UNCTAD/LDC/2006

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

THE LEAST DEVELOPED COUNTRIES REPORT, 2006

PART II, Chapter 7

UNITED NATIONS
New York and Geneva, 2006

The Demand Constraint

Chapter 7

A. Introduction

The development of productive capacities cannot be understood without addressing demand-side constraints as well as supply-side constraints. The previous two chapters have focused on the latter, examining the low stock and poor quality of physical infrastructure in the LDCs and also some key institutional weaknesses which constrain investment, technological learning and innovation. But even if these supply-side issues are successfully resolved, the development of productive capacities will still be constrained if there is no demand stimulus which provides an inducement to capital accumulation and technological progress. Decisions to spend on the expansion of physical production capacity are based on the expected growth of markets. Similarly, decisions of entrepreneurs to devote time and money to technological learning are based on the expected rents arising from innovations that increase their share of existing markets and also create new markets.

The development of productive capacities cannot be understood without addressing demand-side constraints as well as supply-side constraints.

As noted earlier in this Report, the existence of productive capacities only creates a potentiality for production and growth. Whether or not that potential will be realized depends on whether productive capacities are also utilized. This depends on the stimulus of demand. In situations where there is a lack of effective demand, existing productive capacities will be underutilized. Moreover, where productive capacities are underutilized, there will be weak incentives for their further development. The sustained development of productive capacities occurs when there is a virtuous circle in which the development of productive capacities and the growth of demand mutually reinforce each other.

Starting and sustaining this interaction between growing demand and the development of productive capacities is particularly difficult in the LDCs. Generalized and persistent poverty means that national markets offer limited opportunities for efficient mass production. External markets are growing, but domestic entrepreneurs do not usually have the capabilities, the infrastructure or the institutions which can enable them to reach them, or in activities in which they do have such capabilities, they face fierce competition. As a result, productive resources and capabilities within LDCs are underutilized. This is yet another element of the poverty trap within which very poor countries are enmeshed.

Generalized and persistent poverty means that national markets offer limited opportunities for efficient mass production. As a result, productive resources and capabilities within LDCs are underutilized.

Although the first generation of development economists were well aware of the influence of effective demand on the potential for development, the role of demand in processes of economic growth has been since neglected. As a result, there is a very limited literature on the role of demand in development in very poor countries. Against this background, this chapter addresses the subject in a preliminary and partial way. It seeks to provide a better understanding of the components of demand and also the constraints on demand in the LDCs.

The chapter is divided into three major sections. Section B identifies the relative importance of the five basic components of demand — private consumption, investment, government consumption expenditure, exports and imports — for a sample of the LDCs during the period 1993–2003. This shows that domestic demand makes the largest contribution to economic growth in almost all the LDCs. But there is also a strong association between export growth

and economic growth. Section C focuses more closely on domestic demand by considering intersectoral linkages. In particular, it examines how the growth of agricultural incomes can provide an important stimulus for investment in manufacturing industry and services within very poor countries. Such agricultural growth linkages are one of the most important mechanisms through which growing demand and the development of productive capacities can be linked in a virtuous circle in the LDCs. Section D extends the analysis by examining why exports also matter. It discusses this from a demand-side perspective by examining the extent to which the growth of a group of LDCs has been constrained by their balance of payments over the last 25 years. The analysis also identifies the contribution that capital inflows and transfers have made in financing current account deficits, and thus enabling the import content of domestic demand to be met. Section E summarizes the main points of the chapter.

All components of demand are highly interdependent, and they all have an import content, so that how fast private consumption, investment and government consumption expenditure can grow partly depends on how fast exports grow.

B. The relative importance of different components of demand

This section identifies for a selected group of LDCs which components of demand have been driving their economic growth. It then highlights the complementarities between each of the components of demand and the crucial impact that exports have on current economic growth.

The traditional macroeconomic identity ($Y = C + I + G + X - M$, where Y is aggregate demand or GDP, C is private consumption, I is investment, G is government consumption expenditure, X is exports and M is imports) is used here to identify which components of demand have contributed most to the economic growth of a selected group of LDCs.[1] It is necessary to stress that all components of demand are highly interdependent, and particularly that all components of demand have an import content, so that how fast private consumption, investment and government consumption expenditure can grow partly depends on how fast exports grow.[2] Also, it is important to remember that in using accounting identities no unidirectional causation is implied between output and its components.

The fastest-growing countries are generally associated with the fast growth of investment and exports.

Table 55 ranks 15 LDCs in descending order according to their average annual growth rates of real GDP over the period 1993–2003. It also includes the accounting contributions of C, I, G, X and M to economic growth. The table gives the growth rates of each component of demand (section a); the weights, defined as the share of each component of demand in GDP (section b); and the contribution of each component of demand to GDP growth (section c), which is captured by the combined effect of the respective growth rates and weights.

Taking the countries as a whole, it can be seen that, on average, the weight of private consumption is the highest (79 per cent), followed by imports (34 per cent), exports (23 per cent), investment (17 per cent) and government consumption expenditure (12 per cent). The component of demand with the highest average annual growth rate for the group of LDCs is investment (7.9 per cent), followed by exports (6.8 per cent) and government consumption expenditure (5.3 per cent). Private consumption has grown the least. The fastest-growing countries are generally associated with the fast growth of investment and exports. The rate of growth of investment and exports is high in Mozambique, Rwanda, Cambodia, Bangladesh and Ethiopia. These countries are examples of the *virtuous* link that can exist between the two exogenous components of demand — investment and exports. By contrast, in other

TABLE 55. CONTRIBUTION OF COMPONENTS OF DEMAND[a] TO REAL AVERAGE ANNUAL GDP GROWTH RATES IN SELECTED LDCs, 1993–2003

	Growth rates[b] (%) (1)						Weights[c] (2)					Contribution of components of demand[d] (3)							
	Y	C	I	G	X	M	C/Y	I/Y	G/Y	X/Y	M/Y	Y	C a	I b	G c	X d	M e	DD a+b+c	NE d-e
Mozambique	8.1	1.6	15.2	6.2	18.0	4.0	0.8	0.3	0.1	0.2	0.4	100	15.7	51.6	6.9	44.3	18.5	74.2	25.8
Rwanda	7.0	4.8	8.6	6.8	11.4	0.8	0.9	0.2	0.1	0.1	0.3	100	61.4	18.0	11.4	12.3	3.1	90.8	9.2
Cambodia	6.5	4.4	12.7	8.0	20.7	14.9	0.9	0.2	0.1	0.4	0.5	100	57.6	30.2	6.2	121.9	115.8	93.9	6.1
Benin	5.2	2.2	16.2	8.0	1.4	3.8	0.8	0.2	0.1	0.1	0.2	100	30.7	66.3	16.3	3.4	16.7	113.3	-13.3
Bangladesh	5.1	3.5	9.3	5.2	10.9	7.1	0.8	0.2	0.1	0.1	0.2	100	52.7	39.4	4.6	26.0	22.6	96.6	3.4
Senegal	4.9	1.2	10.0	7.3	7.2	1.8	0.7	0.2	0.1	0.3	0.3	100	15.8	32.5	20.3	40.8	9.4	68.5	31.5
Ethiopia	4.7	2.1	6.4	15.7	11.4	7.9	0.8	0.2	0.2	0.1	0.2	100	34.2	19.5	51.8	28.1	33.6	105.5	-5.5
UR of Tanzania	4.5	1.5	3.4	11.5	4.2	0.9	0.8	0.2	0.2	0.2	0.3	100	25.2	15.3	49.4	16.6	6.5	89.9	10.1
Burkina Faso	4.4	3.9	10.5	-1.4	2.7	4.3	0.8	0.2	0.1	0.1	0.2	100	68.9	47.5	-3.2	4.7	17.9	113.2	-13.2
Mauritania	4.2	4.5	11.5	5.0	-2.8	3.7	0.7	0.2	0.2	0.3	0.4	100	76.8	59.1	18.3	-19.1	35.1	154.2	-54.2
Togo	4.3	5.1	9.0	1.1	3.5	5.6	0.7	0.2	0.1	0.4	0.4	100	81.3	32.2	2.8	31.2	47.5	116.3	-16.3
Gambia	3.6	1.9	2.3	5.2	2.9	0.5	0.8	0.2	0.1	0.5	0.6	100	42.1	11.8	15.1	39.1	8.1	69.0	31.0
Malawi	3.0	4.2	-12.8	1.0	3.1	-0.1	0.9	0.2	0.2	0.3	0.5	100	132.1	-71.1	6.8	30.8	-1.4	67.9	32.1
Madagascar	2.6	2.9	7.1	2.7	3.4	7.6	0.8	0.1	0.1	0.2	0.2	100	93.0	34.8	8.3	22.8	58.9	136.1	-36.1
Zambia	2.0	-0.7	9.8	-2.0	5.1	2.1	0.7	0.2	0.1	0.4	0.4	100	-23.1	85.3	-12.1	88.2	38.3	50.1	49.9
Average	4.7	2.9	8.0	5.4	6.9	4.3	0.8	0.2	0.1	0.2	0.3	100	51.0	31.5	13.5	32.7	28.7	96.0	4.0

Source: UNCTAD secretariat estimates based on World Bank, *World Development Indicators 2005*, CD-ROM.

a Y=GDP; the components of demand are: C=private consumption, I=investment, G=government expenditure, X=exports, and M=imports.

b The countries have been ranked from the highest to the lowest real average annual GDP growth rate.

c The weights have been calculated by dividing each component, measured in constant local currency, by GDP.

d The figures were calculated by multiplying the growth rate of each GDP component by its weight and by normalizing their sum to 100.

countries where investment growth was strong, but exports grew slowly, growth performance was not so impressive, for example, Burkina Faso, Mauritania, Togo, Madagascar and Zambia. Private consumption has grown fastest in Togo (5.1 per cent), Rwanda (4.8 per cent), Mauritania (4.5 per cent) and Cambodia (4.4 per cent).

In the LDCs, where investment growth was strong, but exports grew slowly, growth performance was not so impressive.

When the contribution of each component of demand to GDP growth is considered, the component with the highest contribution to GDP growth is private consumption (51 per cent), followed by exports (33 per cent) and investment (31 per cent), on average. These results reflect the weight of the different components of demand as well as their growth rates.

Table 56 orders countries according to the contribution of the two most important components to GDP growth for the whole period, 1993–2003, and for two sub-periods, 1993–1998 and 1998–2003. Private consumption and investment have been the most important in the majority of countries, which were not necessarily the fastest growers. Private consumption and investment have been the main driving forces through the two sub-periods in Bangladesh, Burkina Faso, Madagascar and Mauritania. In no other countries have the same two components of demand been the driving force in all three periods. But over the whole period, it can be seen that investment and exports have been the driving force in Mozambique, Zambia and Senegal; exports and private consumption in Cambodia, The Gambia and Malawi; and, private consumption and government consumption expenditure in Ethiopia and the United Republic of Tanzania.

The component with the highest contribution to GDP growth is private consumption, followed by exports and investment.

There is no systematic pattern in the contribution of different demand components to GDP growth in the fastest-growing LDCs during this period. Regarding the six countries that have experienced the highest GDP growth over the full period, economic growth in Rwanda and Bangladesh has been driven by private consumption, the investment component played a leading role in Benin and Mozambique, and exports were the leading component in Cambodia and Senegal.

TABLE 56. LDCs CLASSIFIED ACCORDING TO THE CONTRIBUTION OF DEMAND COMPONENTS TO GDP GROWTH, 1993–2003, 1993–1998 AND 1998–2003

Contribution of demand to GDP growth, highest and second highest, respectively	1993–2003	1993–1998	1998–2003
C, I	Bangladesh	Bangladesh	Bangladesh
	Burkina Faso	Burkina Faso	Benin
	Madagascar	Madagascar	Burkina Faso
	Rwanda	Rwanda	Madagascar
	Mauritania	Mauritania	Mauritania
	Togo		
I, C	Benin	Benin	Gambia
I, X	Mozambique	Mozambique	Zambia
	Zambia		
X, I	Senegal	Zambia	Cambodia
			Mozambique
			Togo
X, C	Cambodia	Gambia	
		Senegal	
C, X	Gambia	Cambodia	
	Malawi	Malawi	
		Togo	
C, G	Ethiopia	Ethiopia	Rwanda
	United Rep. of Tanzania	United Rep. of Tanzania	
G, C			Malawi
G, I			Senegal
G, X			Ethiopia
			United Rep. of Tanzania

Source: UNCTAD secretariat estimates based on table 1.

Notes: Countries have been grouped according to their first and second highest GDP components.
C is private consumption, I is investment, G is government consumption expenditure and X is exports.

Domestic demand has contributed the most to GDP growth in the majority of the LDCs considered.

A further subdivision of GDP into domestic demand and net exports shows that the share of domestic demand in GDP is larger than the share of net exports in terms of its contribution to economic growth (see table 55).[3] Indeed, the share of domestic demand was greater than 50 per cent in all countries. For the countries (Mozambique, Rwanda, Cambodia and Benin) that experienced the highest GDP growth during the reference period, 1993–2003, most of the growth comes from the domestic demand. For nine out of fifteen LDCs, domestic demand grew at a faster rate than net exports. However, it would be fallacious to assume that this implies that exports do not matter as a component of demand. This is because the concept of net exports disguises the contribution that exports (and foreign exchange) make to economic growth. For instance, if exports and imports are equal, net exports are zero, which implies that there is no contribution to economic growth from exports, but exports are necessary in order to pay for the import content of domestic demand.

For nine out of fifteen LDCs, domestic demand grows at a faster rate than net exports.

Taking the countries as a whole, it can be seen, on average, that the share of private consumption in GDP is the highest (79 per cent). followed by imports (34 per cent), exports (23 per cent), investment (17 per cent) and government consumption expenditure (12 per cent). The component of demand with the highest growth rate, on average, is investment (7.9 per cent), followed by export growth (6.8 per cent) and government consumption expenditure (5.3 per cent). Private consumption has grown the least.

To summarize, domestic demand has contributed the most to GDP growth in the majority of the LDCs considered. This was expected since the share of domestic demand components in GDP is higher than that for exports.

But the evidence shows that high domestic demand growth is also associated with high export growth. This is particularly true of investment, which is not surprising since the import content of investment in most LDCs is high. Six of the seven fastest-growing countries have investment and exports growing faster than GDP — Mozambique, Rwanda, Cambodia, Bangladesh, Senegal and Ethiopia.

C. Agricultural growth linkages, employment and poverty reduction

Trends in domestic demand are closely related to what happens within the agricultural sector and also the nature of the linkages between agriculture and the rest of the economy.

In countries where the share of agriculture in GDP and employment is high, trends in domestic demand are closely related to what happens within the agricultural sector and also the nature of the linkages between agriculture and the rest of the economy. These linkages are critical for sustained economic growth (Fei and Ranis, 1997). On the supply side, agricultural productivity growth is particularly important for increasing domestic savings in very poor countries and also for ensuring an adequate supply of cheap foodstuffs. But demand-side linkages which result from agricultural growth are also an important mechanism which stimulates the development of local manufacturing industries and local services (Bhaduri and Skarstein, 2003). These intersectoral linkages can serve as a catalytic inducement mechanism which can set off a sequence of investment decisions and mobilize latent entrepreneurial capabilities within LDCs. They can also help to ensure that economic growth becomes more broad-based and inclusive.

In the initial literature on linkages, agriculture was identified as having very weak forward and backward intersectoral linkages. As Hirschman (1958: 109–110) put it, "Agriculture certainly stands convicted on the count of its lack of stimulus to the setting up of new activities through linkage effects; the superiority of manufacturing is crushing". But subsequent empirical research has nuanced this view.

Adding $1 of new farm income potentially increases total income in the local economy — beyond the initial $1 — by an additional $1.88 in Burkina Faso, by $1.48 in Zambia, by $1.24 to $1.48 in two locations in Senegal, and by $0.96 in Niger

Vogel (1994: 143–144) has shown that "(i) at low levels of development agriculture possess strong backward links to non-agricultural production activities; (ii) at low levels of development, the dominant linkage in the backward multiplier is rural household expenditures on non-agricultural commodities derived from increases in agricultural income; and (iii) the agricultural backward input–output linkage increases during the development process". This finding is based on the analysis of 27 social accounting matrices taken from countries at different levels of development. In low-income countries, every $1 of expenditure by agriculture generates $2.75 of induced demand for non-agricultural inputs and services, and 70 per cent of this backward linkage effect is attributable to rural household demand for consumer goods and services. Research in Africa has also found that growth in household incomes that comes from increases in agricultural production and incomes — due to technological changes, better prices or lower input costs — is largely spent on farm and non-farm items that are non-tradable, such as perishable foods, local services and locally produced non-farm goods. Adding $1 of new farm income potentially increases total income in the local economy — beyond the initial $1 — by an additional $1.88 in Burkina Faso, by $1.48 in Zambia, by $1.24 to $1.48 in two locations in Senegal, and by $0.96 in Niger (Delgado, Hopkins and Kelly, 1998: xii). Realizing this potential depends on the elasticity of the supply response of non-tradable activities.

Mellor (2000) has identified this demand linkage effect of agricultural growth as central to poverty reduction. As he puts it starkly, "(1) Poverty reduction takes place largely through increased employment in the production of non-tradables; (2) rising agricultural incomes are the dominant source of demand for non-tradeables; and (3) raising the aggregate of agricultural incomes requires substantial public sector expenditure to facilitate income increasing technological change, specialization and intensification" (p. 3). From this perspective, agricultural growth matters for poverty reduction directly because agriculture is the sector where most of the poor are located, and it is also generally a labour-intensive activity. But the most important reason why agriculture matters for poverty reduction is that rising income in agriculture leads to an increased demand for non-farm, non-tradable goods which are also very labour- intensive. This occurs primarily in the rural and small-town non-farm sector.

Rising income in agriculture leads to an increased demand for non-farm, non-tradable goods which are also very labour-intensive.

Poverty reduction, Mellor argues, requires employment growth outside agriculture because agriculture itself is likely to shed labour. But it is agricultural demand which stimulates the investment and entrepreneurship which generate such employment. However, the multiplier effects of agricultural growth on non-farm employment in non-tradables depend on the degree of income inequality in agriculture. The greater the income inequality, the more increased agricultural incomes are spent on imports and capital-intensive goods and less on non-farm, non-tradable, labour-intensive goods, and therefore there will be less employment growth and poverty reduction.

This model through which agricultural growth induces employment growth in local industry and services in rural areas and small towns is highly relevant to the LDCs.[4] Empirical research in Bangladesh suggests that this mechanism has been central to the process through which economic growth has translated into poverty reduction through expansion of more productive employment (Osmani et al,. 2003; Osmani, 2005). However, for most LDCs, inadequate levels of demand arising from agriculture have resulted in weak inter-sectoral linkages, thus contributing to labour market conditions such as those discussed in chapter 4.

The greater the income inequality, the more increased agricultural incomes are spent on imports and capital-intensive goods and less on non-farm, non-tradable, labour-intensive goods, and therefore there will be less employment growth and poverty reduction.

The research in Bangladesh begins by considering what are the sectors which have contributed most to the growth acceleration which occurred in Bangladesh in the 1990s. The two fastest-growing subsectors of the economy are fisheries and manufactures, both of which are export sectors. However, the sectors which contributed most to the improvement in the growth rate in Bangladesh between the 1980s and 1990s are non-tradables. As Osmani (2005: 59) puts it, "[o]n the whole, at least two-thirds to three-quarters of the incremental growth in the 1990s originated from the non-tradeable sectors — mainly services, construction and small scale industry". The analysis also shows that "the acceleration of the non-tradeable sector cannot be explained by autonomous productivity improvement within the sector. A more likely explanation lies in a more robust demand stimulus originating from outside the sector, especially in view of the existence of widespread underemployment in this sector, which ought to make it particularly responsive to demand stimulus" (p. 60).

The next question which arises is: what are the sources of demand stimulus for the growth of non-tradables in Bangladesh? Three are identified. The first is the phenomenal growth of the garments industry. The workers in this industry are the poorest among manufacturing workers and thus their spending patterns could provide a significant demand boost to the production of non-tradables. The second possible source is the accelerated increase in workers' remittances from emigrant Bangladeshis. The third is the growth in agricultural output and

income associated with coordinated expansion of the use of agricultural inputs through the 1990s. When the sources of demand stimulus are disaggregated between increased crop production, garments output and foreign remittances from 1986/1987 and 1997/1998, Osmani (2005) finds that increased crop production provided the greatest stimulus to growth of non-tradables, followed by the growth of the garments industry and workers' remittances. Indeed, the demand stimulus from expanding crop production was equivalent to the combined stimulus from the other two sources.

The sectors which contributed most to the improvement in the growth rate in Bangladesh between the 1980s and 1990s are non-tradables.

There were also important differences in the structure of employment growth between the 1980s and 1990s in Bangladesh. In the 1980s the shift of labour was mainly into the rural non-farm sector, where people became self-employed with quite low productivity. The 1990s were characterized by faster growth of relatively larger-scale enterprises in the rural non-farm sector that are more productive and employ more wage labour. The poor rural workers found an increased opportunity to secure wage employment in the rural non-farm sector instead of overcrowding into petty self-employed activities. These developments have played a major role in reducing poverty in Bangladesh. Osmani et al (2003) summarize the growth–poverty nexus that took place in the 1990s as follows: "Faster growth enabled the non-farm enterprises to increase their scale of operation, thus tilting the structure of the rural-non-farm sector more towards the relatively larger enterprises. This structural change in turn brought about a change in the nature of labour absorption in this sector, as salaried wage employment became more plentiful with the emergence of large enterprises." (p. 26). However, lack of education, the shortage of physical assets and the lack of access to physical infrastructure act as impediments to moving up the hierarchy of salaried employment.

Bangladesh is not a unique case. Recent work on pro-poor growth which seeks to compare trends in growth and poverty in Viet Nam and Burkina Faso in the 1990s identifies mechanisms analogous to those operating in Bangladesh at work in Viet Nam (Bernabè and Krstic, 2005). In contrast, weak stimulus of demand is identified as a critical factor which is preventing the productive absorption of labour outside agriculture in Burkina Faso.

In Bangladesh, the demand stimulus to non-tradables from expanding crop production was equivalent to the combined stimulus from the garments industry and workers' remittances.

Focusing on the period 1993–1998, Bernabè and Krstic (2005) explain Viet Nam's success in terms of growth and poverty reduction as follows: "First, a broad-based increase in agricultural labour productivity combined with a strong domestic and foreign demand for crops produced, increased earning for the majority of the poor and stimulated domestic demand for non-agricultural goods produced by the poor. Second, an increase in (low-skilled) informal labour productivity combined with growing domestic and foreign demand for informal goods and services, created higher earning opportunities for agricultural workers. In turn, higher non-agricultural earnings further stimulated demand for agricultural goods and services, thereby creating a virtuous circle of growth and poverty reduction" (p. 37). In this process, although the high rates of economic growth were led by increasing exports of labour-intensive manufacturing goods, poverty reduction mainly occurred through rising agricultural incomes and the expansion of demand for non-tradables.

An important feature of the employment trends during this period was that there was "a massive informalization of non-agricultural employment" (p. 17). However, at the same time there has been "a decline in the rate of underemployment, particularly in the sectors where the poor were employed" (p. 18). Formal sector earnings grew faster than informal earnings, reflecting important productivity gains. But there was also a real increase in informal

earnings. This was partly as a result of productivity gains, but more importantly as a result of an increase in demand for informally produced goods. Within the agricultural sector, there was a shift to higher- value-added products and an increase in the intensity of agricultural employment. This was critically important for direct poverty reduction — two thirds of the workers who moved out of poverty remained or became employed in agriculture during the period 1993–1998. However, rising informal earnings were also related to the demand stimulus which came with the widespread increase in agricultural earnings. Moreover, some informally produced industrial goods were also exported and thus increased demand for Viet Nam's manufacturing exports supplemented the demand stimulus to informal sector activities.

Informal sector activities do not necessarily have to be survivalist but may also be growth-oriented. The critical factor which enables increased informal sector earnings is the stimulus of demand.

In contrast to the pattern of growth and poverty reduction in Viet Nam, a shift to higher-value crops occurred in Burkina Faso but in a way which was limited to a small group of farmers, and the majority of food crop farmers faced weak domestic demand and essentially no foreign demand for their products. The strongest productivity gains were in the cotton sector. Output of food crops grew. But domestic demand was constrained by the small urban population and declining real urban incomes. There was also almost no foreign demand for food crops as they are effectively non-tradable. As agricultural earnings stagnated, there was little demand stimulus for non-farm goods and services, and there was also little demand for tradable non-agricultural goods. Thus "as informal labour supply expanded in the services sector, it was not matched by an increase in demand. As a result, although the expansion of employment generated growth in output, productivity and wages fell, leading to an increase in the poverty rate in the services sector" (p. 38).

From this analysis, it is now possible to get a clearer view of the problem of productive labour absorption within LDCs, which was discussed earlier in this Report. The analysis in chapter 3 identified declining non-agricultural labour productivity as a widespread tendency within the LDCs, and chapter 4 showed that in weak-growth economies this was associated with urban labour markets in which most people were employed in informal sector enterprises, and that there were high rates of underemployment. The cases of Bangladesh and Viet Nam show that in terms of their income-earning opportunities, informal sector activities do not necessarily have to be survivalist but may also be growth-oriented. However, the critical factor which enables increased informal sector earnings is the stimulus of demand. Moreover, the major source of demand stimulus comes from agricultural productivity growth. This pattern, in which there is a virtuous circle in which demand stimulus from agricultural growth induces investment, entrepreneurship and employment in non-agricultural activities, particularly non-tradables, is likely to be relevant in many LDCs and at the heart of efforts to create a more inclusive process of development which supports sustainable poverty reduction.

There is a possibility that agricultural imports could slow down agricultural growth. This could break down positive intersectoral linkages between agriculture and the rest of the economy, including the positive demand linkages.

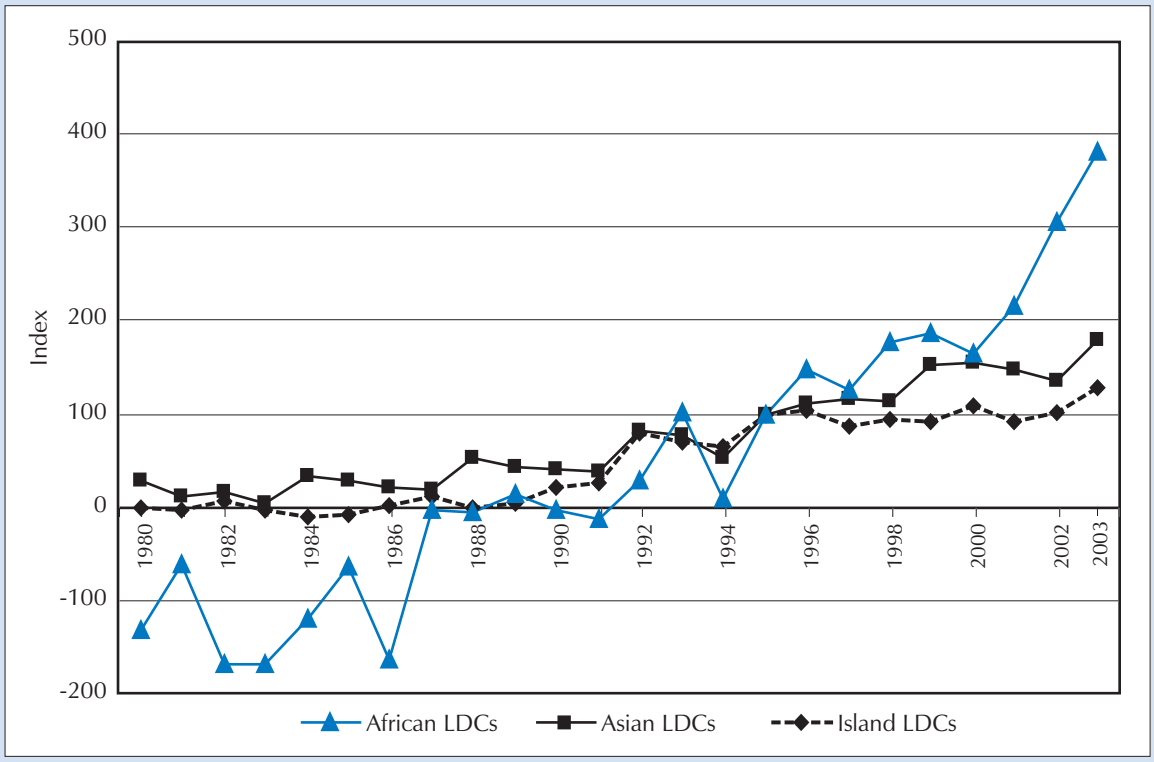
This growth and poverty reduction mechanism is influenced by the form of integration with the global economy. The opportunity of export markets can enable a faster rate of agricultural growth than would be possible if agricultural output was limited to domestic market. From this perspective, Mellor (2002) has argued that globalization could enable agricultural growth rates at 4 per cent to 6 per cent per annum rather than rates of 3 per cent, which were the maximum that they normally achieved in the past on the basis of domestic demand. However, at the same time, there is a possibility that agricultural imports could slow down agricultural growth. This could break down positive intersectoral linkages between agriculture and the rest of the economy, including the positive demand linkages discussed above. In this regard, a trend which is a matter of

Box 20. Food import surges into LDCs

The LDCs currently import more food than they export. This is particularly so in African LDCs. They were net food exporters in the 1980s, but in the early 1990s they changed to being net food importers. Their net imports increased at a steady rate during the 1990s, but since 2000 the growth of food imports has accelerated (box chart 7). This pattern has not occurred in either the Asian or island LDCs.

Box chart 7. Net food imports[a] in LDCs, 1980–2003

(Index, 1995 = 100)



Source: UNCTAD secretariat estimates based on UN COMTRADE.

a Food imports minus food exports.

Following the methodology used by FAO (2002), the number of import surges into LDCs that occurred in the 1970s, 1980s and 1990s and during 2000–2003 were calculated. An import surge is defined as a 20 per cent positive deviation from a five-year moving average for each commodity/country. The analysis was carried out for a selected number of commodities which were considered to be especially representative, namely wheat, maize, rice, bovine meat, pig meat, poultry meat, milk, tomatoes, tomato paste and sugar. The evidence shows that the number of import surges has been increasing over time and they became more frequent in the 1990s and, proportionally, more so in 2000–2003. In the case of pig meat, tomatoes and tomato paste, 60 per cent of the total import surges were experienced during 1990–2003 and 50 per cent of the total import surges of maize and poultry meat were experienced over the same period of 13 years. In the case of rice and sugar, slightly over 40 per cent of rice and sugar import surges were experienced over the past 13 years (box table 10).

Different countries have been affected differently by food import surges. Overall, African LDCs have been hit by import surges more than their Asian and island counterparts. African LDCs have been particularly hit in their domestic production of poultry meat over the last 13 years. The imports of processed agricultural goods also affect the domestic production of unprocessed agricultural goods. The case of tomato paste in African LDCs is a particularly good example. Imports of tomato paste by African LDCs have shown a rapid increase from the mid-1990s onward, while domestic production of tomatoes has remained stagnant. Imports of paddy rice show a different pattern. Rather than a steady increase in imports, there are spikes which probably reflect the effects of drought and other adverse weather conditions on domestic production.

According to recent research, food import bills in developing countries have increased recently because of (i) domestic exchange rate depreciation, and (ii) higher quantities of food imported on a commercial basis rather than through food

Box 20 (contd.)

aid (FAO, 2003). Many food prices also increased simultaneously in the period 2000–2003. Many of the products represented in box table 10 were also heavily subsidized by OECD countries. There is also likely to be a relationship between trade liberalization, which has proceeded far and fast in many LDCs, and increasing food imports in countries where local production is uncompetitive with imports. Using the liberalization episodes identified in *The Least Developed Countries Report 2004* (table 37, p. 186) for 26 LDCs, it was found that the majority of the countries that had liberalized by 2003 had increased their net food imports during and in the aftermath of their liberalization episodes (11 out of 15 countries), while the majority of those that are still liberalizing have experienced a fall in their net food imports during their ongoing liberalization policies (7 out of 11 countries). Only a minority of LDCs (4) have experienced a fall in food imports following the liberalization episodes. Also, the vast majority of the countries analysed have experienced a higher annual incidence of import surges in the post-liberalization period than in the pre-liberalization period.

BOX TABLE 10. NUMBER OF IMPORT SURGES ON SELECTED COMMODITIES EXPERIENCED BY THE LDCs, 1970–2003

Commodities	No. of import surges			Countries *particularly* hit by the import surges[a]
	1970–2003	*1990–2003*	*2000–2003*	
Rice	350	150	53	Bangladesh, Burkina Faso, Burundi, Central African Republic, Madagascar, Mali, Rwanda
Sugar	350	155	44	Benin, Burkina Faso, Central African Rep, Chad, Madagascar, Malawi, United Rep. of Tanzania
Maize	345	181	64	Benin, Burkina Faso, Guinea-Bissau, Malawi, Mali, Mauritania, Sierra Leone, Somalia, Togo, Uganda, Yemen
Bovine meat	344	160	54	Cape Verde, Guinea-Bissau, Madagascar, Malawi, Mali, Mozambique, Rwanda, Uganda
Wheat	301	143	34	Angola, Bangladesh, Liberia, Niger
Milk	290	136	34	Cambodia, Chad, Lao PDR, Uganda
Poultry meat	272	145	52	Central African Republic, Liberia, Mauritania
Pig meat	210	124	43	Democratic Republic of the Congo
Tomatoes	197	117	41	Cape Verde, Central African Republic, Liberia, Mauritania, Niger, Togo
Tomato paste	178	119	39	Burkina Faso

Source: UNCTAD secretariat estimates.

a Countries that have experienced a number of import surges greater than or equal to 10.

Most of the products in which the LDCs are experiencing food import surges are also produced by the LDCs. But even if they do not produce the very same products in respect of which they experience import surges, they typically do produce substitutes, which can also be negatively affected by these import surges (UNCTAD, 2004). However, the relationship between import surges and domestic production is complex. Domestic production of many of these goods either fell or slowed down during the period 1990–2003. But it is difficult to ascertain whether production is falling because of an inability to compete with cheaper imports, or whether imports are filling a demand gap left by falling domestic production. This is an important issue which requires further research, as it is potentially critical for the effectiveness of intersectoral linkages between agriculture and the rest of the economy in the LDCs.

concern is the rise in food import surges into LDCs, which was particularly apparent in the 1990s (see box 20).

D. Economic growth and the balance-of-payments constraint in LDCs

It is clear that domestic demand makes a critical contribution to economic growth. However, exports also matter because economic growth and the full utilization of productive capacities are constrained through the balance of payments. The empirical evidence clearly indicates that there is a conflict between sustaining an accelerated GDP growth rate and preserving an equilibrium in the balance of payments. The ultimate solution must lie in improving the balance of payments through trade, as will be discussed later.

Exports also matter because economic growth and the full utilization of productive capacities are constrained through the balance of payments.

As outlined in *The Least Developed Countries Report 2004*, exports can play a number of different roles in supporting economic growth. These are as follows: (a) static efficiency gains which arise through specialization according to current comparative advantage; (b) increased capacity utilization which arises if external demand enables the employment of previously idle factors of production; (c) increased physical and human capital investment owing to improved returns to investment; and (d) productivity growth through the transfer of technology or increased efficiency due to the exposure to international competition. This orthodox approach assumes that the balance of payments of a country looks after itself, so that the demand side of the economy is ignored. In practice, the exchange rate consequences of trade cannot be ignored and the balance of payments cannot be assumed to be self-correcting. Thus, the disequilibria within the balance of payments can become a constraint on economic growth from the demand side if deficits cannot be financed.

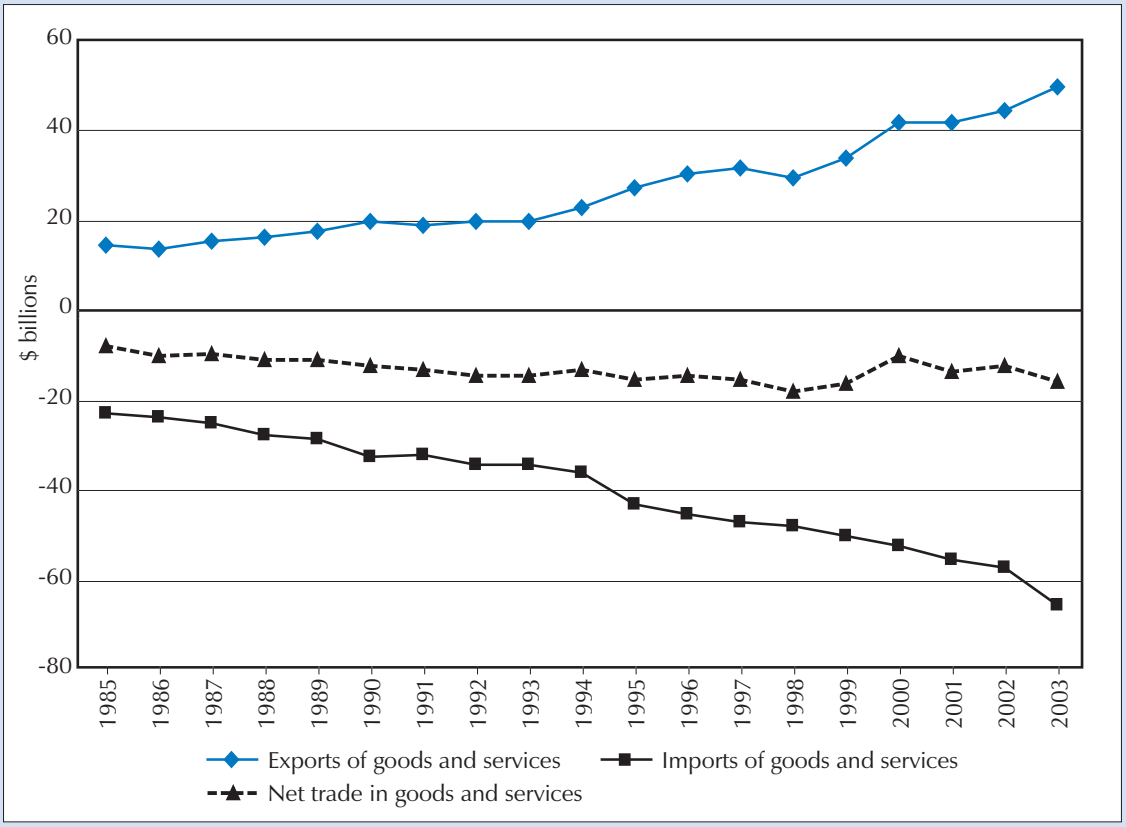
Theoretically, in the long run, no country can grow faster than the rate consistent with the balance-of-payments equilibrium on the current account unless it can finance ever-growing deficits through capital inflows. This is the idea behind the balance-of-payments-constrained growth model (Thirlwall, 1979). Empirical evidence suggests that most developing countries are demand-constrained by their balance of payments, although for short periods the constraint can be relaxed by capital inflows and transfers;[5] however, experience shows that the maximum current account deficit to GDP ratio sustainable by private financial flows is generally in the order of 2 to 3 per cent (Thirlwall, 2003).

The disequilibria within the balance of payments can become a constraint on economic growth from the demand side if deficits cannot be financed.

Each component of demand has an import content, which is essential for the continuation of the ongoing economic activities and development, and countries need foreign exchange to pay for those imports. In general, export earnings are the most important (and in many ways the most desirable) source of foreign exchange. However, if the rate of growth of exports is not enough to provide the foreign exchange needed, countries are obliged to attract capital flows to finance the difference between the value of imports and the foreign exchange provided by exports; if this does not happen, the components of demand have to be constrained in the long term in order for the balance of payments to be in equilibrium.

Chart 53 shows that the LDCs' trade deficit in goods and services worsened from 1985 to the late 1990s, as imports grew faster than exports. There was, however, a subsequent improvement, but this was mainly driven by oil-

CHART 53. EXPORTS, IMPORTS AND TRADE DEFICIT IN GOODS AND SERVICES IN LDCS, 1985–2003
(In current $ billions)



Source: UNCTAD secretariat estimates based on World Bank, *World Development Indicators 2005,* CD-ROM.

exporting LDCs. In the group of non-oil-exporting LDCs, the trade deficit in goods and services averaged 9 per cent of GDP in 2003. This suggests that the LDCs, and non-oil LDCs in particular, relied heavily on capital flows and transfers to finance their imports of goods and services.

Considering that export growth has not been enough to finance the import content requirement for the economic development of LDCs, Pacheco-López (2005b) used an extended version of the balance-of-payments-constrained growth model with capital flows and transfers for a sample of 18 LDCs (see box 21 for a technical review of the model).

Although the nominal terms of trade have been improving on average over the last three decades, the depreciation of LDCs' currencies has swamped any positive effects of the nominal terms of trade.

It was found that export growth has made a positive contribution to GDP growth in all countries except Mauritania, where the export growth rate was negative. The export growth rate exceeded the rate of GDP growth in 7 of the 18 countries. In the other 11 countries, the actual growth of GDP has been slowed down either by a negative pure terms of trade effect and/or slower growth of capital flows and transfers than exports. The pure terms of trade effect on growth can be estimated as the sum of the rate of change of the nominal terms of trade (measured as the ratio of domestic to foreign prices) and the rate of change of the nominal exchange rate (measured as the domestic price of foreign currency). Table 57 shows that although the nominal terms of trade have been improving on average over the last three decades, the depreciation of LDCs' currencies against the US dollar has swamped any positive effects of the nominal terms of trade. Eleven countries — Burundi, Ethiopia, Gambia, Haiti, Lesotho, Malawi, Mali, Senegal, Sierra Leone, Uganda and Zambia — have experienced adverse real terms of trade; and in eight of these countries this negative terms of trade effect can partly explain why the actual growth of GDP is

Box 21. Testing the balance-of-payments-constrained growth model for LDCs

Every country requires foreign exchange in order to pay for imports to support the growth and development process. How much imports grow with the growth of GDP is given by the income elasticity of demand for imports (holding relative prices constant). The magnitude of the income elasticity will depend on the structure of production, the import content of final demand and the trade regime in operation.

There can be no doubt from the evidence that virtually all of the LDCs are short of foreign exchange. Their current-account balance-of-payments deficits relative to GDP are huge, while their GDP growth rates are relatively modest, and there is also surplus labour. Often capital is also under-utilised because of a shortage of foreign exchange to buy spare parts. There are many ways of financing imports through: exports, ODA, FDI inflows, private lending, workers' remittances, and so forth. Use of the balance-of-payments framework, including both current and capital transactions, can give the relative importance of these components in financing imports and the growth process in LDCs.

The model, originally derived in Thirlwall (1979) and Thirlwall and Hussain (1982),[1] has the following form:

$$y_B^* = \frac{(p_{dt} - p_{ft} - e_t)(1 + w_1\eta + \psi) + w_1\varepsilon(z_t) + w_2(c_t - p_{dt})}{\pi}$$

where y_B^* is a country's growth rate consistent with the overall balance-of-payments equilibrium (including capital flows and transfers); p_{dt} is the rate of change of domestic prices; p_{ft} is the rate of change of foreign prices; e_t is the rate of change of the exchange rate (measured as the domestic price of foreign currency); z is world income growth; $(c_t - p_{dt})$ is the growth of real capital inflows that allow import growth to exceed export growth; h is the price elasticity of demand for exports which will be negative ($\eta < 0$) because a rise in the relative price of exports will reduce export demand; y is the price elasticity of demand for imports which will be negative ($\psi < 0$) because a rise in the price of imports will reduce import demand; ε is the income elasticity of demand for exports which will be positive ($e > 0$) because a rise in world income will lead to an increase in the demand for goods if they are "normal" goods; π is the income elasticity of demand for imports which will be positive ($\pi > 0$) because a rise in domestic income is partly spent on imports; and w_1 and w_2, respectively, are the shares of exports and capital flows and transfers in total receipts to pay for the import bill, and $w_1 + w_2 = 1$.

Since the overall balance of payments must balance, it can be seen from the equation that any country's growth rate can be disaggregated into four components:

1. The growth of exports determined by world demand conditions and the interaction of relative price changes and the price elasticity of demand for exports, i.e. $[w_1\eta(p_{dt} - p_{ft} - e_t) + w_1\varepsilon(z)]/\pi = w_1x/\pi$, where x is the growth of exports;
2. The contribution of real capital flows and transfers, i.e. $w_2(c_t - p_{dt})/\pi$ (this can be disaggregated into component parts such as the growth of net ODA, net FDI inflows, net private lending, workers' remittances, etc. — each weighted by their share in total capital flows and transfers);
3. A pure terms of trade effect i.e. $(p_{dt} - p_{ft} - e_t)/\pi$;
4. A residual determined by the interaction of relative price changes and the price elasticity of demand for imports i.e. $[(p_{dt} - p_{ft} - e_t)\psi]/\pi$.

The full model has been applied to 18 LDCs over various periods between 1975 and 2003.[2] Box table 11 provides a summary of results for each of the countries in the sample. Column 1 gives the average growth of GDP. Column 2 gives the contribution of export growth to GDP growth. Column 3 gives the pure terms of trade effect and column 4 gives the contribution of real capital flows and transfers to GDP growth. The difference between the actual growth of GDP and the sum of the three components in the table is the fourth component, which is the residual mentioned above (including errors in the data).

Box 21 (contd.)

BOX TABLE 11. THE CONTRIBUTION OF EXPORT GROWTH, PURE TERMS OF TRADE MOVEMENTS, AND REAL CAPITAL FLOWS AND TRANSFERS TO REAL GDP GROWTH OF SELECTED LDCs, 1975–2003[a]

(Percentage per annum)

	Average annual GDP growth rate	Average contribution[b] of:		
		Export growth	*Pure terms of trade movements* $(p_{dt} - p_{ft} - e_t)/\pi$	*Real capital flows and transfers* $w_2(c_t - p_{dt})/\pi$
Bangladesh	4.3	+3.0	+1.2	+0.9
Benin	4.0	+0.8	+0.3	+0.4
Burkina Faso	3.8	+0.5	+1.4	-1.0
Burundi	1.7	+6.9	-6.0	+2.5
Ethiopia	3.1	+2.5	-7.0	+1.8
Gambia	3.6	+4.2	-3.4	+11.3
Haiti	0.5	+1.8	-3.7	+2.7
Lesotho	4.0	+3.4	-4.1	-3.9
Madagascar	0.9	+0.1	+0.2	+1.4
Malawi	3.3	+7.9	-7.4	+24.8
Mali	3.4	+1.9	-0.9	-0.9
Mauritania	3.7	-0.9	+0.8	+3.0
Rwanda	4.2	+6.7	10.8	+1.3
Senegal	3.0	+7.0	-5.4	+3.9
Sierra Leone	-0.4	+0.5	-4.1	+5.3
Togo	2.3	+1.4	+1.7	+4.6
Uganda	5.4	+2.6	-4.5	-2.4
Zambia	1.1	+0.4	-0.5	+2.2

a Based on data availability; periods for variables and countries vary.
b The sum of the contributions does not equal the average annual GDP growth rate due to the fact that not all capital flows were considered and also due to data errors.

Source: Pacheco-López (2005b).

[1] For an up-to-date literature review on this topic, see McCombie and Thirlwall (2004).
[2] The periods differ for countries according to the availability of data.

less than the combined contribution of export growth and real capital flows and transfers. The negative pure terms of trade effect is largely accounted for by nominal exchange rate depreciation — which coincides with the implementation of the Structural Adjustment Programmes implemented during the late 1980s and early 1990s.

Capital flows play an important part in the growth process of LDCs. Often capital flows and transfers pay for nearly 50 per cent of imports.

Capital flows play an important part in the growth process of LDCs. Often capital flows and transfers pay for nearly 50 per cent of imports. In general, the growth of real capital flows and transfers made a positive contribution to GDP growth in 14 of the 18 countries in the sample. In those countries, the growth of real capital flows and transfers made a more important contribution to GDP growth than the growth of exports. This is some measure of how many LDCs are reliant on capital flows and transfers to pay for their imports. When capital flows and transfers are disaggregated into net ODA, net FDI inflows (FDI), net private lending, workers' remittances and interest payments, it is possible to identify which type has the highest share in total capital flows and transfers (see box 22). However, a more revealing analysis is derived by considering the contribution of the real growth rate of each of these components to GDP growth.[6] Table 58 shows the actual GDP growth rate and the contribution of net ODA, net FDI inflows (FDI), net private lending, workers' remittances and interest payments on past net private lending to economic growth for the periods for which data are available. It is shown that:

TABLE 57. AVERAGE CHANGES OF THE NOMINAL TERMS OF TRADE, THE NOMINAL EXCHANGE RATE AND THE REAL TERMS OF TRADE IN SELECTED LDCS, VARIOUS PERIODS[a]

(Annual average, percentage)

LDCs	Nominal terms of trade[b]	Nominal exchange rate[c]	Real terms of trade[b]
Bangladesh	+8.2	-6.2	+2.0
Benin	+6.8	-6.1	+0.7
Burkina Faso	+9.8	-7.1	+2.7
Burundi	+8.1	-12.8	-4.7
Ethiopia	+7.0	-15.5	-8.5
Gambia	+8.4	-10.6	-2.2
Haiti	+9.1	-17.0	-7.9
Lesotho	+10.7	-14.0	-3.3
Madagascar	+15.7	-15.0	+0.7
Malawi	+18.0	-21.0	-3.0
Mali	+3.1	-4.4	-1.3
Mauritania	+9.5	-8.1	+1.4
Rwanda	+15.7	-7.9	+7.8
Senegal	+3.7	-6.5	-2.8
Sierra Leone	+33.4	-41.8	-8.4
Togo	+8.4	-6.2	+2.2
Uganda	+48.4	-56.3	-7.9
Zambia	+53.0	-54.4	-1.4

Source: Based on Pacheco-López (2005b).

a Data availability: Bangladesh (1976–2002), Benin (1976–2002), Burkina Faso (1980–2002), Burundi (1979–2002), Ethiopia (1982–2002), Gambia (1976–1994), Haiti (1976–2002), Lesotho (1981–2002), Madagascar (1976–2002), Malawi (1976–1984, 1986–2000), Mali (1986–1996), Mauritania (1986–2002), Rwanda (1976–1979, 1981–2002), Senegal (1976–2001), Sierra Leone (1976–1986, 1989–1993, 1995–2002), Togo (1976, 1978–2002), Uganda (1983–2002), and Zambia (1976–1978, 1980–1982, 1984–1986, 1990–1997).

b + indicates improvement and – deterioration.

c + indicates appreciation and – depreciation.

- The growth of net ODA in real terms has contributed positively to GDP growth in 8 of the 18 countries. In the other countries, real net ODA flows must have fallen on average resulting in a negative contribution of real net ODA growth to GDP growth.[7]
- From the limited data available on net FDI inflows, net private lending and workers' remittances to LDCs it appears that real FDI growth contributed positively to GDP growth in 11of the 15 countries; the growth of real net private lending contributed positively to growth in 12 of the 18 countries; the growth of workers' remittances in real terms contributed positively to GDP growth in 8 of the 10 countries; and the payment of real interest on loans contributed negatively to growth in 6 of the 18 countries. Interestingly, in only 3 of the 18 countries has the growth of all capital inflows been positive simultaneously. In other countries, the impact of different flows has been offsetting.

Given the degree to which imports are financed by capital inflows and transfers, it is most likely that some of these LDCs would not be able to achieve their economic growth rates without these flows and transfers.

These results highlight the dependence on capital inflows in the form of net ODA, net FDI inflows, net private lending and workers' remittances in financing growth in the majority of LDCs.

The findings presented above lead to several policy implications for economic policymaking. First, it is clear from the size of their deficits that economic growth in LDCs has been constrained by their balance-of-payments position. Most LDCs have experienced current account deficits, which have been financed by capital flows and transfers. But when the latter are not sufficient to finance such deficits, or when they are volatile and with widespread fluctuations, the other components of demand may have to be limited owing to their import content. An alternative way of addressing this issue is to question

Box 22. Capital flows and transfers in LDCs

In the LDCs capital flows and transfers have been financing an excess of imports over exports. The main types of capital flows and transfers are the following: net ODA flows, net FDI inflows (FDI), net private lending, workers' remittances, interest payments (negatively) and other flows (not reported here). Box table 12, shows the average share of net ODA flows, net FDI inflows, net private lending, workers' remittances and interest payments to GDP for each country. For all countries, the share of net ODA flows is by far the highest. For many countries, the share of net ODA flows *alone* has exceeded total capital inflows so that net ODA flows are financing not only balance-of-payments deficits but also capital outflows presumably private capital flight.

Box table 12. Capital flows and transfers, as share of GDP, 1975–2003[a]

(Average, percentage)

	Net ODA flows	Net FDI inflows	Net private lending	Workers' remittances	Interest payments
Bangladesh	4.4	0.2	0.1	3.3	0.4
Benin	10.3	1.6	1.5	4.3	1.0
Burkina Faso	13.4	0.2	0.1	5.3	0.7
Burundi	16.7	0.2	-0.1	..	1.0
Ethiopia	11.6	n.a.	0.6	..	0.8
Gambia	27.8	2.6	0.3	..	2.0
Haiti	9.0	0.4	0.3	6.0	0.5
Lesotho	15.1	2.5	0.7	..	1.8
Madagascar	9.3	0.5	0.5	0.2	1.5
Malawi	21.2	0.4	0.1	..	2.2
Mali	19.4	0.7	-0.1	4.3	1.1
Mauritania	23.8	0.5	0.0	0.9	3.6
Rwanda	17.3	0.6	0.0	0.1	0.4
Senegal	12.0	0.7	0.1	2.3	2.2
Sierra Leone	13.7	-0.5	0.3	..	1.2
Togo	10.6	2.0	1.9	1.4	2.1
Uganda	11.4	2.3	0.1	..	0.6
Zambia	17.4	2.1	0.1	..	3.0

Source: Based on Pacheco-López (2005b).

a Based on data availability; periods for variables and countries vary.

Supply-side reforms should lift the balance-of-payments constraint on demand by increasing the growth of exports and reducing the income elasticity of demand for imports.

the sustainability of the actual GDP growth rates in LDCs. Given the degree to which imports are financed by capital inflows and transfers, it is most likely that some of these countries would not be able to have their current economic growth rates without these flows and transfers.

Second, attempts by LDCs to grow faster by focusing on the supply-side of the economy will not succeed unless at the same time supply-side reforms should lift the balance-of-payments constraint on demand by increasing the growth of exports and reducing the income elasticity of demand for imports. Increasing the capacity to supply without a concomitant increase in demand would lead to further unemployed resources. Supply-side reforms should seek to improve the performance of the tradable sector, with particular emphasis on increasing export growth, by increasing the income elasticity of demand for exports, and on reducing the income demand elasticity of imports. As shown in chapter 3, the export composition of the LDCs is dominated by primary products, which in general lack market dynamism.

TABLE 58. CONTRIBUTION OF DIFFERENT CAPITAL FLOWS AND TRANSFERS TO REAL AVERAGE ANNUAL GDP GROWTH IN SELECTED LDCs, 1975–2003[a]

(Percentage)

	GDP growth rate	Contribution of:				Negative effect of interest payments on growth[c]
		Net ODA flows[b]	Net FDI inflows[b]	Net private lending[b]	Workers' remittances to growth[b]	
Bangladesh	4.3	-0.5	0.7	-0.3	1.4	0.1
Benin	4.0	0.4	1.2	0.6	0.2	0.2
Burkina Faso	3.8	-0.1	-5.1	6.7	-0.4	0.1
Burundi	1.7	1.7	-43.2	1.6	..	-0.1
Ethiopia	3.1	3.7	..	-4.1	..	0.1
Gambia	3.6	4.5	..	2.2	..	2.4
Haiti	0.5	10.4	0.1	2.4	-0.1	1.4
Lesotho	4.0	-0.5	1.9	-1.4	..	0.0
Madagascar	0.9	-0.1	0.1	3.3	1.0	0.6
Malawi	3.3	-11.4	..	2.1	..	-1.2
Mali	3.4	-0.7	6.9	5.6	0.0	0.8
Mauritania	3.7	0.6	0.6	0.4	1.5	-0.1
Rwanda	4.2	-0.7	1.0	-9.0	0.4	0.3
Senegal	3.0	3.5	19.7	5.1	1.2	1.1
Sierra Leone	-0.4	-2.6	-13.0	-0.1	..	0.0
Togo	2.3	0.6	3.9	-0.2	4.2	0.5
Uganda	5.4	-9.1	9.7	0.8	..	-0.8
Zambia	1.1	-3.3	-0.7	11.7	..	-0.6

Source: UNCTAD secretariat estimates, based on Pacheco-López (2005b).

a Based on data availability; periods for variables and countries vary.
b A negative sign indicates that the particular capital flow has impacted negatively on real GDP growth.
c A negative sign indicates that interest payments have been declining.

E. Conclusions

The stimulus of demand is critically important for the development of productive capacities.[8] It animates the core processes through which productive capacities develop — capital accumulation, technological progress and structural change. Moreover, effective demand ensures that productive capacities are fully utilized. A proper understanding of the different components of demand, and of the constraints on their growth, is thus essential in any policy discussion of productive capacities. What are perceived as supply-side constraints cannot be divorced from demand-side constraints.

This chapter has shown that expansion of domestic demand has contributed to economic growth in most LDCs. This finding is based on a sample of 15 LDCs for the period 1993–2003. But it replicates a similar finding for a different sample of LDCs using a different methodology in an earlier LDC Report (UNCTAD, 2004: 143–148). Moreover, it confirms a tendency identified in earlier analysis of patterns of growth which shows that at the start of the development process, the expansion of domestic demand contributed just under 75 per cent of economic growth in both small primary-oriented and small manufactures-oriented countries (Chenery, Robinson and Syrquin, 1986).

Sluggish domestic demand is a central deficiency of the investment climate in LDCs.

Because domestic demand is such a large demand-side source of economic growth, its weak growth is a major constraint on the development of productive capacities in most LDCs. Sluggish domestic demand, which is associated with generalized and persistent poverty, is a central deficiency of the investment

climate in those countries. Seeking to improve the investment climate is an important policy emphasis. But the current thrust of policy analysis in relation to the investment climate, which focuses on governmental constraints and bureaucratic red tape, addresses only a limited part of the problem. It ignores the stimulus to economic action which can be constrained through excessive regulation. Effective domestic demand must also be taken into account. To take it for granted is to leave out half the story. Supply creates demand; but demand induces supply.

Although domestic demand makes a critical contribution to economic growth in the LDCs, exports also matter.

Because the share of agriculture in GDP and total employment is high in most LDCs, trends in domestic demand are closely related to what happens in the agricultural sector and also the nature of the linkages between agriculture and the rest of the economy. In this regard, the chapter has shown that the demand linkage effects of agricultural growth constitute an important growth and poverty reduction mechanism. In Viet Nam and Bangladesh, it is possible to observe a virtuous circle in which demand stimulus from agricultural growth induces investment, entrepreneurship and employment in non-agricultural activities, particularly non-tradables. This virtuous circle is likely to be relevant in many LDCs and at the heart of efforts to create a more inclusive process of development which supports sustainable poverty reduction. Without the stimulus of domestic demand for non-tradables, it is difficult to envisage the productive absorption of labour outside agriculture, which, as shown earlier in this Report, is becoming a critical issue for poverty reduction in more and more LDCs.

Although domestic demand makes a critical contribution to economic growth in the LDCs, exports also matter. There are various supply-side reasons for this. But exports also matter because economic growth and the full utilization of productive capacities are constrained through the balance of payments. Each component of demand has an import content which is essential for the continuation of ongoing economic activities and their expansion, and countries need foreign exchange to pay for those imports. Analysis of the LDCs within this framework shows that export growth has made a positive contribution. But its contribution to relaxing the balance-of-payments constraint has been seriously reduced by declining terms of trade and currency depreciation. It is also clear that capital inflows and transfers have played an important role in the LDCs in alleviating the balance-of-payments constraint.

An exclusive emphasis on exports rather than domestic demand, or vice versa, or on developing productive capacities in tradables rather than non-tradables, or vice versa, is likely to be counter-productive. Both matter for growth and poverty reduction.

Overall, the analysis of this chapter suggests that an exclusive emphasis on exports rather than domestic demand, or vice versa, or on developing productive capacities in tradables rather than non-tradables, or vice versa, is likely to be counter-productive. Both matter for growth and poverty reduction. But what is more fundamentally important is to ensure that demand-side factors begin to be taken seriously in policy efforts to develop productive capacities. Policies which seek to engineer a supply-side fix in the LDCs, without due attention to the dynamics of demand, are likely to fail.

Notes

1. For which data are available and consistent.
2. Ideally, the import content of all items of C, I, G and X should be subtracted to find the *true* contribution of domestic demand.
3. Aggregate demand can be decomposed into the contribution of domestic demand (DD), which is the sum of C + I + G, and net exports (NE), which is the difference between exports and imports (X–M). For an example which applies this to five Asian countries, see Asian Development Bank (2005).
4. It is also relevant in other developing countries. Mellor (1999) applies the model to Egypt.
5. There is now an extensive literature that has tested empirically the balance-of-payments-constrained growth model, either for individual, or groups of, developing countries, for example Moreno-Brid and Perez (1999) for Central American countries; Hussain (1999, 2001) for East Asian and African countries; Perraton (2003) for several developing countries; and Moreno-Brid (1998) and Pacheco-López (2005a) for Mexico.
6. The contribution of each capital flow to growth is calculated by multiplying the average rate of growth of each flow by its share in financing imports.
7. This does not mean that net ODA flows do not contribute to welfare and living standards. However, in a growth model it is important to distinguish between the level of variables and their growth rates. Their level can be positive but their rate of growth negative. Another distinction that should be taken into account is that variables in nominal terms differ from variables in real terms.
8. The issue of demand stimulus also is central to the debate on market access; see Fugazza (2004).

References

Asian Development Bank (2005). *Asian Development Outlook 2005, Developing Asia and the World*, Hong Kong, China.

Bernabè, S. and Krstic, G. (2005). Labour productivity and access to markets matter for pro-poor growth. *World Bank*, within the context of the Operationalizing Pro-Poor Growth Work Program.

Bhaduri A. and Skarstein, R. (2003). Effective demand and the terms of trade in a dual economy: A Kaldorian perspective, *Cambridge Journal of Economics*, 27(4): 583–595.

Chenery, H., Robinson, S. and Syrquin, M. (1986). *Industrialization and Growth: A Comparative Study*. World Bank, Washington DC.

Delgado, C., Hopkins, J. and Kelly, V. (1998). *Agricultural Growth Linkages in Sub-Saharan Africa*. International Food Policy Research Institute, Research Report 107, Washington, DC.

FAO (2002). Some trade policy issues relating to trends in agricultural imports in the context of food security. CCP 03/10, Rome.

FAO (2003) Trade reforms and food security (http://www.fao.org/documents/show_cdr.asp?url_file=/DOCREP/005/Y4671E/Y4671E00.HTM).

Fei, J.C. and Ranis, G. (1997). *Growth and Development from an Evolutionary Perspective*, Blackwell, UK.

Fugazza, M. (2004). Export performance and its determinants: Supply and demand constraints. Policy Issues in International Trade and Commodities Study Series, No. 26. UNCTAD/ITCD/TAB/27, Geneva.

Hirschman, A. (1958). *The Strategy of Economic Development*. New Haven: Yale University Press.

Hussain, M.N. (1999). The balance of payments constraint growth and growth rate fifferences among African and East Asian economies, *African Development Review*, June, 103–137.

Hussain, M.N. (2001). "Exorcising the ghost": An alternate model for measuring the financing gap in developing countries, *Journal of Post Keynesian Economics*, 24(1): 89–124.

McCombie, J. and Thirlwall, A.P. (2004). *Essays on Balance of Payments Constrained Growth: Theory and Evidence*. London: Routledge.

Mellor, J. (1999). Faster, More Equitable Growth: The relationship between growth in agriculture and poverty reduction, *Agricultural Policy Development Project Research Report*, No.4, Abt Associates Inc., Cambridge, Mass.

Mellor, J. (2000). Agricultural growth, rural employment, and poverty reduction: Non-tradables, public expenditure and balanced growth. Paper prepared for the World Bank Rural Week 2000, "Poverty or Prosperity: Rural People in a Globalized Economy" 28–31 March.

Mellor, J. (2002). The impacts of globalization on the role of agriculture. Paper presented at the Expert Consultation on Trade and Food Security "Conceptualizing the Linkages", 11–12 July 2002, Rome.

Moreno-Brid J.C., (1998). 'Balance of payments constrained economic growth: The Case of Mexico', *Banca Nazionale del Lavoro Quarterly Review*, 207: 413–433.

Moreno-Brid J.C. and Perez, E. (1999). 'Balance of payments constrained growth in Central America, *Journal of Post Keynesian Economics*, 22(1): 131–147.

Osmani S.R. et al. (2003). The Macroeconomics of Poverty Reduction: The Case Study of Bangladesh. United Nations Development Programme, Asia-Pacific Regional Programme on Macroeconomics of Poverty Reduction: Kathmandu. Mimeo.

Osmani, S.R. (2005). *The Employment Nexus Between Growth and Poverty — An Asian Perspective*, Sida Studies No.15., Swedish International Development Cooperation Agency, Stockholm.

Pacheco-López, P. (2005a). The impact of trade liberalisation on exports, imports, the balance of payments and growth: The Case of Mexico, *Journal of Post Keynesian Economics*, 27(4): 595–619.

Pacheco-López, P. (2005b). Testing the balance of payments constrained growth model for the least developed countries. Background paper prepared for *The Least Developed Countries Report 2006*, UNCTAD, Geneva.

Perraton, J. (2003). Balance of payments constrained growth and developing countries: An examination of Thirlwall's hypothesis, *International Review of Applied Economics*, 17(1): 1–22.

Thirlwall, A.P. (1979). The balance of payments constraint as an explanation of international growth rate differences, *Banca Nazionale del Lavoro Quarterly Review*, 128: 45–53.

Thirlwall, A.P. (2003). *Trade, the Balance of Payments and Exchange Rate Policy in Developing Countries*. Cheltenham: Edward Elgar.

Thirlwall, A.P. and Hussain, M.N. (1982). The balance of payments constraint, capital flows and growth rate differences between developing countries, *Oxford Economic Papers*, 34: 498–509.

UNCTAD (2004). *The Least Developed Countries Report 2004, Linking International Trade with Poverty Reduction*. United Nations publication, sales no. E.00.II.D.21, Geneva and New York.

Vogel, S. (1994). Structural changes in agriculture: Production linkages and agricultural demand-led industrialization, *Oxford Economic Papers*, 46: 136–156.