentives like tax holidays and rebates and other kinds of special treatment for producers in the non-tradables sector.

The induced fall in the price of non-tradables provides a rise in the relative price of tradables in the economy. The reforms advocated in this paper are supply-side policies designed to enhance growth and structural change so that the tradables sector of the economy expands at a faster rate. The above framework can be used to complement other reforms in tackling the problems of openness of African economies. For example, a reform that targets domestic prices can be used to check the problem of overvaluation of the *RER* in many African countries. It can also be used to encourage the development of the manufacturing sub-sector, which is an integral part of the tradables sector. This can help cushion the fears of the Singer-Prebisch hypothesis. Furthermore, the inflation rates of many African countries far outweigh those of the developed countries, and this gives enormous trade advantages to the developed countries. A reform that targets P_n will in part help to check domestic inflation. More fundamentally, such reforms will be useful in correcting inherent structural imbalances in many African economies. In the next section, we illustrate how economic reforms using the suggested framework can help African countries overcome two key problems associated with openness: the Dutch Disease syndrome and destabilising capital inflows.

## Tackling the problems of openness in Africa

The Dutch Disease syndrome
The aftermath of large shifts in the level of domestic spending is usually a shift of production between tradables and non-tradables. There are a number

of reasons why this may occur. For example, it can occur when a country begins to repay its debts. However, the most interesting reason for this occurrence is when a country experiences a large change in wealth because of shifts in the value of natural resources owned by the country. As Black (2002) encapsulates, the Dutch Disease is the effect of an increase in net exports driving up a country's exchange rate, which handicaps the sale of other exports and impairs the ability of domestic products to compete with imports. Many countries have suffered from this syndrome. For example the discovery of natural gas in the Netherlands, crude oil in Nigeria, coffee in Colombia and North Sea oil in Norway all led to large shifts in the production structure of these countries.

In Figure 2, following Sachs and Larrain (1993) we present an illustration of the Dutch Disease syndrome in a hypothetical economy with two sectors, a non-tradables sector and a manufacturing/tradables sector. The economy is at an initial equilibrium at point E_0. This is the point of intersection between the production possibility frontier (PPF) and the long-run consumption curve (OC). The discovery and export of a natural resource, say coffee, shifts the PPF to the right with a new equilibrium at E_1. Comparing the production structure at points E_0 and E_1 reveals four distinct features.

**Figure 2**: Dutch Disease in a Hypothetical Economy
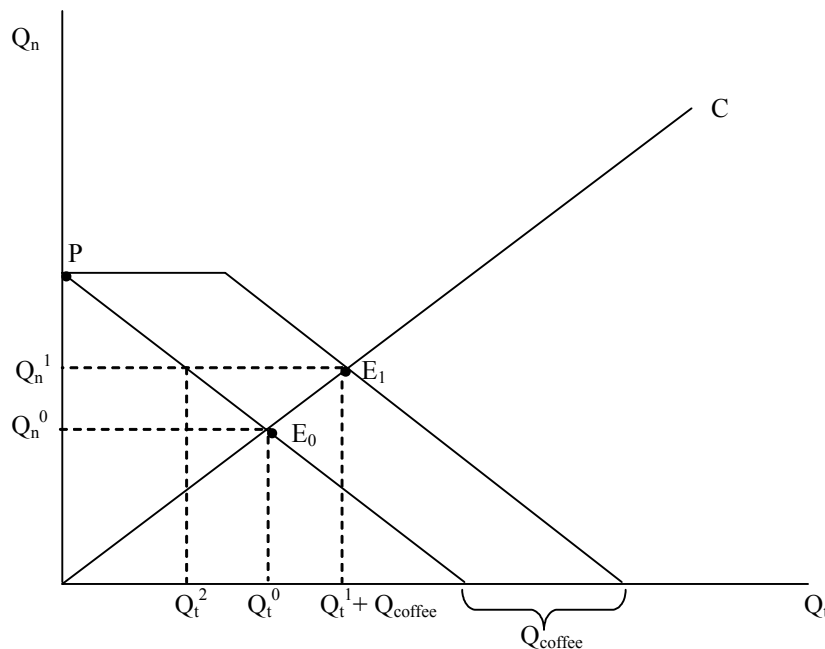
First, manufacturing production has fallen from Q_t^0 to Q_t^2. Second, coffee production has risen from zero to Q_{coffee}. Third, total tradables production has increased from Q_t^0 to Q_t^1 plus Q_{coffee}. And finally, non-tradables production has risen from Q_n^0 to Q_n^1. The problem with the emerging structure, therefore, is that the discovery of coffee crowds out the manufacturing sub-sector. This is made even worse by the appreciation of the *RER* following exports of coffee. Hence the manufacturing industry loses international competitiveness.

Inflation in many African countries is very high. When a country's inflation rate is much higher than those of her trading partners, this may also lead to the Dutch Disease syndrome. This is especially true for countries that operate a fixed or managed floating exchange rate system. The pegging of the *RER* makes tradables relatively cheaper while increasing the price of non-tradables. The result is that domestic demand shifts to tradables, while productive resources shift to non-tradables. One way to avoid this result is to devalue the currency so that the manufacturing sector will regain competitiveness. Considering the characterisation of the *RER* given in equation (5), it is obvious that the only variable that can be easily manipulated to depreciate the *RER* is the price of non-tradables. Although the nominal exchange rate is important for the analysis of debt issues, short-run market clearing under flexible regimes and many other problems, it is the real concept that matters for trade flows. Given the small-country assumption, policy cannot affect the price of tradables, as this is determined in the international market. Consequently, economic reforms can be used to depreciate the *RER* and ensure an avoidance of the Dutch Disease.

How then can reductions in the price of non-tradables (P_n) help to avert the Dutch Disease? The main effects that make this outcome a 'disease' include the shrinkage of the manufacturing sub-sector, the shift in demand to tradables and the movement of productive resources to the non-tradables sector. If reform can help sustain the international competitiveness of the manufacturing sub-sector in the face of a surge in natural resource export, there will be no Dutch Disease. A reduction in P_n achieves this goal by leading to *RER* depreciation. The demand and supply shifts between the tradables and non-tradables sectors are the result of relative price shifts. Productive resources usually move to sectors with rising prices, while demand chases falling prices. This lop-sided economic structure can be averted if reform can precipitate a fall in P_n. To further illustrate this argument, consider Figure 3.

As can be seen in Figure 3, the export of coffee does not lead to an outward shift of the PPF. Rather it rotates along the axes while maintaining the initial equilibrium point. This ensures that the underlying economic structure of production between tradables and non-tradables is maintained. This

Figure 3: Optimal Policy Response to Dutch Disease
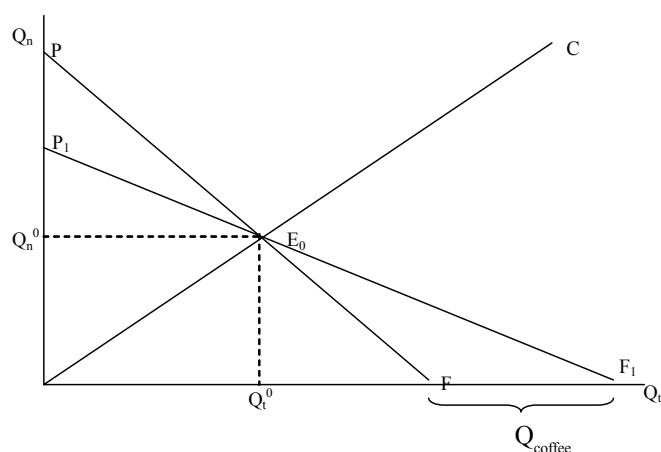
response takes cognisance of the fact that such natural resource booms are temporary and should not necessitate a change in the prevailing structure of production.

Capital flows and macroeconomic instability

One of the most abiding problems associated with capital inflows is the effect on the current account. If a country's balance of payments responds significantly to its capital account, then capital inflows can cause current accounts deficits. The *RER* plays an important role in determining capital flows. At a given *RER*, if the domestic demand for foreign exchange outweighs the domestic supply, the shortfall is usually met by capital inflows. This usually occurs at a low *RER*. Hence clearing this market will require that the *RER* rise. Now, consider Figure 4.

The demand and supply of foreign exchange are measured on the horizontal axis, while the vertical axis measures the *RER*. For analytical purposes we take the Naira (N) as the domestic currency and the Pound Sterling as the foreign currency. Although these functions represent demand and supply, they also reflect a more important concept; they represent alternative equilibrium positions in the foreign exchange market. The *RER* at which both curves intersect is the one which guarantees that net capital flows will be zero. Hence there will be movement in the Central Bank's monetary reserves of foreign exchange.

As Figure 4 shows, ₦20 is the equilibrium RER for zero net capital flows, while a *RER* of ₦10 would compel a capital inflow of £50 million. This is

Figure 4: Foreign Exchange Demand and Supply
– Interaction Between Capital Flow and RER
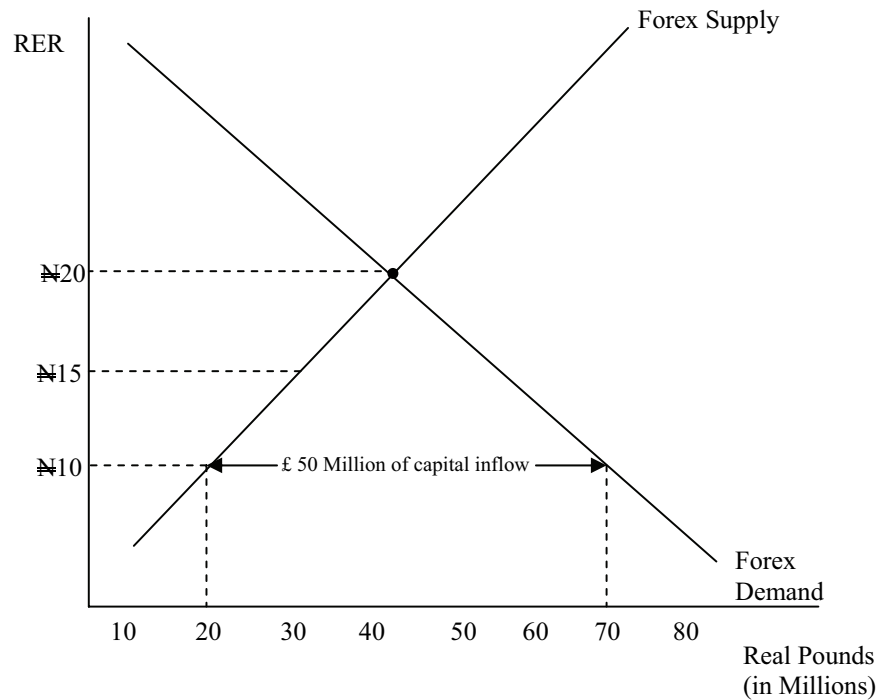
analogous to a reserve loss of the same amount. In either case it suggests that national expenditure exceeds national output. Recall that this scenario induces a shift in demand to tradables, while productive resources move into the less efficient non-tradables sector. The result of this is to worsen the current account deficit. Because of the policy of capital account liberalisation pursued by many African countries, they find themselves operating at the region of the *RER* below ₦20. In order to equilibrate both markets, a relative price adjustment is necessary. This requires the movement of the *RER* to ₦20. The depreciation of the RER will reduce the supply of nontradables while stimulating demand. This is to eliminate excess supply in that market. Similarly the policy of *RER* depreciation will encourage an expansion of the production of tradables while restraining their demand because of a rise in relative price.

The means by which the *RER* should be depreciated is really not an easy matter. There have been many suggestions as to how to achieve this without

hurting other parts of the economy (Helmers 1988). Most notable among these suggestions are the expenditure-reducing and expenditure-switching policies. Using the familiar national income identity, the overriding objective of the expenditure-reducing policy is to leave the national output unchanged while reducing domestic expenditures on consumption and investment goods so that net exports can rise. As Helmers suggests, one way of achieving this is for the government to reduce its expenditures on such goods. Another is to compel the private sector to reduce its expenditures. This may mean wage cuts. However there are well-known political reasons why this is not feasible. This approach has many disadvantages. It may lead to unemployment and excess capacity in such industries, while the export industry may take a long time to be able to absorb the resources released from these industries. Although we may find some improvement in the balance of payments, it is counter-productive because the decline in GDP will likely lead to a recession. In the case of expenditure-switching policies the major problem is how to ensure that the *RER* actually rises. Using the nominal exchange rate ensures that traded goods then become more expensive in nominal terms. In addition, the domestic price level will also rise. This might signal the wage-price spiral which will lead to further rises in price. This process may, therefore, not produce any increase in the *RER*.

Using the framework developed above, one way to ensure that the *RER* actually rises is to target the price of non-tradables in the economy. This method averts the problems associated with either of the methods discussed above. It militates against inflationary pressures and does not lead to unemployment in any sector. For African countries following some sort of fixed or pegged exchange rate regimes, the inflow of capital is supposed to cause a real appreciation with its associated problems. However a reform that reduces the price of non-tradables in this period negates the incipient real appreciation whilst correcting balance of payments problems.

Conclusions and lessons for policy

This paper neither sets out a particular reform programme nor pretends to have a catch-all solution to Africa's economic problems. Rather, it is an attempt to situate the problems confronting Africa as a result of recently-adopted liberalization policies. The paper has analyzed the problems which accompany openness of African economies, and concluded that economic reforms which target the reduction of the price of non-tradables are likely to be welfare-improving. Given the availability of alternative means of reducing this price, the onus is on the reforming economy to identify the cost drivers of nontradables in the economy. For example prohibitive transport costs and artificial trade barriers have rendered many agricultural products non-

tradables. Hence lower internal transport costs can make these products cheaper in the cities while maintaining the international non-tradability.

The process of economic reform may face a number of challenges. These may be political, ideological, religious or otherwise. In some instances, there can be strong political opposition to currency devaluation in many African economies. However, once the situation calls for it, immediate steps have to be taken to devalue. The longer one waits to implement devaluation, the more tortuous the adjustment process will be. It is important to underscore the point that immediate liberalisation of capital flows may not serve the best interests of many African countries. This is because large speculative capital inflows, by causing a decline in the RER, may offset the effect of devaluation.

The major benefits of economic liberalisation and RER depreciation arise from an efficient, cost-minimising and internationally-competitive manufacturing sector. Since industrialisation and manufacturing are the engines of economic growth, economic reforms in Africa must be designed to make the non-tradables sector unattractive for productive resources, while making the tradables/manufacturing sector the destination of such resources. To achieve this, such economic reforms must be targeted at reducing the price of non-tradables in the economy. This will ensure that domestic demand shifts to the non-tradables sector and that productive resources move into the tradables sector. It will also lead to *RER* depreciation, which ensures that the manufacturing sector becomes internationally competitive. There cannot be a better time for Africa to leave the 'coal agricultural train' and catch the 'electric trade train' as a means of getting on the fast track of economic growth and development.

Notes

1. I thank, without implicating, Abdul-Razaq Olopoenia, Abdul-Ganiyu Garba, Alfred Yaw Barimah and Festus Aigbe for incisive comments to an earlier draft of this paper

2. Hossain and Chowdhury (1998) contains an excellent review of problems and issues associated with openness for developing countries. This section borrows from it.

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