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Macroeconomic Challenges of Scaling up Aid – Intelligent Management and Efficient Use of ODA Can Prevent Dutch Disease

If the governments of the industrialized countries keep their promise, official development assistance (ODA) will rise sharply in the next few years. The main beneficiaries will be the least developed countries of sub-Saharan Africa. The additional financial transfers will increase developing countries' chances of setting sustainable development processes in motion and reducing poverty by triggering positive growth and welfare effects.

Yet there is also criticism of the increase in ODA that needs to be taken seriously. It comes from three directions: from the microeconomic perspective it is argued that there are not enough mature projects for the additional capital (lack of absorptive capacity) and that the organization of the "aid business" burdens the recipient countries with excessive transaction costs. From the political economy angle it is feared (and empirically proved) that ODA leads to a reduction in the recipients' own efforts and to unproductive rent-seeking. This paper considers the third criticism, which concerns the pos-

sibility of ODA having unwanted macroeconomic side-effects, known as "Dutch Disease". The point here is that additional financial flows may worsen an economy's long-term growth prospects if the competitiveness of the domestic economy wanes as a result of an appreciation of the real exchange rate.

A conclusion that can be drawn from the available empirical and theoretical analyses is that, although concern about Dutch Disease is justified, it is usually exaggerated. This effect should not therefore be used as an argument against an increase in aid. However, recipients of capital face macroeconomic challenges which are exacerbated by additional ODA. Donors can do a great deal to alleviate the problem by reducing the volatility of ODA flows. Recipient countries need to align their fiscal, monetary and exchange rate policies to manage the trade-offs. The negative effects of exchange rate appreciation can be countered by an improvement in the supply-side conditions of the economy.

What happens when Dutch Disease strikes?

Dutch Disease is the name given to the economic phenomenon that occurs when an increase in capital inflows leads to a decline in domestic production and an impairment of long-term growth. The term was coined in 1977, when a boom in the Dutch raw materials sector – triggered by the discovery of new gas reserves – caused a significant rise in the value of the guilder and a fall in output in the industrial sector. What is in principle a positive feature – more money flowing into the economy and investment and consumption possibly rising – contrasts with a deterioration in competitive conditions for the domestic export sector and for import-competing sectors due to a real appreciation. In principle, Dutch Disease can be sparked by any kind of capital inflow, such as a rise in the prices of raw materials, foreign direct investment, migrants' remittances and development assistance. We will concentrate on development assistance here.

The decline of the export sector (manufacturing and/or agriculture) may be triggered by a direct or indirect effect, both associated with an upward movement of the real exchange rate.

Where a state increases its expenditure as a result of additional revenue, total domestic demand rises, leading to an increase in the prices of non-tradable goods. Non-tradable goods include such local services as haircuts and real estate; tradable goods are, in particular, manufactured and agricultural goods, which can be traded both locally and in the world market. An important difference between the two categories of products is the manner in which their prices emerge. For tradable goods there is, as a rule, a single world market price. The prices of non-tradable goods depend on domestic factors, which is why they alone rise when demand grows. This results in a rise in the level of domestic prices and so to an upward movement of the real exchange rate. To enable the higher demand to be satisfied, the demand for labour and so wages rise in the non-tradable sector. Workers migrate from the tradable sector to the non-tradable sector. If those workers cannot be replaced, which is true at least of skilled workers in most developing countries, production in the tradable sector declines.

Under certain conditions, a supplementary factor is a nominal appreciation of the currency, which leads to a

further real appreciation. The government converts foreign exchange into domestic currency at the central bank. If the central bank does not, in its turn, retain the foreign exchange as currency reserves, but sells it to importers for domestic currency, the supply of domestic currency falls and its value rises. In this way, the competitiveness of the domestic economy tends to deteriorate, since it now receives for its products, which are usually sold at a world market price expressed in dollars, a smaller amount of domestic currency to cover its production costs. Profits fall, and production in the tradable sector similarly declines. Where exchange rates are fixed, the central bank will prevent a nominal appreciation.

Box 1: Exchange rates
The <i>nominal exchange rate</i> is the rate at which a country's currency is exchanged into another country's currency. In a flexible exchange rate regime it adjusts to supply and demand. Where the exchange rate is fixed, it is kept constant by central bank interventions.
The <i>real exchange rate</i> is the rate at which goods are traded between two countries. It is determined by the ratio of domestic price level to foreign price level multiplied by the nominal exchange rate

The reduced competitiveness of the tradable sector is a problem for economies because ODA inflows or raw material revenues do not continue indefinitely. An economy needs a productive base to earn the foreign exchange for necessary imports and to maintain consumption at the level it has reached. If, however, resources are withdrawn from sectors which have high growth potential and in which – owing to exports and other factors – important learning effects are achieved and spread to the rest of the business community, the economy's long-term growth prospects may wane. For this reason, many countries try to prevent their currencies from appreciating in order to maintain the competitiveness of their industrial and agricultural output. For an overall assessment of the macroeconomic consequences of Dutch Disease the positive effects of financial inflows on consumption and investment must therefore be offset against possible negative effects of the rising real exchange rate.

What macroeconomic consequences can official financial transfers have?

A financial transfer gives the recipient country additional foreign exchange, which it can use to buy goods and services. The macroeconomic effects of development assistance depend on the conduct of the government and central bank. In an analysis of the various possible courses of action the IMF's concept of "absorption and spending" is helpful:

Absorption: If ODA results in a real transfer of resources, the aid is said to have been absorbed. The developing country is able to import additional goods and services without having to increase its own output and to export it to other countries. Absorption can be de-

tected from a widening of the current account deficit (excluding aid).

Spending: As the recipient of the financial transfer, the state can decide whether to spend the additional funds or to use them to reduce government debts. If it spends them, which is usually what the donors want, the result is a rise in government spending and so an increase in the budget deficit (excluding aid).

Countries thus have four options: they can either absorb or not absorb aid and, in either case, they can choose whether or not to spend the money. The scale of spending depends on a country's fiscal policy, absorption on its exchange rate and monetary policies. The combination of policies determines the macroeconomic consequences of the financial transfer.

Table 1: The four strategies for using ODA		
	Absorption	Non-absorption
Spending	Central bank sells foreign exchange, and government spends aid. Money supply and foreign exchange reserves remain unchanged. Appreciation of currency, risk of Dutch Disease. Real transfer of resources.	Central bank retains foreign exchange, and government spends aid. Money supply and foreign exchange reserves rise (risk of inflation) In the event of sterilization: private sector crowded out, debts rise. No real transfer of resources.
Non-spending	Central bank sells foreign exchange, but government does not spend aid. Money supply falls, and foreign exchange reserves remain unchanged. Stabilization: inflation and debts fall, but no investment. Real transfer of resources.	Central bank retains foreign exchange, and government does not spend aid. Money supply remains unchanged, and foreign exchange reserves grow. Government debt falls. No real transfer of resources.
Source: IMF (2005)		

Strategy 1: Absorption & spending: This strategy complies with the original idea behind ODA: the recipient government spends the additional funds, and the central bank sells the foreign exchange to private individuals for domestic currency to enable additional imports to be financed. There is a real transfer of resources, and the economy is able to consume and invest more than without ODA. However, this strategy entails the greatest risk of effects of Dutch Disease because it is usually accompanied by a real appreciation.

Strategy 2: Non-absorption & non-spending: The government and central bank may decide neither to spend the ODA (state spending is not increased) nor to convert it into the domestic currency. This strategy leads to a rise in foreign exchange reserves and a reduction in the government deficit. However, neither consumption nor investment increases, and there is no real transfer of resources. As the real exchange rate and domestic demand remain unchanged, Dutch Disease does not occur. This strategy may be appropriate where foreign exchange reserves are very small, the budget

deficit is very large or development assistance payments are highly volatile.

Strategy 3: Non-absorption & spending: The government may increase spending without the aid being absorbed. This is the case when the central bank retains the incoming foreign exchange and does not buy back the amount of domestic currency by which government spending increases. It can be induced to do so by a fixed exchange rate regime. As a result of this combination of actions, the domestic money supply increases, entailing inflationary risks and nominal pressure to devalue the currency. Inherent in this strategy is the problem that no real resources are transferred to the country, since imports do not rise. The resources are merely diverted from the domestic private sector to the domestic public sector. All in all, this strategy produces the most problematical results because the private sector is crowded out and inflationary risks arise without the ODA increasing consumption and investment.

Strategy 4: Absorption & non-spending: In this strategy the government uses development assistance to finance the state deficit rather than resorting to domestic borrowing, but it does not spend more. As the central bank now sells the foreign exchange reserves in the domestic market for domestic currency, nominal pressure to revalue the currency occurs. Imports rise and exports fall, and the current account deficit grows. Real resources are thus transferred to the private sector. Furthermore, inflation tends to decline because the central bank reduces the money supply when it buys domestic currency for foreign currency. Many countries with high rates of inflation therefore adopt this strategy. At best, it is appropriate in the short term as a means of eliminating existing budget deficits or combating existing high inflation. In the long term the money should be used to overcome financial constraints on necessary investment.

What macroeconomic consequences have official financial transfers had in practice?

Few empirical studies have been able to demonstrate the typical effects of Dutch Disease. In practice, it is rather the case that precisely the opposite effects have frequently occurred, the reason being that hardly any recipient country has pursued the textbook strategy (absorption and spending). Not least fear of real appreciation has led most recipient countries to opt for one of the other three strategies. In many cases, there has even been a devaluation, which has helped to promote non-traditional exports. Ghana and Ethiopia have absorbed and spent little ODA, but increased their foreign exchange reserves and combated inflation. Mozambique, Uganda and Tanzania, on the other hand, have spent more ODA than they have absorbed, which has resulted in rising rates of inflation. In Uganda and Tanzania the central banks have reacted with sterilization measures, causing inflation to fall again, but crowding out the private sector because of the rising interest rates.

These findings are questionable in development terms, since although revaluation has been avoided, the objectives of increased ODA have not been achieved. Only the absorption of the funds results in the desired additional investment and in a rise in the level of consumption. Without absorption, there is no additional momentum for a sustained growth process.

Table 2: Examples of the macroeconomic use of rising ODA inflows, 2000–2004

	Absorbed	Spent	Change to real exchange rate (in %)
Ghana	0 %	7 %	0.5
Ethiopia	20 %	0 %	-2.1
Tanzania	0 %	91 %	-9.8
Uganda	27 %	74 %	-6.3
Mozambique	66 %	100 %	-6.4

Source: IMF (2005)

What are the implications for development cooperation?

Decision-makers in development cooperation should be aware of the macroeconomic effects of rising financial flows and avoid the undesirable side-effects as far as possible. This calls for intelligent macroeconomic management and a steadier flow of aid payments. There are, moreover, a number of trade-offs to be borne in mind in the practical shaping of development cooperation, with decisions taken on a case-by-case basis.

- Recipient countries must use their **monetary and fiscal policies** to ensure that ODA inflows are absorbed and spent. At best, the other strategies may be appropriate in the short term as means of overcoming macroeconomic imbalances. If greater absorption is not possible (see below), the financial inflows should not be further increased.
- The more ODA inflows fluctuate, the sooner Dutch Disease will have adverse consequences. The **volatility of aid payments** has increased significantly in recent years. This raises major management problems for countries in which ODA accounts for a large proportion of government spending, since the strong fluctuations in the real exchange rate resulting from this volatility give rise to serious adjustment problems and high costs (job losses, etc.) in the economy. In addition, it becomes virtually impossible to implement important investment projects requiring long-term financing. Steadiness and better predictability of ODA inflows are therefore among the most important factors if the effects of Dutch Disease are to be alleviated.
- Real appreciation due to rising ODA inflows is not entirely avoidable if the aid is absorbed and spent. The question is what can be done to limit the effects

of this appreciation. The inflows should be used to **improve the economy's supply-side conditions** with a view to making the producers of tradable goods more competitive and so compensating for the real appreciation. From the macroeconomic point of view, then, investment in business infrastructure, in productive sectors or in the training of skilled workers is to be recommended. In the short term, this will contrast with the "donor darlings," where direct relevance to poverty is more easily communicable, i.e. investment in social sectors (education, health).

- The adverse side-effects of Dutch Disease can also be avoided if the ODA inflows are spent primarily on **additional imports**. Although this means that the aid is absorbed and spent, there is no pressure for appreciation. This strategy is, however, inconsistent with the donors' goal of using domestic resources as far as possible in the recipient country (local skilled workers, local supply firms). In developing countries that are reaching the limits of their strategic resources (not having, for example, enough skilled workers) it makes macroeconomic sense for imported goods and skilled workers to be used until the domestic constraints have been overcome.
- Many developing countries have failed to absorb ODA inflows for fear of Dutch Disease. In macroeconomic terms absorption has been defined as a widening of the current account deficit. This needs to be distinguished from the **microeconomic concept of the absorptive capacity** of a country, meaning its capacity to plan and implement worthwhile investment projects. In the event of increasing capital inflows, it can usually be assumed that the rates of return from additional projects will fall. When ODA passes a certain threshold-share of GDP, which differs from one country to another, additional inflows will hardly be able to compensate for the negative effects of real appreciation. This threshold-share very much depends on the extent to which the country succeeds in implementing worthwhile projects despite capacity constraints and so in absorbing the aid in the microeconomic sense. The two absorption concepts are linked.

As long as the additional capital flows can be converted into worthwhile projects that strengthen the economy's productive base and overcome its strategic capacity constraints, the legitimate fear of Dutch Disease

should not be misused to prevent an increase in development assistance. On the other hand, the development cooperation decision-makers must ensure that, where there are microeconomic absorption constraints, any increase in development cooperation is carefully planned with appropriate timing so that the recipient country's long-term growth prospects are not undermined. In a nutshell, the improvement in an economy's supply-side conditions achieved by ODA needs to exceed the harm done by the real appreciation. This is a strong challenge for development cooperation, but one it is capable of meeting.



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