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Harnessing Remittances and Diaspora Knowledge to Build Productive Capacities

CHAPTER 3

REMITTANCES AND THE LDCs: MAGNITIDE, IMPACTS AND COSTS











A. Introduction

In recent years, remittances as a potential source of development finance have received greater attention from international policymakers. There is also a growing body of economic and social research highlighting the determinants, impact and significance of remittances in developing countries. In addressing these issues in an LDC context, the present chapter starts from the perspective that remittances may have multifaceted and significant impacts on recipient households, as well as at a regional and macroeconomic level. Remittances should therefore be regarded as an additional facet of LDCs' multi-pronged efforts to mobilize adequate sources of development finance.

Several empirical studies have shown that many of the effects remittances have — whether positive or negative — are contingent upon the financial, institutional and macroeconomic setting in recipient countries. Policy can therefore play a fundamental role in enhancing the developmental impact of remittances and harnessing resources for structural transformation.

Against this background, the primary objective of this chapter is to provide an evidence-based assessment of (a) current patterns of remittances to LDCs; (b) their importance for recipient LDC economies and the associated development opportunities and challenges; and (c) the transaction costs involved in remitting to LDCs. Finally, the chapter outlines some key policy issues related to remittances, which will be elaborated upon in chapter 4.

B. The magnitude of remittances for LDCs

1. LDCs from a global perspective

Before entering into a detailed discussion of remittance flows, a few considerations are needed about the data used in this report. The lack of systematic and reliable data invariably constrains the analysis of international migration and remittances, as openly acknowledged in the literature (World Bank 2006a, Grabel 2008, UNDP 2009, Melde and Ionesco 2010, among others). These data limitations, which are particularly pronounced in the LDC context, are discussed in detail in box 3.

Even with the caveats of data problems, the international debate increasingly recognizes that remittances constitute a sizable and relatively stable source of external financing, whose availability could prove particularly valuable for developing countries. After FDI, recorded remittances constitute the second largest external financial flow to developing countries, and their value far outstrips total ODA, although, unlike the latter, they are not necessarily directed from rich to poor countries.

The expansion of the global value of remittances accelerated markedly during the early and mid-2000s. They nearly doubled between 1990 and 2000 (chart 11) and then tripled once again in the following decade, touching \$489 billion in 2011 notwithstanding the global financial crisis. Such a fast pace of growth is remarkable even when compared with corresponding trends of other financial flows.¹ Moreover, with the rate of emigration hovering around three per cent worldwide for the last 25 years, a similar boom of recorded remittances reflects not only the increase in migrant stock proceeding in tandem with demographic dynamics but also a sharp rise in the average amount remitted per migrant.²

Remittances may have multifaceted and significant impacts on recipient households, as well as at a regional and macroeconomic level; they should therefore be regarded as an additional facet of LDCs' multi-pronged efforts to mobilize adequate sources of development finance.

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Box 3. Remittances, definitional issues and data limitations

According to the IMF's Balance of Payments and International Investment Position Manual, remittances represent a source of household income from abroad arising from the temporary or permanent movement of people to foreign economies (IMF, 2010). In line with common practice, in this chapter remittances are intended, unless otherwise specified, as the sum of three distinct items recorded in the balance of payment:

- (a) Workers' remittances, which are recorded under the heading "current transfers" in the current account, and consist of "all current transfers in cash or in kind made or received by resident households to or from nonresident households" (IMF 2011, A5.7 page 273);¹
- (b) Compensation of employees, recorded under the "primary income" subcategory of the current account, and referring to "the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by nonresident entities" (IMF 2011, A5.6 page 272); and
- (c) Capital transfers between households which are reported in the capital account.

Though some empirical works focus only on the item "workers' remittances", the broader definition used here, which corresponds to IMF's notion of "personal remittances" (IMF 2011), is believed to capture more adequately the size of workers' remittances.

Leaving aside definitional issues, three main sets of problems limit the overall quality of existing remittances statistics, as openly acknowledged in the literature (World Bank, 2006a; Grabel, 2008; UNDP, 2009; Melde and Ionesco, 2010, among others). First, several countries do not report remittances data, thereby reducing the coverage of available statistics regardless of the definition of remittances used. This is the case, for instance, of the Central African Republic, the Democratic Republic of Congo, and Somalia, all of which are believed to receive significant remittance flows. As noted in Kapur 2004, these gaps in data availability refer in many instances to those countries, such as Afghanistan or Somalia, where persistent economic difficulties may render remittances even more critical to a household's livelihood and economic activity.

Second, countries reporting data sometimes fail to implement in a standardized manner the IMF guidelines concerning the classification of remittances' flows. The latter problem arises above all with the distinction between "workers' remittances" and "compensation of the employees". Although data coverage and comparability have significantly improved over the last decade, as a consequence of these persistent limitations they are still incomplete, particularly in the context of the LDCs. Another clear example of the poor data quality is the fact that the worldwide sum of remittance inflows does not match the sum of outflows: in 2009, they were respectively \$416 billion and \$282 billion (World Bank, 2011).²

Third, official statistics only record those sums which transit through formal intermediaries (banks, bureaux de change, money transfer operators, etc.); and not in-kind transfers or other informal channels such as "hawala" systems.³ In this regard, World Bank estimates suggest that informal flows could add at least 50 per cent to the reported remittances flows, with significant variation across regions (Maimbo et al., 2003 and World Bank 2006a). This measurement problem is likely to be particularly acute in the case of LDCs, given that informal channels tend to be used disproportionately where the financial sector is either absent — as in conflict and post-conflict countries — or in any case weak (World Bank 2006a). According to Freund and Spatafora (2005), for instance, informal remittances accounted for 54 per cent of the total in Bangladesh and an astounding 80 per cent of the total in Uganda. In the same vein, Maimbo et al. (2003) place the share of unreported remittances in Sudan and Tanzania at 55 and 58 per cent, respectively.

- ¹ According to IMF's 2011 Balance of Payments and International Investment Position Manual (6th edition), the traditional denomination "workers remittances" is now to be replaced by "personal transfers" (A5.7 page 273).
- ² In the text below, unless otherwise specified the term "remittances" will be used to refer to "remittance inflows".
- ³ While historically associated with the Middle East and South Asia, informal fund transfer systems are now widely used in the whole developing world. They go under different names in various regions: Hawala in Arab countries, Fei-Ch'ien in China, Padala in the Philippines, Hundi in India, Hui Kuan in Hong Kong, and Phei Kwan in Thailand.

In fact, all regions of the world have witnessed significant expansions in remittance receipts (chart 12), with generalized acceleration in the last decade.³ The increase in global remittances is chiefly driven by the surge of inflows to developing countries, which include many of the world's largest remittances recipients. Indeed, since remittance inflows to transition economies and developing countries alike — whether LDCs or non-LDCs — have grown at a much faster rate in the past two decades than those directed to developed economies, the developed economies' share of world remittances has been steadily declining (chart 13). At present, developed countries receive approximately 25 per cent of the world's total remittances, down from 50 per cent of the total in the early 1990s. Conversely, developing countries excluding LDCs account for upwards of 60 per cent of the total, while LDCs and transition economies receive roughly six per cent each.

The increase in global remittances is chiefly driven by the surge of inflows to developing countries. The fallout of the global financial crisis appears to have reinforced this prominence.



Source: UNCTAD secretariat calculations, based on UNCTADstat database.



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The fallout of the global financial crisis appears to have reinforced this prominence of developing countries. Remittances to LDCs continued their upward trend notwithstanding the global recession, albeit at a much slower pace, while inflows to other developing countries, as well as transition economies, suffered a slump in 2009 but quickly rebounded. Conversely, three years after the onset of the crisis, remittances inflows to developed economies remain significantly below their pre-crisis peak.

In addition, it is likely that the burgeoning importance of developing countries with respect to global remittances is even more pronounced than official figures indicate. World Bank estimates suggest that informal flows could add at least 50 per cent to reported remittances flows, and developing countries are likely to account for the bulk of these unreported transfers (World Bank 2006a).

With regard to the LDCs, remittance receipts climbed from \$3.5 billion in 1990 to \$6.3 billion in 2000, subsequently accelerating further to touch nearly \$27 billion in 2011. A number of concurring factors explain such a rapid surge, especially when the notorious limitations of remittance data are taken into consideration (see box 2). The boom in LDC remittances partly reflects the steady increase in the stock of emigrants originating from LDCs, from 16 million people in 1990 to 19 million in 2000, and as many as 27 million in 2010 (i.e. a 42 per cent increase in the stock of LDC emigrants during the last decade). In part, it may also follow from a gradual rise in the importance of "economic migration" (especially to fast-growing developing countries) and since 1995 a corresponding decline in the number of refugees and forced migrants, who tend to remit much lower sums. In addition to these factors, as the number of LDCs reporting remittance data has grown from 22 in the year 1980 to 39 since 2006, the increase in total remittances also depends, at least to some extent, on the improved quality of the data.⁴ Nonetheless, the average amount remitted by each

Remittance receipts to the LDCs climbed from \$3.5 billion in 1990 to \$6.3 billion in 2000, subsequently accelerating further to touch nearly \$27 billion in 2011. Since 2004 — and for most of the period considered here remittances consistently represented the second-largest source of foreign financing for the LDCs.

The value of remittances relative to GDP has historically been much greater in the LDCs than in either developed or other developing regions.

Remittances to LDCs were equivalent to nearly 15 per cent of total export revenues in 2011, more than three times as much as in other developing countries. LDC emigrant also appears to have increased over the period considered. This may be partly due to gradual improvements in migrants' earnings translating into larger remittance streams; it is likely, however, that the rise in LDC remittances also reflects the increasing utilization of formal remittance channels. The latter, in turn, has been stimulated by the broadening of services provided, the slow but steady reduction in the associated costs, and the tightening of international financial controls.⁵

The magnitude of remittance inflows to the LDCs is particularly noteworthy in comparison with other financial inflows.⁶ Undoubtedly, net ODA disbursements (excluding debt relief) continue to represent the main source of external financing for the world poorest countries, having reached approximately \$42 billion in 2010 (chart 14). Yet since 2004 — and for most of the period considered here — remittances consistently represented the second-largest source of foreign financing for the LDCs. Preliminary data for 2011 suggest that they totalled \$26 billion, that is, 1.8 times the corresponding value of FDI inflows (\$15 billion) Moreover, as global recovery falters and austerity takes hold in donor countries, they may well prove more resilient than other capital flows.

The value of remittances relative to GDP has historically been much greater in the LDCs than in either developed or other developing regions (chart 15). In 2010, remittances to the LDCs reached 4.4 per cent of their aggregate GDP, three times higher than for other developing countries and 14 times higher than for developed economies. Significantly, this ratio remained high throughout the 2000s, when most LDCs were enjoying unprecedented GDP growth.⁷

Similarly, remittances to LDCs were equivalent to nearly 15 per cent of total export revenues in 2011, more than three times as much as in other developing countries (chart 16). Most of the decline in the trend for LDCs took place in the 1990s, while the ratio between remittances and total export revenues remained broadly constant in the 2000s. Thus, the recent dynamics of recorded remittances have roughly paralleled those of exports of goods and services, notwithstanding the well-known "commodity boom" and the eruption of the global crisis.

Chart 14. Remittances, FDI and ODA inflows to LDCs (Billions of dollars)



Source: UNCTAD secretariat calculations, based on UNCTADstat, World Development Indicators, and OECD-DAC online databases.



Source: UNCTAD secretariat calculations, based on UNCTADstat database.





Source: UNCTAD secretariat calculations, based on UNCTADstat database.

Although LDC remittances form a relatively small share of the global total, they play a disproportionately important role in LDCs compared with other economies (Ratha 2003, IMF 2005). Remittances had become an important means of LDC integration into the world economy even during the period when they were relatively marginalized in terms of world trade and investment flows. Currently, while LDCs represent 12 per cent of global population, their contribution to world GDP and exports is only one per cent and their share of global FDI is just under three per cent, yet they account for six per cent of global cross-border remittances.

2. REMITTANCES ACROSS LDC ECONOMIES

LDCs exhibit tremendous heterogeneity in terms of population, economic size, structural characteristics, geography and historical legacies; accordingly, a high degree of heterogeneity should also be expected with regard to remittance issues. The LDC group includes some of the world's top remittance recipients (whether in nominal value or relative to GDP), as well as countries for which remittances are negligible. Against this background, this section provides a disaggregated assessment of the magnitude of remittances across LDCs, clarifying the extent to which country-specific characteristics affect their significance for the recipient economy.

Remittance inflows to LDCs are unevenly distributed across countries, even more so than FDI and export revenues, a fact which partly reflects the varying size of each country's stock of emigrants. Chart 17 shows the persistence and accentuation of skewed distribution over the last decade. Over this period, the top recipient, Bangladesh, expanded its share of total LDC remittance inflows from 31 to 44 per cent. The top three LDC recipients (Bangladesh, Nepal and Sudan) also increased their overall share from 44 per cent to 66 per cent of total LDC inflows. Besides these well-known large recipients, other LDCs obtaining sizeable sums through remittances include Cambodia, Ethiopia, Haiti, Lesotho, Mali, Senegal, Togo, Uganda and Yemen.

Notwithstanding the uneven distribution, the sustained dynamism of remittance inflows to LDCs was quite general. In all but a handful of LDCs for which data are available, remittance inflows increased markedly over the last decade (chart 18), growing at an annual average of 15 per cent in the median LDC. Admittedly, in the wake of the global financial crisis of 2009, remittance receipts slowed down in most LDCs, even though they continued to increase with a few exceptions (see box 4 below).

As noted earlier, the sustained boom in remittance flows to the LDCs should be interpreted with caution in light of data limitations.⁸ Nonetheless, it is

1999-2001 2009-2011 Ethiopia Ethiopia Pacific LDCs Mali Malj Pacific LDCs Other Asian LDCs Other Asian LDCs eson Yemen Uganda Bangladesh Senegal Bangladesh Other African LDCs Yemen Haiti Sudar Nepal Sudan Nepal Haiti

Chart 17. Distribution of remittances inflows across LDCs, 1999-2001 and 2009–2011

Remittance inflows to LDCs are unevenly distributed across countries, even more so than FDI and export revenues, over the last decade. The top three LDC recipients (Bangladesh, Nepal and Sudan) increased their overall share from 44 per cent to 66 per cent of total LDC inflows.

In all but a handful of LDCs remittance inflows increased markedly over the last decade.

Source: UNCTAD secretariat calculations, based on UNCTADstat database.





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noteworthy that remittances to LDCs have also increased in per capita terms, despite rapid demographic dynamics in the recipient countries. On a per capita basis, recorded remittance flows to the LDCs rose from an average of \$7 in 1990 to nearly \$30 in 2010, with a doubling of this quantity since 2005. Table 6 shows that a rising trend in per capita remittance receipts since 1990 holds for the overwhelming majority of the LDCs. It also reveals that remittances represent a sizeable inflow of resources relative to GDP per capita, not only in

Box 4. Remittances and the global financial crisis

Like other capital and trade-related flows, remittances have not been spared the adverse effects of the global financial crisis and the ensuing recession or the continuing difficulties of several developed countries. Migrant workers have shared the burden of gloomy labour market conditions, with faltering global recovery and double-dip recessions in some developed countries. In many ways, however, the fallout of the crisis has provided insight into the extent of remittances' resilience compared with other sources of foreign exchange, and the reasons behind it.

To shed more light on this aspect, box table 1 compares recent trends, pre- and post-crisis, for private capital inflows to LDCs and to low- and middle-income countries (LMICs). Interestingly, in 2010, remittances were well above their 2007 levels in both developing regions, while inflows of FDI and portfolio investments remained below their corresponding value three years previously. More precisely, in the case of the LDCs, remittances indeed suffered a sharp growth slowdown in 2009, as a consequence of the downturn, but continued their upward trend, albeit at a modest rate. For LMICs, however, remittances inflows stalled in 2009 but picked up one year later, when they recovered the ground lost and actually surpassed the 2008 peak.¹

This distinct behaviour of remittances, as opposed to other types of private capital flows, stands out and confirms their relative resilience to shocks. With regard to LDCs, this finding is corroborated by the evidence depicted in box chart 1, which compares three-year growth rates in remittances inflows to individual LDCs before and after the crisis (1 January 2009 being taken as the cut-off point). As a matter of fact, the overwhelming majority of LDCs lie below the red 45-degree line, showing that with a few exceptions the expansion of LDCs' remittances receipts has indeed slowed down in the post-crisis period. Nonetheless, even in the post-crisis triennium, the value of migrants' remittances continued to climb, albeit at a slower pace, in all but a dozen LDCs.

Equally interesting, countries whose remittances were worst hit by the crisis (Ethiopia, Guinea, Liberia, Sao Tome, Sudan and Zambia) appear to be those whose diaspora communities are largely concentrated in developed economies at the epicentre of the crisis (United States, France, United Kingdom). In this respect, it can be argued that, given the very genesis of the global financial crisis, the predominantly South–South nature of LDC migration and remitting channels represented a factor of resilience. This finding is consistent with (UNCTAD, 2010a) and with the argument that countries with more diversified migration destinations are likely to have more resilient remittances.

¹ Incidentally, the different behaviour of FDI and portfolio investment flows is also worth mentioning. FDI inflows rose at double-digit rates between 2007 and 2008, notwithstanding financial distress in developed economies, but then fell sharply both in LDCs and LMICs, and had not yet recovered their peak level by 2010. Conversely, the notorious flight to safety manifested itself right after the collapse of Lehman Brothers, triggering immediate outflows of portfolio investments from both LDCs and LMICs in 2008. Although by 2010 both regions were once again witnessing positive inflows of portfolio investments, neither had recovered to their pre-crisis level.



Box chart 1. Remittances to LDCs before and after the global recession

Box 2 (contd.)

Box table 1. Private capital inflows in times of crisis (Value in 2007=100)									
	Type of private capital flow	2007	2008	2009	2010				
To LDCs	Remittances	100	132.5	135.1	141.7				
	FDI net inflows	100	116.5	112.6	92.6				
	Portfolio equity, net inflows	100	-101.8	-8.2	82.9				
To LMICs	Remittances	100	116.4	110.3	116.9				
	FDI net inflows	100	116.6	74.6	94.9				
	Portfolio equity, net inflows	100	-40.1	82.1	97.5				
Source: UNCTAD secretariat calculations based on <i>World Development Indicators</i> online database. LMIC = Low- and middle-income countries.									

	Table 6 Remit	tances inflows to	LDCs, 1990-2010		
		ecreasing rank in			
			per capita		Share of GDP
	1990	2000	2005	2010	per capita 2010 (%)
Samoa	265.73	254.89	609.90	783.51	23.44
Lesotho	261.03	243.44	292.16	343.53	35.03
Haiti	8.56	66.86	105.50	147.48	24.07
Nepal		4.57	44.42	115.79	21.65
Senegal	19.62	24.56	72.55	108.26	10.48
Kiribati	71.60	83.32	76.10	88.71	6.04
Bangladesh	7.40	15.18	30.69	72.97	10.88
Gambia	10.35	10.79	39.44	66.94	11.56
Yemen	125.39	72.67	62.12	62.44	4.34
Тодо	7.33	7.14	35.60	55.26	10.53
Djibouti		16.79	31.98	36.73	2.86
Sudan	2.34	18.74	26.45	32.60	1.79
Guinea-Bissau	0.98	6.47	14.55	31.76	5.89
Mali	12.33	6.48	13.45	28.38	4.74
Benin	21.17	13.36	22.63	28.03	3.78
Uganda		9.83	11.32	27.36	5.37
Vanuatu	56.00	187.30	24.14	26.82	0.91
Cambodia		9.68	14.95	22.71	2.85
Comoros	22.69	21.33	18.66	16.33	2.22
Sao Tome and Principe	2.67	3.29	9.83	12.09	0.94
Sierra Leone	0.01	1.72	0.47	9.80	2.79
Rwanda	0.37	0.82	2.27	9.71	1.82
Liberia			10.01	7.87	3.60
Bhutan				7.80	0.38
Lao People's Democratic Republic	2.60	0.12	0.14	6.59	0.63
Guinea	3.12	0.14	4.60	6.05	1.42
Burkina Faso	14.98	5.48	3.99	5.77	1.11
Niger	1.78	1.32	5.11	5.67	1.59
Mozambique	5.20	2.02	2.84	5.64	1.38
Ethiopia	0.10	0.81	2.34	4.16	1.28
Zambia			4.62	3.34	0.27
Solomon Islands		10.58	15.25	3.10	0.26
Myanmar	0.15	2.30	2.82	2.77	0.32
United Republic of Tanzania		0.24	0.50	0.55	0.11
Mauritania	6.87	0.76	0.66	0.55	0.05
Madagascar	0.70	0.73	0.61	0.48	0.11
Angola		0.29	0.42	0.47	0.01
Burundi			0.01	0.43	0.25
Malawi		0.07	0.07	0.06	0.02
LDCs	7.01	9.54	16.36	29.57	4.01

Source: UNCTAD secretariat calculations, based on UNCTADstat database.

small economies such as Samoa, Lesotho, Kiribati, Gambia or Djibouti but also in large recipient countries.

As evident from chart 19, whether in relation to GDP (panel A) or to export earnings (panel B), remittances play a prominent role in the median LDC, accounting for as much as 2.1 per cent of GDP and 8.5 per cent of export earnings, as compared with 1.6 per cent and 4.5 per cent, respectively, for other developing countries. This prominence is noticeable for an array of LDCs,





ranging from small economies like Lesotho or Samoa - where remittances represent over 20 per cent of GDP - to traditionally large recipients such as Nepal and Haiti, where they largely exceed export earnings.

For a number of LDCs, remittances constitute a key source of foreign financing (chart 20). Over 2008-2010, recorded remittances exceeded both ODA and FDI inflows in nine LDCs (Bangladesh, Haiti, Lesotho, Nepal, Samoa, Senegal, Sudan, Togo and Yemen). In addition, remittances surpassed FDI but not ODA in another eight LDC economies (Benin, Burundi, Comoros, Ethiopia, Gambia, Guinea-Bissau, Kiribati and Uganda).

Whereas by their very nature remittances are distinct from other international financial flows, they clearly play a significant role in providing foreign exchange for a large number of LDC countries. It is therefore important that LDC development strategies take full account of the relevance of these flows of resources, of their intrinsic characteristics, and of their underlying potential.

Whether in relation to GDP or to export earnings, remittances play a prominent role for an array of LDCs, and constitute a key source of foreign financing; over 2008-2010, they exceeded both ODA and FDI inflows in nine LDCs and they surpassed FDI but not ODA in another eight LDC economies.



Chart 20. Remittances inflows to LDCs compared with other capital flows

Source: UNCTAD secretariat calculations, based on UNCTADstat, World Development Indicators, and OECD-DAC online databases.

3. REGIONAL PATTERNS AND REMITTANCE CORRIDORS

The historical context (for example colonialism) and the "geography" of remittances represent additional elements from both the analytical and the policymaking point of view. A number of reasons explain this relevance. First, geographical and cultural proximity is one of the key determinants of migration costs, which in turn affect the size of migrant stocks from any given country to another. As a consequence, proximity factors, coupled with differences in economic development and labour market conditions in the origin and destination countries, concur to determine the size of bilateral remittance flows. Second, in the LDC context, proximity factors appear to influence the cost of remitting and possibly also the choice of channel for sending money back home, thereby affecting the amount of foreign exchange ultimately available to the receiving economy. Third, bilateral exchange rate movements, which are contingent upon the precise pattern of remittances either from or to any given country, may also determine variations in remittance receipts. Similarly, the geographical distribution of remittances may also affect their resilience to idiosyncratic shocks, to the extent that business cycles in the country of origin and in the destinations are not closely correlated.⁹ This highlights the importance of understanding the pattern of remittances to any given country (in the light of geographical and cultural factors) and their currency composition.

South–South flows are particularly important for LDCs, consistent with the fact that the majority of LDC migrants actually move to other developing countries, often to neighbouring ones (Ratha and Shaw, 2007). Even though workers migrating to developed economies are typically in a position to remit greater amounts of money, in 2010, it was estimated that as much as two-thirds of recorded remittances to LDCs originated in other Southern countries (UNCTAD, 2011a). Arguably, the prominence of South–South remittances may well be even higher than the above estimates suggest, given that "hawala" channels may be expected to be prevalent among countries with less developed financial systems.

South–South remittance flows are particularly sizeable in the case of large LDC recipients. Seven of the top ten – or twelve of the top twenty – remittance corridors to the LDCs are South–South. These include several corridors linking countries of the Gulf Cooperation Council (GCC) and India to large recipients such as Bangladesh, Nepal, Sudan and Yemen, in addition to a few intra-African corridors to Lesotho and Uganda. Besides, corridors connecting destination countries in the developed world (notably the UK, the USA or France) to large LDC recipients also feature prominently in the list of top remitting corridors.

There are distinct regional and subregional patterns of remittance corridors, as documented in chart 21 and table 7.¹⁰ The significance of remittance flows from neighbouring countries is apparent in the case of African LDCs, where relatively large sums of money are sent from subregional "poles" such as Kenya and Uganda in East Africa, Nigeria and Côte d'Ivoire in West Africa, and South Africa. The weight of the corridors linking Saudi Arabia with Sudan, and Israel with Ethiopia, represent notable exceptions to the above sub-Saharan African pattern, but again they are largely driven by considerations of historical and cultural proximity. Other prominent corridors in sub-Saharan Africa typically include those linking African LDCs to developed economies with which they retain historical and cultural ties. This is particularly the case of corridors linking France, the UK, and other European countries with their former colonies, but also of those connecting the United States with countries such as Liberia and Sierra Leone.

In the case of the Asian LDCs, conversely, India and GCC countries are by far the primary sources of remittances, whereas funds sent from developed

LDC development strategies should take full account of the relevance of these flows of resources, of their intrinsic characteristics, and of their underlying potential.

From the analytical and policymaking point of view, it is important to understand the pattern of remittances to any given country (in the light of geographical and cultural factors) and their currency composition.

Even though workers migrating to developed economies are typically in a position to remit greater amounts of money, in 2010, it was estimated that two-thirds of recorded remittances to LDCs originated in other Southern countries

There are distinct regional and subregional patterns of remittance corridors.

In the case of African LDCs, relatively large sums of money are sent from subregional "poles" such as Kenya and Uganda in East Africa, Nigeria and Côte d'Ivoire in West Africa, and South Africa.



Table 7. Top remittance corridors by recipient LDC									
	Main corridor		Second main corr		Third main corrid	lor	Cumulative		
Recipient country	Sending country	Remit- tances inflows in 2010 (\$ million)	Sending country	Remit- tances inflows in 2010 (\$ million)	Sending country	Remit- tances inflows in 2010 (\$ million)	importance of the 3 main corridors for the recipient country (%)		
Benin	Nigeria	87.4	France	28.4	Тодо	24.0	59		
Burkina Faso	Côte d'Ivoire	32.9	Italy	1.4	France	0.7	90		
Burundi	United Rep. of Tanzania	0.8	Uganda	0.5	Belgium	0.3	49		
Comoros	France	9.9	Madagascar	0.5	Egypt	0.2	96		
Djibouti	France	18.1	Ethiopia	3.3	Canada	1.7	82		
Ethiopia	United States	148.3	Israel	64.8	Sudan	26.0	62		
Gambia	Spain	20.3	United States	10.7	United Kingdom	6.2	61		
Guinea	France	11.6	Côte d'Ivoire	11.3	Senegal	6.7	45		
Guinea-Bissau	Portugal	11.1	France	4.9	Spain	3.5	72		
Lesotho	South Africa	457.0	Mozambique	19.2	United States	1.6	95		
Liberia	United States	32.3	Guinea	7.8	Côte d'Ivoire	4.2	77		
Madagascar	France	8.0	Canada	0.3	Belgium	0.2	85		
Malawi	United Kingdom	0.3	Zimbabwe	0.2	South Africa	0.1	69		
Mali	Côte d'Ivoire	121.0	France	91.1	Nigeria	37.3	65		
Mauritania	France	0.5	Spain	0.3	Senegal	0.3	60		
Mozambique	South Africa	51.9	Portugal	24.7	Malawi	7.8	72		
Niger	Nigeria	14.6	Côte d'Ivoire	13.8	Benin	11.8	58		
Rwanda	Uganda	25.1	Belgium	15.3	United Rep. of Tanzania	10.2	56		
Sao Tome & Principe	Portugal	1.2	Angola	0.4	Cape Verde	0.1	92		
Senegal	France	309.8	Italy	248.1	Gambia	152.4	61		
Sierra Leone	United Kingdom	11.1	United States	10.2	Guinea	9.1	63		
Sudan	Saudi Arabia	1025.5	Uganda	407.1	United States	270.6	54		
Тодо	France	61.2	Nigeria	54.3	Germany	49.6	55		
Uganda	Kenya	326.2	United Kingdom	176.4	United States	87.4	76		
United Rep. of Tanzania	United Kingdom	4.5	Canada	3.2	Kenya	2.5	58		
Zambia	United Kingdom	23.4	United Rep. of Tanzania	9.0	United States	6.5	55		
Haiti	United States	1055.0	Dominican Republic	178.9	Canada	129.7	91		
Bangladesh	India	3768.9	Saudi Arabia	1249.2	United Kingdom	1113.9	55		
Cambodia	United States	179.5	France	80.2	Australia	36.0	81		
Lao People's Dem. Rep.	United States	0.6	France	0.2	Thailand	0.1	87		
Myanmar	Thailand	55.6	United States	48.6	Australia	11.9	75		
Nepal	Qatar	1125.2	India	960.9	United States	428.4	72		
Yemen	Saudi Arabia	1039.4	United States	134.8	United Arab Emirates	122.0	88		
Kiribati	United States	2.4	Germany	2.0		1.3	65		
Samoa	New Zealand	65.8	United States	31.4	Australia	26.6	87		
Solomon Islands	Australia	1.5	New Caledonia	0.4	New Zealand	0.3	80		
Vanuatu	Australia	2.9	France	1.4	New Caledonia	0.7	72		
Source: UNCTAD secreta	riat calculations based or	World Ba	nk dataset Bilateral remit	tance 201	0 estimates using migran	t stocks d	estination and		

Source: UNCTAD secretariat calculations based on World Bank dataset Bilateral remittance 2010 estimates using migrant stocks, destination and source country incomes; http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:22803131~page PK:64165401~piPK:64165026~theSitePK:476883,00.html

In the case of the Asian LDCs, India and GCC countries are by far the primary sources of remittances, whereas funds sent from developed economies account for only some 30 per cent of the total. economies in Europe or North America account for only some 30 per cent of the total. This is especially true for Bangladesh, Nepal and Yemen, even though the corridors linking the UK to its former colonies are also important (table 7). For small LDC recipients in South-East Asia, on the other hand, a large share of remittances originate from the United States — and to a lesser extent France — though the amounts sent are negligible compared to the receipts of other Asian LDCs. Finally, unlike the other LDC regions, developed countries account for the majority of remittance inflows to Pacific Islands and Haiti. In this respect, the United States is, broadly speaking, the main source of inflows, followed by Australia and New Zealand in the case of the Pacific Islands; and the Dominican Republic and Canada for Haiti.

C. The development impact of remittances

In sections A and B, we have presented clear evidence of the growing value of remittances to the LDCs, and of their importance as a source of external financing. Given the magnitudes involved, it is likely that they affect not only the recipient households but also a number of macroeconomic variables, ranging from investments, labour supply and real exchange rates to the potential creditworthiness of a country, etc. These overlapping effects, in turn, set in motion complex adjustment processes whose ultimate outcomes typically depend on country-specific conditions.

This section reviews the current evidence on the development impact of remittances, distinguishing between the macroeconomic and microeconomic spheres. As noted by Chami et al. (2008), empirical studies in this field have widened the scope of research, refining the methodologies applied and moving from country case-studies to cross-sectional and panel data analyses. This section focuses only on those issues which are deemed critical in the context of the LDCs. With regard to macroeconomic impacts, four main questions will be addressed:

- 1. Do remittances have an impact on economic growth?
- 2. To what extent do they smooth GDP fluctuation and current account volatility?
- 3. Do remittances have an impact on the creditworthiness of the recipient country?
- 4. Is there a risk that remittances may fuel real exchange rate appreciation or real estate bubbles in recipient countries?

With regard to microeconomic effects, the discussion will focus on the impact of remittances on poverty reduction and diversification of households' income sources, as well as the different uses of remittance income.

There is a compelling body of research documenting the positive impact of remittances at the household level, both in terms of poverty reduction and as a risk mitigation strategy to diversify sources of income. However, the evidence on their developmental impact at a macroeconomic level is far less clear-cut. Migrants' remittances may indeed contribute to the development of productive capacities by sustaining investment in human and physical capital and stimulating financial deepening. However, the realization of such potential is largely contingent upon the policy and institutional frameworks which recipient countries put in place. In this respect, while capital-scarce LDCs have much to gain from the potential developmental impact of remittances, their structural weaknesses also make it more difficult to successfully mobilize these sources of external financing for productive purposes.

1. MACROECONOMIC ISSUES

a) Do remittances have an impact on economic growth?

The relationship between remittances and economic growth is complex and multifaceted, as remittances affect a recipient country's economy through a number of overlapping channels. Since remittances represent a household-tohousehold transfer, their receipts directly increase the real disposable income of the recipient families, allowing them to improve their standard of living. By doing so, they correspondingly boost aggregate demand through either consumption Developed countries account for the majority of remittance inflows to Pacific Islands and Haiti.

There is a compelling body of research documenting the positive impact of remittances at the household level, both in terms of poverty reduction and as a risk mitigation strategy to diversify sources of income.

The evidence on their developmental impact at a macroeconomic level is far less clear-cut.

Migrants' remittances may contribute to the development of productive capacities. However, the realization of such potential is largely contingent upon the policy and institutional frameworks which recipient countries put in place. or investment spending, with the multiplier being dependent on the specific use of remittance income.

Migration and remittances also affect labour supply directly or indirectly. On the one hand, outward migration reduces labour supply, which may put upward pressure on domestic wages in the short term. On the other hand, the receipt of remittances may be expected to raise the "reservation wage", thereby reducing the incentive to work for household members in the country of origin. For example, Kim (2007) finds evidence that remittances have a negative effect on labour market outcomes in Jamaica. Jadotte (2009) finds the same in the case of Haiti, for both hours worked and for labour market participation. However, other empirical studies have yielded contrasting evidence. Ducanes and Abella (2008) show that among Filipino households, those with migrants abroad tend to display a higher participation in the labour market, once the working age population attending schools is factored in. Cox-Edwards and Rodríguez-Oreggia (2009) also find limited evidence of labour force participation effects of long-term remittances in Mexico.¹¹

Generally speaking, it could be argued that the reduced incentive to work is likely to be more pronounced in remittance-dependent small economies, especially in the presence of large differentials between the domestic wage and the wage prevailing in destination countries. This is notably the case for several SIDS located at a small distance from much more developed economies.¹² Yet this concern is plausibly less serious in the LDC context, where underemployment and low-value-added informal activities prevail and capital – not labour – is the scarce factor. Indeed, both Jadotte (2009) and Kim (2007) note that the negative impact on labour supply is quantitatively small, as a result of which adverse effects on output are unlikely to be significant.

In the short run (i.e. with fixed capital stock and productivity), aggregate supply is unlikely to keep pace with the expansion in aggregate demand financed by remittance inflows. Consequently, large inflows of remittances may be expected to worsen the trade balance of the recipient country. Relative prices of nontradables may then tend to increase vis-à-vis tradables, leading to appreciation of the real exchange rate, even as the inflows of financial resources sent by overseas migrants help to finance the trade deficit.

Whether these short-run dynamics can be expected to improve or dampen the recipient country's growth performance depends essentially on the impact of remittances on the expansion of productive capacities. On the negative side, the adverse effect of remittances on labour market outcomes may reduce economic growth if a culture of dependency on foreign transfers becomes gradually entrenched. Moreover, unless properly addressed, the tendency of remittances to trigger appreciations in the real exchange rate may give rise to "Dutch disease" effects, impairing much-needed structural change by undermining the competitiveness of non-traditional tradable sectors.

On the positive side, remittances may support economic growth and productive capacity development through two non-mutually exclusive channels: investment and financial deepening. Indeed, remittances provide a muchneeded source of foreign financing that could accelerate the pace of physical and human capital accumulation (the "investment channel"). In addition, they tend to increase the availability of funds for the domestic financial system, paving the way for recipient households to demand and gain access to other financial products and services which they might not have otherwise. Besides, remittances may possibly relax financial constraints on recipient households, particularly those in rural areas which are poorly served by existing financial intermediaries.

The relationship between remittances and economic growth is complex and multifaceted, as remittances affect a recipient country's economy through a number of overlapping channels.

On the negative side, the adverse effect of remittances on labour market outcomes may reduce economic growth if a culture of dependency becomes gradually entrenched or if remittances trigger appreciations in the real exchange rate.

On the positive side, remittances may support economic growth and productive capacity development through two non-mutually exclusive channels: investment and financial deepening. Given that the overall impact of remittances on growth is ambiguous at a theoretical level, whether or not the positive effects outweigh the negative impacts is a purely empirical question, the answer to which depends on a host of country-specific factors, ranging from the pattern of migration and its underlying distributive consequences to institutional quality and financial development. Most econometric analyses investigating the relationship between remittances and GDP per capita growth have relied on the standard growth regression framework, including additional control variables accounting for remittance receipts and other plausible growth determinants. This empirical literature has so far yielded mixed results, as well as highlighting a number of methodological problems ranging from measurement and specification issues to reverse causality and unobservable heterogeneity.¹³

On one hand, some cross-sectional studies document an adverse effect of workers' remittances on economic growth, traceable to reduced working efforts (Chami et al., 2005, 2008) or deteriorating institutional quality (Abdih et al., 2012). In the same vein, Acosta et al. (2009) build a two-sector dynamic stochastic general equilibrium model based on the El Salvadorian economy, confirming that remittances hamper growth through a decline in labour supply and an increase in consumption demand biased toward non-tradables, as with the "Dutch disease".

Yet the above claims are at odds with other empirical research, which actually fails to detect any robust statistically significant relationship between remittances and growth (IMF, 2005; Pradhan et al., 2008; Giuliano and Ruiz-Arranz, 2009).¹⁴ Moreover, a number of others studies — particularly those with a strong emphasis on the time dimension, such as dynamic panel data — document instead a positive and statistically significant influence of remittances on per capita GDP growth (Glytsos, 2005; Acosta et al., 2008; Catrinescu et al., 2009; Mundaca, 2009; Ziesemer, 2009, 2012).

Along similar lines, but by means of a completely different framework, namely a traditional Keynesian macroeconomic model focusing on five Mediterranean countries (Egypt, Jordan, Greece, Morocco and Portugal) — Glytsos (2005) obtains a positive effect of remittances on economic growth, with average investment and income multipliers of 2.3 and 0.6 respectively.¹⁵

As for the "financial deepening channel", the influence of remittances appears to be twofold. First, they appear to sustain growth by easing credit and liquidity constraints in countries with poorly developed financial sectors, thereby "substituting" for financial development. Consistent with this view, those studies adding to a standard growth regression both a remittance variable and an interaction of that variable with a proxy for financial development find a significant positive coefficient for the former and a significant negative coefficient for the latter (World Bank, 2008; Giuliano and Ruiz-Arranz, 2009). ¹⁶ Second, remittances directly foster financial deepening, especially when transferred through formal financial institutions, by stimulating demand for new products and services. Aggarwal et al. (2006) document this robust positive impact of remittances on a panel of 99 countries, even after controlling for other factors that affect financial development, and regardless of whether financial development is measured in terms of the ratio of deposits or credit to GDP. Various econometric studies focused on Latin American and Caribbean countries reach the same conclusion, namely, that remittances are strongly associated with greater banking breadth and depth, increasing the number of branches and accounts per capita, and the ratio of deposits to gross domestic product (World Bank, 2008; Anzoategui et al., 2011; Demirgüç-Kunt et al., 2011).¹⁷ In the African context, these findings are corroborated by the analysis of several household surveys, which demonstrate how, for a given income quintile, the probability of having a bank account is considerably higher for households receiving remittances (World Bank, 2011a).

Econometric analyses investigating the relationship between remittances and GDP per capita growth have yielded mixed results.

Remittances appears to sustain growth by easing credit and liquidity constraints in countries with poorly developed financial sectors.

Remittances directly foster financial deepening, especially when transferred through formal financial institutions, by stimulating demand for new products and services. There appears to be general agreement that complementary policies and sound institutions play an important role in enhancing the development impact of remittances.

Capital-scarce LDCs clearly have much to gain from the potential developmental impact of remittances. However, their structural weaknesses make it more difficult to successfully mobilize these sources of external financing for productive purposes.

Remittances tend to be more resilient to downturns than other sources of foreign exchange.

Even though the literature is still somewhat inconclusive on how remittances ultimately affect economic growth, there appears to be general agreement on the fact that complementary policies and sound institutions play an important role in enhancing their development impact (World Bank, 2008; Pradhan et al., 2008; Catrinescu et al., 2009). Governments typically have only limited room to directly affect the allocation of remittance income, since taxation or mandatory remittance requirements have historically proved rather ineffective and in most cases have simply led migrants to use informal channels to remit (Lucas, 2008). In the light of the inherently private nature of remittance flows, the effective mobilization of remittances for productive purposes depends on a whole array of policy and institutional improvements, aimed at reinforcing both the "investment channel" and the impact of remittances on financial deepening. This may entail a range of policy interventions, from "development-centred" macroeconomic and regional development policies aimed at crowding in private investments to appropriate financial and regulatory reforms designed to reduce transaction costs and promote greater financial inclusion and credit provision for SMEs.

Overall, there is some scope for remittances to stimulate physical and human capital accumulation as well as financial development; all the more so when a large share of remittance income is received by poor and otherwise creditrationed households. In this respect, capital-scarce LDCs clearly have much to gain from the potential developmental impact of remittances. However, LDCs' structural weaknesses make it more difficult to successfully mobilize these sources of external financing for productive purposes. It is therefore essential to design appropriate strategies and policy frameworks for harnessing remittances for economic development.

b) To what extent do remittances smooth GDP fluctuation and current account volatility?

It is true that remittance flows tend to be correlated with the macroeconomic performance of source countries and could thus partially transmit macroeconomic fluctuations from source to recipient countries.¹⁸ Yet unless business cycles are closely synchronized across both sets of countries, remittances can be expected to play a somewhat more stabilizing role. In addition, remittances tend to be more resilient to downturns than other sources of foreign exchange for several reasons, as confirmed in the aftermath of the 2009 global recession (see box 3). First, as remittances are sent by the accumulated flows of migrants and not only by the new migrants of recent years, they tend to be more persistent over time. Second, as remittances typically account for a minor share of a migrant's income, the latter often cushions a temporary fall in earnings by reducing other costs while continuing to send money back home. Third, the tightening of border controls and fear of unemployment back home may encourage the migrant to stay abroad longer (i.e. increase the duration of migration) and continue to send money overseas. Finally, returning migrants are likely to take back accumulated savings, which are counted as remittances.¹⁹

Equally important, unlike purely investment-driven sources of capital flows, remittances also encompass an altruistic/insurance component, and can thus have a stabilizing effect on the recipient economies. For example, remittance receipts rose during the so-called "tequila crisis" in Mexico in 1994–1995, and during the Asian crisis of 1997 in Korea and the Philippines. Besides, it has been noted that they tend to increase in response to natural disasters and political conflicts, in countries that have a larger emigrant stock as a share of the home country population (Mohapatra et al., 2009). In Haiti, for example, remittance receipts increased by over \$100 million a year in the biennium following the devastating earthquake of January 2010, which corresponds to an average annual growth rate of eight per cent.²⁰ Similarly, in West African countries,

remittances appear to play a significant role in smoothing GDP fluctuations induced by climatic variability (Couharde, Davis and Generoso, 2011).

Several studies covering large samples of countries and using different estimation strategies (ranging from instrumental variables to generalized method of moments) have shown that an increase in the share of remittances to GDP tends to reduce the volatility of GDP growth, even after controlling for other possible determinants of growth volatility (IMF, 2005; Bugamelli and Paternò, 2008; Chami et al., 2010). This finding highlights another potential channel through which remittances may sustain economic progress in recipient countries, namely by reducing growth volatility, which in itself is detrimental to economic growth. This may be particularly relevant in an LDC context, given that these economies have indeed been traditionally characterized by relatively recurrent growth accelerations but nearly as frequent growth collapses (UNCTAD, 2010a).

From a macroeconomic point of view, the relative stability of remittances as compared with other sources of external financing is worth stressing. As shown in chart 22, over the period 1980–2010, remittance inflows to the LDCs displayed the lowest volatility, as measured by the standard deviation of the ratio between the relevant inflow and GDP.²¹ Among the sources of foreign exchange available to the world's poorest countries, the volatility of ODA net disbursements was nearly twice as high, while FDI and export revenues displayed even higher instability over time. In addition, over the same period, remittances appear to be characterized by considerably lower procyclicality than other types of flows, including both aid and FDI.²²

This relative stability and lower cyclicality of remittances as compared with other inflows may have beneficial implications for the recipient country's external accounts. A comparison of the stabilizing impact of aid and remittances in 82 developing countries (including 26 LDCs) spanning the period 1980–1995 reveals that remittances, like aid, behave in a rather acyclical way with respect to exports (Guillaumont and Le Goff 2011). However, as remittances are on average less volatile than aid, and aid is less volatile than exports, both flows tend to dampen the instability of export revenues in the majority of countries (ibid.).²³

Several studies have shown that an increase in the share of remittances to GDP tends to reduce the volatility of GDP growth, even after controlling for other possible determinants of growth volatility.

The relative stability and lower cyclicality of remittances as compared with other inflows may have beneficial implications for the recipient country's external accounts.



Source: UNCTAD secretariat calculations, based on UNCTADstat, *World Development Indicators,* and OECD-DAC online databases. *Note:* For the definition of volatility and cyclicality refer to the main text.

In the context of the LDCs, whose export structures are concentrated within a narrow range of products, the stabilizing effect of ODA and remittances can play an important role in reducing the impact of adverse terms of trade shocks. Remittances, especially when they are larger than three per cent of GDP, also appear to reduce the probability of sharp current account reversals by reducing the sensitivity to a decline in international reserves (Bugamelli and Paternò, 2009).

c) Do remittances have an impact on the creditworthiness of the recipient country?

By increasing the level and often the stability of foreign exchange receipts as well, remittances may improve the creditworthiness of the recipient country, boosting its ability to repay external debt — at least insofar as they transit through formal financial channels. This is illustrated in chart 23, which compares the ratio of debt service to export earnings (a standard indicator of debt sustainability), both including and excluding remittances from the computation. Across LDCs, the inclusion of remittances lowers the indicator of debt burden by roughly one percentage point on average. The benefit is significantly larger for some Pacific Island LDCs and other traditional recipients.

Acknowledging the growing importance of remittances for low-income countries, the World Bank and the International Monetary Fund have gradually moved towards a revision of the Debt Sustainability Framework, so as to account for the impact of remittances on debt repayment capacity as well as on the probability of default (IMF and World Bank, 2009 and 2012). The full operationalization of this revision is hampered by the poor quality of remittance data, as a result of which only eight countries had their risk of debt distress assessed using remittances in the 2010–2011 biennium (IMF and World Bank, 2012).

Given the relative stability of remittances and the underlying implications for a country's creditworthiness, one potential mechanism for enhancing their developmental impact could be to use them as collateral for securitization or for long-term syndicated loans. This could reduce the (often prohibitive) costs LDCs face on international capital markets, potentially broadening their access to long-term development finance. This policy option is discussed in detail in chapter 5, which also highlights the possible synergies between this measure and other institutional and regulatory reforms aimed at strengthening domestic capital markets.

d) Is there a serious risk that remittances may fuel real exchange rate appreciation or real estate bubbles?

Large remittance recipients should be aware of the risk that, like other types of large foreign exchange inflows, these may put pressure on the non-tradable sector. Since a considerable share of remittance income is typically spent on housing, be it to improve the living standards or as a deliberate saving strategy, this situation could fuel real estate bubbles, particularly in large cities where property is one of the most favoured asset classes. Several practitioners, for instance, have observed that transfers from overseas migrants, along with other factors such as rapid economic growth and an expanding middle class, have pushed up property markets over the last few years in various developing countries, ranging from the Philippines to Ghana or Nepal (Buckley and Mathema, 2007 and Chow, 2011). This concern may be partly attenuated in most LDCs (especially in sub-Saharan Africa), where the overwhelming majority of the population lives in rural areas and many recipients of remittances are rural dwellers.

By increasing the level and the stability of foreign exchange receipts, remittances may improve the creditworthiness of the recipient country, boosting its ability to repay external debt.

Large remittance recipients, however, should be aware of the risk that, like other types of large foreign exchange inflows, these may put pressure on the non-tradable sector.



Source: UNCTAD secretariat calculations, based on UNCTADstat, World Development Indicators, and OECD-DAC online databases.

Large inflows of remittances may also be associated with appreciation of the real exchange rate, weighing down domestic competitiveness and hindering economic growth (i.e. the so-called "Dutch disease"). This risk appears to be more pronounced in Latin American and Caribbean economies, where — according to (Amuedo-Dorantes and Pozo, 2004) — a doubling of workers' remittances could result in real exchange rate appreciation of some 22 per

cent.²⁴ However, there is little evidence of such an effect in broader samples of developing countries or in the context of sub-Saharan Africa (Rajan and Subramanian, 2005; World Bank, 2011a).

The possibility of real exchange rate appreciation may be less of a concern for most LDCs. Focusing on the six most remittance-dependent LDC economies (i.e. those where remittances represent the highest share of GDP), chart 24



Source: UNCTAD secretariat calculations, based on UNCTADstat database.

shows that only in the case of Haiti — and to a much lesser extent Samoa — was the surge in remittances associated with a discernible appreciation in the real exchange rate. In the case of Senegal and Bangladesh, on the other hand, the boom in remittance inflows did not seem to have a similar effect, while even in Nepal — where remittances climbed from five per cent of GDP to 20 per cent in the span of a decade — the real exchange rate appreciated only marginally.

Of course, this does not mean that LDCs should be complacent and overlook the potentially adverse implications of remittances, and other foreign exchange inflows, on domestic competitiveness. Particularly when the overall macroeconomic environment discourages the channelling of remittance incomes towards investment, the boost provided to disposable income and aggregate demand may conflict with persistent supply-side bottlenecks. This may ultimately undermine domestic competitiveness, and require some degree of proactive monetary and exchange policy interventions to restore macroeconomic conditions that are conducive to growth and economic diversification. In any case, insofar as LDCs put in place sustainable exchange rate and fiscal policies while crowding in private investment and fostering financial deepening, the positive effects of growing remittance inflows are likely to outweigh the modest appreciations typically witnessed in the LDC context.

2. MICROECONOMIC ISSUES

In the typical developing country, remittances account for approximately 30 to 40 per cent of a recipient household's income. As a result, they can contribute towards poverty reduction while raising the household's savings and investments, including through better access to health and education. Empirical studies, whether at the country level or across a broad range of economies, typically show that remittances reduce standard poverty measures (Adams, 2011; World Bank, 2011a). An often-cited cross-sectional study based on household surveys for 71 developing countries shows that both international migration and remittances have a statistically significant effect on poverty reduction, whether measured through the headcount ratio or the poverty gap (Adams and Page, 2005). Using instrumental variables to control for reverse causality, the authors find that, on average, a 10 per cent increase in per capita international remittances leads to a 3.5 per cent reduction in the proportion of people living below the poverty line and a 3.9 per cent reduction in the poverty gap. These findings are basically confirmed by another study of 10 Latin American countries, employing a twostage Heckman model to control for selection bias, which find that international remittances have a positive and statistically significant poverty-reducing effect. Similarly, according to the study by (Anyanwu and Erhijakpor, 2010) covering a sample of 33 African countries for the period 1990-2005, a 10 per cent increase in reported international remittances as a share of GDP leads to a 2.9 per cent decline in the share of people living in poverty, with similar declines also occurring for the depth and severity of poverty. Besides, remittances (whether national or international) appear to contribute to household income smoothing and to a diversification of sources of income, broadly in line with the tenets of the New Economics of Labour Migration.

The impact of remittances on inequality is less clear-cut, especially in view of the serious econometric concerns related to reverse causality and above all to the selectivity underlying the migration process. As prospective migrants incur upfront costs which are largely dependent on the destination, those belonging to the poorest households are typically unable to afford long-distance international movement or the costly bureaucratic procedures usually required to migrate to developed economies. So it is precisely the poorest who are unable to benefit from the largest differentials in terms of expected wages and who consequently remit larger sums. As a result, international migration in many cases appears

On average, a 10 per cent increase in per capita international remittances leads to a 3.5 per cent reduction in the proportion of people living below the poverty line.

Remittances appear to contribute to household income smoothing and to a diversification of sources of income.

The impact of remittances on inequality is less clear-cut, especially in view of the selectivity underlying the migration process. to have a regressive impact on inequality (Adams, 2011). Consistent with this finding, recent household surveys show that more than half of households in Burkina Faso, Ghana and Nigeria and 30 per cent of households in Senegal receiving remittances from outside Africa are in the top two consumption quintiles (World Bank, 2011a). Conversely, households receiving remittances from other African countries or domestic sources tend to be more evenly distributed across consumption expenditure quintiles, although these flows of remittances tend to be significantly lower than remittances from outside the region. Once again, however, country-specific conditions matter. For example, in Fiji and Tonga — where migration to neighbouring developed economies (i.e. Australia or New Zealand) is relatively more affordable — remittances are found to have a positive effect not only on poverty but also on income distribution (Brown and Jimenez, 2007).²⁵

In terms of uses of remittance income, while it is true that a substantial portion is spent on food and housing, this should not be taken to mean that "remittances are predominantly spent on excessive consumption" (De Haas, 2005). On the contrary, a significant proportion of remittances is typically used for human capital accumulation, namely health and education expenditures. Household surveys conducted by the World Bank in Burkina Faso, Kenya, Nigeria, Senegal, and Uganda show, for instance, that the share of international remittance income spent on health and education ranged between 10 to 32 per cent, albeit with some variability across destination and source regions (chart 25). Accordingly, remittances are typically found to improve health and education outcomes, even though the absence of a migrant family member may to some extent erode part of these benefits (Amuedo-Dorantes et al., 2010; Amuedo-Dorantes and Pozo, 2010; Adams, 2011).

Chart 25. Use of remittances by recipient household in selected African countries, by source of remittance



Source: UNCTAD secretariat calculations, based on World Bank (2011a).

A significant proportion of remittances is typically used for human capital accumulation, namely health and education expenditures. Equally important, a significant share of remittances is also spent on physical investment. For example, it is estimated that some 20 per cent of the capital invested in 6,000 microenterprises in urban Mexico was financed by remittances (Woodruff and Zenteno, 2007). Similarly, household surveys from the six sub-Saharan African countries mentioned above show that on average, 20 per cent of international remittance income is spent on physical capital investments such as buying land or equipment, starting a business, or improving a farm (chart 25).

Interestingly, the selectivity of migration may also be linked to households' use of remittance income. Given their state of deprivation, the poorest households are likely to use a relatively higher share of remittance income on subsistence items such as food and clothing. Conversely, in relatively wealthier settings, remittances respond more to strategies of risk diversification and investment, so there is a larger share of income financing productive assets. The evidence reported in chart 25, which compares the use of remittance income by source, is consistent with this reasoning.

Given the relatively shallow levels of financial development in most LDCs, the potential linkages between remittances and household access to financial services are worth noting. Especially in rural areas, the receipt of remittances often constitutes the only relationship poor people have with the formal financial system. So they potentially provide an opportunity for financial intermediaries to "get to know" otherwise unbanked recipients, paving the way for the latter to obtain new financial products, for saving as well as credit purposes (Orozco and Fedewa, 2006). Consistent with this, data from recent household surveys conducted in Africa and in Latin American and Caribbean economies demonstrate how households that receive remittances typically have better access to financial services, such as bank accounts (World Bank, 2008, 2011a).

D. Remittance payment systems and LDCs

In most LDC remittance corridors, the cost of sending remittances is still high relative to the often low incomes of migrant workers. At the 2009 G8 Summit in L'Aquila, countries pledged to reduce the cost of sending remittances by half (from 10 to 5 per cent) in five years. As a result of this commitment, the Global Remittance Working Group and the World Bank initiated the 5x5 objective, which is based on the BIS-World Bank General Principles for International Remittance services.²⁶ However, in an LDC context, it is unclear as to whether the target has been achieved and whether the problem of persistently high costs is due to sending country or recipient country factors. In this section, we consider the costs of remittances in terms of socioeconomic factors, industry market structure, government policies and regulations that affect the costs borne by remitters.

1. The costs associated with remitting

Migrants typically utilize a whole range of formal and informal channels for remitting, chosen on the basis of cost, reliability, accessibility and trust. Formal channels include money transfer services by banks and non-bank financial institutions, such as bureaux de change, and dedicated money transfer operators (MTOs) like Western Union and MoneyGram. The former enables financial transfers from a bank account in the host country to a foreign account through an international funds transfer. These require considerable administration, and the process may take several days. Formal financial institutions tend to have higher overhead costs than MTOs due to their network of branches and automated

Especially in rural areas, remittances often constitute the only relationship poor people have with the formal financial system. So they potentially pave the way for households to obtain new financial products, for saving and credit purposes.

Migrants typically utilize a whole range of formal and informal channels for remitting, chosen on the basis of cost, reliability, accessibility and trust. teller machines (ATMs) and regulatory compliance requirements, which feed into higher remittance fees. In the LDCs, the majority of MTO transactions involve the receipt of funds, and because MTOs tend to have smaller networks than commercial banks, they tend to focus on serving specific populations and geographic niches. These channels are changing in LDCs with the growth of Internet-based firms and new forms of service provision, such as the option to have goods delivered or to purchase vouchers for redemption in shops in the home country.

In some African LDCs — although it is difficult to determine the extent of this practice — diaspora organizations facilitate remittance transfers, both formally or informally (Melde and Ionesco, 2010). In addition, bus, coach and courier companies that transport money or goods as part of their regular and official services also offer domestic and intraregional remittance transfer (formal but non-financial) services. Informal systems of remittance transfers in LDCs tend to have many similarities, whether in Africa, Asia or the Middle East, as nationals of most LDCs tend to send money with friends, relatives or carry it themselves. Other informal systems include hawala or hundi services or are single-destination services provided by individual business people (see section B.2). For example, Somali refugee communities in Nairobi, Kenya often use informal agents with radio or satellite phones to Somalia to manage money transfers home (Omer, 2003; Kabbucho et al., 2003).

Informal and formal remittance channels are utilized for different reasons. In some cases, formal transfers can be slow, expensive and bureaucratic and incur additional charges, while in other instances they may be more cost-effective than informal channels. On the other hand, the latter tend to be inherently more risky, as usually there are no official means for loss recovery if the money is not successfully delivered. In addition to the formal and informal remittance channels discussed below, there are also new and emerging innovations in the remittance transfer and payment systems, such as mobile money, which are discussed further on in section $2.^{27}$

Though resorting to informal remittance channels may be a rational choice from the point of view of the individual migrant, from a policy perspective, formal remittance systems are preferable, even leaving aside concerns related to security, regulation or supervision. The prevalence of informal flows limits the ability of recipient countries to make the best use of the foreign exchange sent by overseas migrants. This may reduce the effects remittances have on a country's creditworthiness or in stimulating financial deepening, and encourage informal (black market) currency transactions.

The Remittance Prices Worldwide database collected by the World Bank Payment Systems Group shows that, as of the first quarter of 2009, the cost of remittances averaged nine per cent of the amount sent (see chart 26). For LDCs, the average cost of remitting \$200 was close to 12 per cent of the amount sent, 30 per cent higher than the global average.

Chart 27 shows the spread between the minimum and maximum amounts charged on average by remittance service providers (RSPs) in countries sending remittances to LDCs, reflecting both destinations and providers. It also reflects disparities in the cost structures between the major sending countries and within each sending country. For example, Saudi Arabia and the UAE have the lowest total average cost. Among the G8 countries, the UK and the USA are below the world average, at 6.9 per cent and 7.7 per cent respectively. South Africa is the costliest G20 remittance-sending country in the G20 group, with an average of 19 per cent to LDCs as compared to an average of 16 per cent to other developing countries (ODCs). For most LDCs, the cost of formal money transfer is in the range of 4–25 per cent of the value sent, and the price depends

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For most LDCs, the cost of formal money transfer is in the range of 4–25 per cent of the value sent, and the price depends on informal networks, aggregate volume and competition as well as on the availability of banking institutions and technology.



Source: The World Bank Group, Remittance Prices Worldwide: Making Markets More Transparent, online at remittanceprices.worldbank. org (accessed May, 2012; first quarter 2012 data).

Notes: EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin American countries; MENA = Middle East and North Africa; SA = South Asia; SSA = Sub-Saharan Africa.



Chart 27. Country remittance average service provision costs across providers and LDC destinations (Percentage)

Source: UNCTAD secretariat calculations, based on The World Bank Group, *Remittance Prices Worldwide: Making Markets More Transparent*, online at remittanceprices.worldbank.org (accessed May, 2012; first quarter 2012 data).

If North–South remittance costs are high, South–South remittance costs are often significantly higher. on informal networks, aggregate volume and competition as well as on the availability of banking institutions and technology.

If North–South remittance costs are high, South–South remittance costs are often significantly higher (see chart 28). The most expensive channels for remitting transfers to LDCs are found within Africa, whereas the least expensive are from Singapore and Saudi Arabia to Asian LDCs. Remitters to Asian LDCs face the





Source: UNCTAD secretariat calculations, based on The World Bank Group, Remittance Prices Worldwide: Making Markets More Transparent, online at remittanceprices.worldbank.org (accessed May, 2012; first quarter 2012 data).

lowest average costs for sending remittances; they also tend to encounter lower spreads between the minimum and maximum average cost (six per cent), compared with 12 per cent for Pacific LDCs and 20 per cent for African LDCs. One possible reason is that Asian LDCs have a higher than average estimated number of RSPs per sending country, compared with African LDCs and Haiti. Asian LDCs also face lower average exchange rate margin costs than African and Pacific LDCs.²⁸ For example, exchange rate margins in Bangladesh, Nepal and Yemen are on average 1.3 per cent.²⁹ For 16 African LDCs, the margin is on average 2.9 per cent, whereas for five Pacific LDCs, the average is 4.6 per cent. Although the major MTOs are present in the Asian market, they face greater competition due to the absence of exclusivity agreements³⁰ and the proliferation of new technologies, such as mobile phone transfers and transfer cards, which have helped to reduce costs.

There is significant variation across Africa (chart 29a): while most African corridors have average remittance costs of 22 per cent, the cost is only 10 per cent for remittances sent from Kenya. For remitters sending from the UK to Rwanda and Uganda, the average cost is lower than from Tanzania, at 12 per cent and 8 per cent respectively (chart 28). Sending remittances within Africa is thus prohibitively expensive, and costs nearly twice as much as sending the same amount of money between Singapore and Bangladesh (chart 28). In Kenya, banks sending remittances to African LDCs are on average around 19 per cent more expensive than MTOs, and almost three times more expensive than MTOs in South Africa and Tanzania. For sending remittances from the UK to Rwanda and Zambia, banks are on average 35 per cent more expensive than MTOs.

The implications of such high remittance costs may be significant. The World Bank has estimated that in 2010, annual remittances sent to sub-Saharan Africa could have generated an additional \$6 billion for recipients, if the costs of remitting money had matched the global average (Ratha et al., 2011). In many LDCs, the remittance market exhibits a low level of competition with very little financial institutional presence, in particular in rural areas. For example, for the whole of sub-Saharan Africa, 65 per cent of all remittance payout locations are controlled by two MTOs (MoneyGram and Western Union). Similarly, African governments have put in place several RSP exclusivity arrangements limiting the type of institutions able to offer remittance services only to banks, thus reducing RSP competition (Ratha et al., 2011).

Pacific LDCs also face an average cost of remitting to the region which is significantly higher than the global average, though somewhat lower than within Africa. Chart 29(c) shows that across most corridors (such as Australia-Samoa), the average remittance cost is 15 per cent of the amount remitted when sent from Australia and 11 per cent when sent from New Zealand. These relatively high costs may in part reflect the relatively small and remote nature of many Pacific economies, which could be limiting the extent to which RSPs can leverage "economies of scale" (that is, falling average costs as the number of transactions increases) to reduce costs. However, as in the case of sub-Saharan Africa, other factors such as regulatory, competition and infrastructure issues may also play a role.³¹

Average remittance costs naturally mask a wide range of elements that vary by corridor and RSP. By corridor, Solomon Islands and Vanuatu have the highest average fees from both Australia and New Zealand. Average costs vary from 10 per cent (New Zealand to Kiribati) to 17.5 per cent (Australia to Solomon Islands). In competitive markets, fees imposed on remittance services should reflect their cost of provision by RSPs, allowing for a profit margin. More competitive markets are usually associated with low profit margins and prices to consumers that closely reflect the cost of providing this service, as firms are

The most expensive channels for remitting to LDCs are found within Africa, whereas the least expensive are from Singapore and Saudi Arabia to Asian LDCs.

In 2010, annual remittances sent to sub-Saharan Africa could have generated an additional \$6 billion for recipients, if the costs of remitting money had matched the global average.

For sub-Saharan Africa, 65 per cent of all remittance payout locations are controlled by two MTOs (MoneyGram and Western Union).

African governments have put in place several RSP exclusivity arrangements limiting the type of institutions able to offer remittance services only to banks, thus reducing RSP competition.



Chart 29. RSP sending countries to LDC recipients' spreads and averages

Source: UNCTAD secretariat calculations, based on The World Bank Group, *Remittance Prices Worldwide: Making Markets More Transparent,* online at remittanceprices.worldbank.org (accessed May, 2012; first quarter 2012 data).

unable to charge fees greatly in excess of their costs without losing market share to competitors. Among RSPs, financial institutions are on average around 22 per cent more expensive than MTOs in Australia and 10 per cent more expensive in New Zealand, although at an individual RSP level, the lowest cost providers in some New Zealand remittance corridors are banks. However, several studies suggest that remittance charges tend to decline with volume sent, and this is particularly true as regards charges for amounts ranging from \$150 to \$300 (Ratha et al., 2011; CGAP, 2010).

Competitive markets for transfer services tend to develop in areas where there are large immigrant populations, generating economies of scale that reduce transaction and transfer costs. The cost of formal international transfers to rural areas tends to be high (Orozco, 2010) and access to remittance outlets can present a problem for rural residents. Formal banking procedures (such as documentation requirements) and physical access difficulties constitute major barriers for the rural population (World Bank, 2005). The weak institutional capacity of rural finance providers is also related to the limited availability of educated and well-trained people in smaller rural communities — this is particularly an issue for community-based microfinance institutions (MFIs).

Accessible and low-cost money transfer mechanisms are not only needed for international remittances but also for domestic ones, i.e. for money sent from urban to rural areas or from one agricultural region to another (Wimaladharma et al., 2004; Pradhan et al., 2008). In Viet Nam, it was found that seven out of every eight transfers are domestic, although they make up only half the value of international remittances (Sander, 2003). Since international travel can be expensive, domestic remittances are particularly relevant to the rural poor (Faini, 2006).

In general, the lack of competition among RSPs appears to be a significant factor in explaining the high costs of remittances. The regulatory challenges that RSPs face vary by LDC and region, and have led to different characteristics in the respective remittance markets (UNCTAD, 2010b). Some of these are summarized in table 8 below and discussed in the next section of this chapter.

2. Emerging remittance transfer payment systems

Remittance transfer payments systems in LDCs are evolving, and new channels and technologies are emerging. In most LDCs, there is little interoperability between bank ATM and point-of-sale (POS)³² networks, a factor which limits customer numbers and therefore the financial viability of these networks. Most bank branch and ATM networks are located in major population centres, limiting rural access. With improving LDC infrastructure and the growth in mobile bank branches and branchless banking, both urban and rural clientele

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Remittance transfer payments systems in LDCs are evolving, and new channels and technologies are emerging.

	Table 8. Regulatory challenges facing international RSPs in LDCs
Issues generic to international RSPs	 Acquiring the necessary authorization of non-bank entities to provide cross-border transfer services in LDCs often incurs high transaction costs. Hard currency out-of-country transfer regulations, remittance service providers (RSPs) compliance with exchange control and reporting requirements are arduous and costly in some LDCs. Exchange control regulations that require customers to provide reporting documentation in person may prevent mobile international remittance models from growing sustainably. Also, exchange controls and foreign currency rationing in LDCs may pose a significant barrier to South-South regional mobile international remittance development.
RSP exclusivity agreements	 In LDCs, often the largest MTOs enter into exclusive payment agreements with those banks that have the widest retail network, and that sometimes no other (non-bank) institutions are allowed to pay remittances. Moreover to enter these markets, RSPs face a situation where the few banks allowed to pay remittances cannot sign an agreement with a new (possibly more efficient) RSP due to the exclusivity agreement; often other potential payment partners, such as MFIs or post offices, are prohibited from offering remittance services.
Issues specific to international remittances through mobile money	 Since 9/11, the existing international framework and national measures for anti-money laundering (AML) and combating the financing of terrorism (CFT) may have had far-reaching effects for LDCs. The introduction of stricter AML/CFT regulations (such as record-keeping and customer ID compliance regulations) may have unintentionally reduced the access of LDC populations to formal financial services. AML/CFT requirements vary by country for both mobile RSPs and mobile money more generally. However, in many LDCs cross-border transactions now involve stricter compliance and increased requirements.
Mobile money specific issues	 Authorization of cash-in and cash-out services outside of bank branches in some LDCs is still greatly restricted. In many LDCs, Central Bank authorities restrict the development of mobile international remittance deployments by not currently allowing the use of non-bank agents in fund transfer transactions.

Source: UNCTAD secretariat summary based on World Bank (2011a) and CGAP (2010).

access to financial services should improve. In LDCs, there are now more mobile subscriptions than bank accounts (chart 30). The UNCTAD Information Economy Report (2010b) shows that there is rapidly growing interactive connectivity in LDCs, which could facilitate access to financial services and low-cost mobile micro-insurance products. However, as noted in table 8, regulatory issues have arisen as a result of concerns at the international level about money laundering and the financing of terrorist activities (IMF, 2012).

Chart 31 shows a schematic of potential branchless banking options for remittance transfer in LDCs. There are four emerging delivery models of relevance to LDCs:

- 1. M-wallets (mobile money) to facilitate cash-in;
- 2. Customer m-wallets to enable cash-out;
- 3. Agent m-wallets (mobile money) to enable cash-out.
- 4. Prepaid cards that can be topped up directly from one sending country to enable cash-out (CGAP, 2012).

UNCTAD (2012c) has categorized mobile money services into three groups: (i) M-transfers: where money is transferred from one user to another, often referred to as person-to-person (P2P) transfers, which may be domestic or international; (ii) M-payments: where money is exchanged between two users with an accompanying exchange of goods or services; and (iii) M-financial





Source: UNCTAD secretariat calculations, based on International Telecommunications Union ICT statistics at http://www.itu.int/ITU-D/ict/ statistics, accessed in May, 2012. CGAP (2010).

There is rapidly growing interactive connectivity in LDCs, which could facilitate access to financial services and low-cost mobile microinsurance products.



Source: Adapted from CGAP (2012).

Banks, MFIs, MTCs

or MNO

Note: Mobile Telecommunications Company (MTC), Mobile Network Operator (MNO) (technology providers enhancing ATM interoperability with banks). Regarding mobile cash-in or cash-out methods, irrespective of how a sender transmits funds, these funds are stored in an m-wallet which can be used for mobile transactions or cashed through an MNO agent network.

services: where mobile money may be linked to a bank account to provide the user with a whole range of transactions (savings, credits) that they would ordinarily access at a bank branch (see chart 31).

Banks or

FX companies

Within Africa, the East African Community (EAC) is at the frontier of both mobile money transfer technology and payment systems. Nonetheless, most mobile money services across EAC are essentially domestic between urban and rural areas, with m-transfers accounting for the bulk of transactions (CGAP, 2012; UNCTAD, 2012c). Mobile money services may be gradually replacing traditional, often insecure informal methods of sending money.

The UNCTAD (2012c) study focusing on the EAC notes that some M-PESA agents perform informal cross-border mobile money transfers between Uganda and Kenya. Also, Western Union has already integrated its system with a number of mobile money platforms in the EAC in order to allow international remittances to be converted and credited directly to a user's mobile money account. At present, this movement is only one way and the service is currently operational on M-PESA in Kenya and MTN Mobile Money in Uganda. Clearly, this reflects potential nascent demand for mobile money remittance services, and could help facilitate growth in cross-border mobile money transfers and regional trade within the EAC. In addition, similar cash-in and cash-out mobile money transfer services are being established in other LDCs such as Bangladesh (Banglalink), Burkina Faso, Madagascar, Samoa and Tanzania.

Mobile money services may be gradually replacing traditional, often insecure informal methods of sending money.

Banks, MFIs, MTCs

or MNO

Moreover, Western Union has established strategic alliances with MTN Uganda and Roshan in Afghanistan which will allow senders to remit funds directly to a recipient's mobile wallet from any of Western Union's agent locations worldwide. Clearly, MNOs are positive about the prospects for greater deployment of international remittances through mobile money in LDCs, although these benefits are most likely of a long-term nature.

Notwithstanding the potential of these emerging systems, in most LDCs more traditional forms of RSP provision still dominate. Notwithstanding the potential of these emerging systems, in most LDCs more traditional forms of RSP provision still dominate. LDC MTOs operate through their own chain stores or a range of existing outlets, for example supermarkets, pharmacies, other transfer agents, bureaux de change and post offices. Since MTOs often partner with other outlets, they usually face lower operating costs than banking institutions. RSPs generate revenue through transfer fees, foreign exchange margins and delayed transfers (to earn interest income). Table 9 shows that MTO participation in the remittance market in African LDCs is heavily concentrated in the hands of Western Union and MoneyGram, which account for approximately 70 per cent of the market — five per cent above the pan-African average. Most financial market regulations in Africa only allow banks to provide remittance services (see table 8). Approximately 51 per cent of payments and 65 per cent of all pay-out locations are serviced by banks in partnerships with either MoneyGram or Western Union (IFAD, 2009).

Table 9. MTO participation in the remittance market in African LDCs (Percentage)									
	Western Union	Money- Gram	Coinstar	Money Express	Express funds inter- national	Express Money Transfer	Trans- horn Money Trans	Money Transfer	Other
Angola	30	65	0	0	0	0	0	0	5
Benin	64	5	2	18	0	0	11	0	0
Burkina Faso	65	11	2	12	0	0	11	0	0
Burundi	85	3	3	0	0	0	10	0	0
Central African Republic	96	4	0	0	0	0	0	0	0
Chad	59	23	3	15	0	0	0	0	0
Comoros	67	5	2	0	0	0	0	0	26
Democratic Republic of the Congo	45	3	29	0	0	0	23	0	0
Djibouti	67	6	17	0	0	0	0	0	11
Equatorial Guinea	80	0	20	0	0	0	0	0	0
Eritrea	7	10	0	0	0	0	0	7	76
Ethiopia	33	14	2	0	0	24	0	0	28
Gambia	63	23	3	4	0	0	0	1	7
Guinea	66	18	1	5	0	0	1	0	9
Guinea-Bissau	64	13	8	0	0	0	0	0	15
Lesotho	0	12	0	0	0	0	0	0	88
Liberia	0	98	0	0	0	0	0	0	2
Madagascar	86	14	0	0	0	0	0	0	0
Malawi	43	38	5	0	0	0	0	0	14
Mali	77	14	1	3	0	0	5	0	0
Mozambique	37	17	0	0	0	0	0	0	47
Niger	63	12	0	13	0	0	1	0	11
Rwanda	79	3	0	0	0	0	18	0	0
Sao Tome and Principe	50	50	0	0	0	0	0	0	0
Senegal	38	9	21	15	0	0	17	0	0
Sierra Leone	32	36	1	0	0	0	4	6	21
Somalia	0	0	0	0	0	0	0	0	100
Sudan	41	0	54	0	0	0	0	2	2
Тодо	50	7	1	26	0	0	16	0	0
Uganda	50	32	3	0	0	0	0	0	15
United Republic of Tanzania	44	9	0	0	0	0	0	0	47
Zambia	39	61	0	0	0	0	0	0	0
LDC average	51	19	6	3	0	1	4	1	16

Source: Adapted from IFAD (2009).

However, table 10 shows that although there is scope for greater participation of MFIs and post offices in providing remittance pay-out and transfer services in African LDCs, the market for these services is still dominated by banks, which account for 53 per cent of inbound payment of remittances in African LDCs. Although post offices have a strong geographical presence in African LDCs, they lack the necessary human capital, communications infrastructure and cashflow to participate effectively in the remittance pay-out market. Similarly, MFIs only account for five per cent of African LDC inbound payment of remittances by institution yet tend to have a greater institutional presence in rural areas, where most Africans still reside. Much of this is concentrated in six African LDCs: Rwanda, Burundi, the Central African Republic, Mali, Uganda and Togo (see table 10).

In LDCs, MFIs actually have a greater network and reach in rural areas than either commercial banks or cooperatives, especially as compared with ODCs (see table 11). However, efforts to promote competitive and reliable fund transfer services and to adopt technology that lowers the cost and improves the efficiency of financial services delivery to the rural population have been constrained by a lack of infrastructure and supportive legal frameworks. The rural poor would benefit directly from policies and regulatory systems that raise There is scope for greater participation of MFIs and post offices in providing remittance pay-out and transfer services in African LDCs.

Efforts to promote competitive and reliable fund transfer services have been constrained by a lack of infrastructure and supportive legal frameworks.

Table 10. African LDC inbound payment of remittances by institution, 2010									
	Deale	(Percentage		Other	Dest	Datall			
Angola	Bank 100	Forex 0	MFI 0	Other 0	Post 0	Retail 0			
Benin	26	0	0	8	54	11			
Burkina Faso	31	2	2	14	38	13			
Burundi	68	0	21	11	0	0			
Central African Republic	70	0	20	0	0	10			
Chad	53	0	0	47	0	0			
Comoros	12	0	9	0	76	3			
Democratic Republic of the Congo	25	0	0	67	0	9			
Djibouti	23	0	0	23	46	8			
Equatorial Guinea	75	0	0	13	40 13	0			
Eritrea	42	58	0	0	0	0			
Ethiopia	89	0	0	10	1	0			
Gambia	34	42	0	15	1	9			
Guinea	47	6	0	28	0	19			
Guinea-Bissau	26	26	0	48	0	0			
Lesotho	100	0	0	0	0	0			
Liberia	69	0	0	28	0	3			
Madagascar	52	6	0	24	18	0			
Malawi	70	10	0	15	0	6			
Mali	59	0	17	15	9	0			
Mozambique	100	0	0	0	0	0			
Niger	33	0	6	18	28	14			
Rwanda	63	0	24	9	4	0			
Sao Tome and Principe	100	0	0	0	0	0			
Senegal	13	0	9	26	53	0			
Sierra Leone	62	20	0	16	0	3			
Somalia	0	0	0	0	0	100			
Sudan	18	46	7	29	0	0			
Тодо	23	0	14	25	38	0			
Uganda	63	0	17	19	1	0			
United Republic of Tanzania	65	0	0	10	25	0			
Zambia	84	0	0	5	11	0			
Average	53	7	5	16	13	7			

Source: Adapted from IFAD (2009).

Table 11. LDC bank branches per hundred thousand adults, 2010									
	Commercial banks Cooperatives SSFIs MFIs								
LDC average	2.9	2.9	0.6	3.7					
ODC average 16.0 2.5 1.5 1.6									

Source: UNCTAD secretariat calculations based on CGAP (2010).

SSFIs = Specialized State Financial Institutions; MFIs = Microfinance Institutions.

confidence in the role of MFIs and other non-bank financial institutions and rural savings mobilization. They would also benefit if MFIs, post offices and banks acted as channels for rural payments and for the transfer of remittances. Efforts to promote partnerships between the private sector and governments (in both developed and developing countries) and to remove barriers to the flow of remittances also have the potential for improving access to finance for the rural poor and local SMEs.

The potential benefits of remittances would be maximized if LDC governments and their development partners could address transaction cost and access issues related to monetary transfers. One way of doing this would be to launch initiatives with bilateral and multilateral partners to address existing infrastructural and regulatory barriers. In addition, there may be a need to promote greater competition among remittance service providers (Mundaca, 2009; Orozco, 2007; Sander, 2003). Microfinance institutions and credit unions are likely to be a key link in channelling remittances, particularly to rural communities, and in facilitating financial intermediation (Maimbo and Ratha, 2005; Orozco and Fedewa, 2006). However, promoting competition raises regulatory issues, primarily to ensure the reliability and integrity of transfer systems and to avoid their abuse (e.g. for money laundering). Policymakers face a challenge in striking the right balance between promoting competition and maintaining supportive regulations.

Data from the World Bank's Global Payments Systems survey, 2010 (2011c) about the relative importance, as rated by LDC central banks, of the various payment instruments for sending and receiving remittances, reveal that current account transfers are perceived as the most important instrument, followed by cash. For receiving remittances, most LDC central banks ranked cash and current account transfers as the most important and mobile phone payments as the least important. The ratings are similar to those reported by central bank respondents in ODCs.

Chart 32 shows the lack of cashless payment infrastructure such as ATMs, point-of-sale terminals, debit and credit cards in LDCs as compared with ODCs and developed economies. Although the expansion of the cashless payment infrastructure is increasing in LDCs, this is from a very low base. Moreover, in developed countries, an individual performs on average over 100 cashless transactions per year, while this same indicator is 19 for ODCs and economies in transition and less than 1 for LDCs. However, there is evidence of growth in per capita cashless transactions in both LDCs and ODCs during the period 2006–2009 (see chart 32). Within the LDC group, cashless transactions grew fastest in African LDCs during the period 2006–2009 (by approximately 500 per cent).

In sum, it is clear that remittance payment systems in LDCs are comparatively limited and mainly located in urban centres. Moreover, the slow development of access channels to initiate and deliver cashless payments (e.g. POS terminals in many LDCs, together with inadequate interoperability of the infrastructure that already exists) has constrained access to modern and cheaper modes of accessing remittance services. It is likely that limited competition among RSPs, especially banking institutions, MTOs and other payment services providers, typically results in higher costs and less access to RSP services, especially in rural areas. Accordingly, LDC policymakers need to introduce policy reforms to improve the national payments system, not just for remittance recipients

The potential benefits of remittances would be maximized if LDC governments and their development partners could address transaction cost and access issues related to monetary transfers.

Policymakers face a challenge in striking the right balance between promoting competition and maintaining supportive regulations.

LDC policymakers need to introduce policy reforms to improve the national payments system, not just for remittance recipients but also for firms, in addressing the prevalence of more expensive cash-based transactions in LDCs.



Chart 32. Recent trends in LDC cashless payment systems 2004–2010

Source: UNCTAD secretariat calculations, based on World Bank Global Payment Systems Survey, 2010 at http://www.worldbank.org/ paymentsystems.

but also for firms, in addressing the prevalence of more expensive cash-based transactions in LDCs.

Policies are also required to improve competition and regulation of the RSPs through greater transparency by providing more information about the service (price, speed, foreign exchange charges, etc.) (table 12). In an LDC context, this raises concerns about RSP services and appropriate consumer protection (see World Bank (2011b). Also, LDC-based RSPs face some financial risk (e.g. if liquidity is supplied to disbursing agents), legal and operational risks, and the threat of fraud.

There are of course cost implications for effective transparency and accountability mechanisms, which may well be passed on to customers. Therefore, good governance and risk management practices by RSPs are required to help make remittance services safer and help protect LDC consumers. Table 12 summarizes an initial assessment of the transparency of remittance services based on a selected sample of LDCs, and suggests that LDC RSPs in general, as compared with ODC RSPs, have a similar and reasonable regulatory framework in place (see table 12). Nonetheless, in an LDC context, we have highlighted the importance of RSP competition and the need to remove entry barriers for other potential remittance service providers, such as post offices and MFIs. This approach, particularly in an African LDC context, would be enhanced by the removal of exclusivity conditions (as opposed to an agent choosing to offer only one remittance service).

Good governance and risk management practices by RSPs are required to help make remittance services safer and help protect LDC consumers.

	22	44	23	65	19	21	44	53	62	
	0DC (%)	~	N		-	~	~	~		-
	LDC (%)	73	2	60	40	27	13	67	87	
	Zambia	×		×	×	×	×	×	×	
	Yemen								×	
	Uganda	×		×					×	
	Timor- Leste	×								
10	United Rep. of Tanzania	×	×	×	×	×	×	×	×	
LDCs, 20	Sierra Leone							×	×	
selected	Samoa	×		×				×	×	
vices in	Rwanda	×						×	×	
ance ser	Nepal							×	×	
Table 12. Transparency of remittance services in selected LDCs, 2010	Mauritania	×		×	×	×		×	×	
sparency	Malawi	×		×	×				×	
12. Tran	Ethiopia	×		×	×	×		×	×	stems.
Table	Eritrea	×		×	×			×	×	aymentsy
	Burundi Dem. Rep. of the Congo	×		×						ldbank.org/p
	Burundi							×	×	/www.woi oviders.
	Country	a. RSPs are legally required to disclose fees applied.	 b. RSPs are subject to different legal requirements as to fees disclosed, depending on the destination country. 	 c. RSPs are legally required to disclose foreign exchange rate applied. 	d. RSPs are legally required to disclose taxes applied.	e. RSPs are legally required to disclose speed of the transfer.	f. RSPs are legally required to disclose available complaint mechanisms.	 BSPs must inform customers on the details of the transaction before they perform it. 	h. RSPs must provide customers with receipt containing the details of the transaction.	Source: World Bank (2011c) at http://www.worldbank.org/paymentsystems. RSP = remittance service providers.

E. Conclusions

The evidence presented in this chapter highlights the importance of remittances to LDCs, not only in terms of the increasing value of these resources but also relative to the size of the recipient economies or to other sources of external financing. Notwithstanding some heterogeneity across individual countries, remittances appear to play a more prominent role in LDC economies than in other developing countries. There are distinct regional and subregional patterns of remittances, underscoring the significance of South–South flows not only in Asia but also within sub-Saharan Africa.

If the rise in remittances has increased the availability of external financing for LDCs, the developmental impact of this evolving reality is subject to a number of caveats. Migrants' remittances undoubtedly exert a positive effect at household level, in terms of poverty reduction as well as mitigation of adverse income shocks. It is less clear as to whether they contribute to the structural transformation of recipient countries or merely supplement disposable income with negligible (or possibly even adverse) consequences for long-term development.

Overall, the chapter shows that remittances do offer some scope to sustain the development of productive capacities, by increasing investment in human and physical capital and by stimulating financial deepening. However, the realization of such potential is contingent upon the policy and institutional framework which recipient countries put in place. In other words, owing to the intrinsic specificities of remittances as private sector financial flows, their effective mobilization for productive purposes essentially depends on the capacity of the State to create a "development-centred" macroeconomic environment while also supporting the establishment of a viable and inclusive financial sector. This, in turn, warrants a combination of policies at multiple levels, ranging from traditional macroeconomic policies capable of crowding in private investment and/or avoiding exchange rate appreciation to appropriate financial and regulatory reforms aimed at fostering financial deepening, thereby stimulating greater use of remittances for productive purposes.

Particularly in an LDC context, leveraging remittances to extend access to financial services will also require engaging with a broad range of financial actors, along with commercial banks and RSPs. State banks, post offices, microfinance institutions and agricultural development banks may have extensive branch networks that can be used to extend access to rural financial services quickly and relatively cheaply and reach out to a broad array of potential customers, from SMEs to micro-entrepreneurs. However, it is clear that greater competition in the RSP market involving a wider range of financial institutions with greater rural market penetration would be desirable in most LDCs.

Since LDCs typically face disproportionately high costs for remittance services, the chapter has also highlighted the role of RSPs and retail payment systems, payment platforms and instruments. In this respect, harnessing the development potential of remittances will require stronger competition in the remittance market and greater attention to regulation (clearing and settlement, capital adequacy, exchange controls, disclosure and cross-border arbitration). Wider LDC adoption of the 5x5, BIS-World Bank General principles for International Remittance services might facilitate this process. This and other policy proposals introduced in the present chapter will be elaborated upon in chapter 4 of this report.

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- 1 In nominal terms, for instance, net ODA disbursements (excluding debt relief) declined from \$57 billion in 1990 to \$48 billion in 2000 then rose steadily over the 2000s, peaking at \$125 billion in 2010, that, is, 2.6 times their value at the beginning of the decade. Conversely, global FDI flows rose from \$207 billion in 1990 to \$1,401 billion in 2000, peaking at \$1,975 billion in 2007, but have not yet recovered since then: in 2011, they still totalled \$1,524 billion.
- 2 Since recorded migrant stock does not capture short-term migration, it is also possible that such migration, including GATS-related movement, increased in this period.
- 3 It is worth noting that the rapid growth rate of remittance inflows to transition economies during the 1990s largely reflects the disruption of the Soviet Union and the consequent abrupt surge in both migrant stocks and international remittances.
- 4 Note, however, that improvements in the country coverage of the series only explain a minor part of the rise of LDC remittance inflows. When the analysis is limited to the 22 LDC countries with consistent data series over the 1980–2011 period, remittances grew at a rate very similar to the total figure (nearly 12 per cent per year), climbing from \$2 billion in 1990 to nearly \$20 billion in 2011.
- 5 In the wake of 9/11, the strengthening of financial controls led to the disruption of some informal "hawala" networks, leading migrants to switch to formal remittance channels (Maimbo and Ratha, 2005; Grabel, 2008).
- 6 The comparison between remittances and other types of foreign exchange inflows (such as export revenues, ODA, or FDI) makes sense from a national accounting point of view, but one should bear in mind that the former are radically distinct from other capital flows insofar as they are intrinsically linked to international migration. For a discussion of some delicate consequences of migration for home countries, notably the "brain drain", see chapter 4.
- 7 On the patterns of growth followed by the LDCs in this period, refer to (UNCTAD, 2010a, 2011a; Valensisi and Davis, 2011).
- 8 Data problems, including the presence of frequent zero entries, may also explain unrealistically high growth rates for remittance inflows to some recipient countries.
- 9 For instance, countries like Ethiopia and Haiti, which receive the bulk of remittances from the USA and other developed economies, were typically more adversely hit by the fallout of the global financial crisis than other LDCs, such as Bangladesh Lesotho or Nepal, whose diasporas mainly reside in other developing countries (UNCTAD, 2010a).
- 10 Unfortunately, the lack of adequate time series impedes an assessment of how remittance patterns to LDCs have evolved over time: estimates of bilateral remittance flows are only available for 2010.
- 11 The authors explain this finding, arguing that a persistent flow of remittances becomes an integral part of a household's income generation strategy and that the emigrant worker remits to simply replace his/her lost contribution to the household.
- 12 For instance, MacMaster (1993: 279) notes that "In the Cook Islands, Tonga and Western Samoa these [remittances] are a mixed blessing as they undermine the incentive to work and are rarely spent on productive investment." Similarly, Mitchell (2006: 21) voices the concern that "Remittances create dependency and act as a disincentive to the mobilization of domestic resources."
- 13 While differing in terms of country/time coverage, control variables included, and definition of remittances used (either "personal remittances" or only the balance of payment item "workers' remittances"; see box 3), these studies usually employ instrumental variable techniques or panel data methods to address issues of reverse causality and unobservable heterogeneity.
- 14 In the last two of the three papers referenced above, the authors indeed obtain a positive effect for the remittance variable on GDP per capita growth, but the corresponding coefficient is not significant.
- 15 All the authors referenced above have left aside distributional issues, although admittedly the propensity to save out of remittances income also depends on the affluence of the recipient households. Here, distributional aspects will be treated below.
- 16 Note that the idea that remittances "substitute" for a viable financial sector is contradicted by (Mundaca, 2009), who, however, does not include any interaction

between remittances and financial development. Incidentally, also observe that (Giuliano and Ruiz-Arranz, 2009) fail to obtain a statistically significant coefficient for the remittance variable in the growth regression, unless when they also include a variable for financial development, and the interaction between the two.

- 17 Interestingly, the positive effect of remittances on financial deepening appears to be stronger in terms of saving instruments than of access to credit, in line with the idea that remittances might ease credit constraints, thereby reducing the need for external financing from financial institutions (Anzoategui et al., 2011; Demirgüç-Kunt et al., 2011).
- 18 For example, the financial and housing crisis in the USA quickly triggered steep reductions of remittance receipts in many Central American economies and in Mexico.
- 19 It is worth noting that the gender dimension could also affect the sensitivity of remittances to business cycles. As women migrants are largely employed in the services sectors (especially as caregivers and housemaids), they tend to be less affected by business cycles than male migrants typically working in manufacturing and construction. Hence, countries with a higher proportion of female migrants tend to have less cyclicality in remittance transfers (Ghosh, 2009; UNDP, 2009).
- 20 Interestingly, the USA, where nearly half of the Haitian diaspora resides, favoured this process by granting temporary protected status for 18 months to Haitians already in the country. The temporary protected status allowed over 200,000 Haitians residing in the USA without proper documents to live and work legally, without fear of deportation. It also allowed them to send money home quickly and efficiently through formal remittance channels (Migration and Development Brief 12).
- 21 This definition of volatility is consistent with the one employed in (IMF, 2005).
- 22 Cyclicality in this case is measured as the correlation between detrended relevant inflows and detrended GDP growth. For all series, the Hodrick-Prescott filter has been used to separate the trend from the cyclical component, setting the smoothing parameter equal to 7, in line with standard practice.
- 23 Using a slightly different approach, (Neagu and Schiff, 2009) find that for a panel of 116 countries, remittances tend to be more stable and less procyclical than FDI but more erratic than ODA, which in turn tends to be countercyclical.
- 24 This point appears to be confirmed by other studies as well (World Bank, 2008; Acosta et al., 2009).
- 25 The positive impact of remittances on inequality (and not just on poverty measures) in the Pacific region is likely to be explained not only by geographic proximity, but also by the existence of specific policy frameworks favouring circular migration between Australia or New Zealand and several Pacific Islands.
- 26 The World Bank 5x5 General Principles for International Remittances Services are as follows:
 - GP1: The market for remittances should be transparent and have adequate consumer protection;
 - GP2: Improvements to payment system infrastructure that have the potential to increase the efficiency of remittance services should be encouraged;
 - GP3: Remittance services should be supported by a sound, predictable, nondiscriminatory and proportionate legal and regulatory framework;
 - GP4: Competitive market conditions, including appropriate access to domestic payments infrastructures, should be fostered in the remittance service industry; and
 - GP5: Remittance services should be supported by appropriate governance and risk management practices.
- 27 UNCTAD (2012c) defines mobile money as funds stored using the SIM (subscriber identity module) in a mobile phone as an identifier as opposed to an account number in conventional banking. Mobile money banking works as follows: (i) notational equivalent is in value issued by an entity (i.e. an MTO) and is kept in a value account on the SIM within the mobile phone that is also used to transmit transfer or payment instructions, while the corresponding cash value is normally held in a bank; (ii) the balance on the value account may be accessed via the mobile phone, which is also used to transmit instant transfer or payment instructions (UNCTAD, 2012c).
- 28 The exchange rate spread is the difference between the exchange rate applied by the RSP to convert, for example, dollars into local currency and the interbank (market) exchange rate. RSPs usually offer the sender a less favourable exchange rate than the market rate.

- 29 A survey of the charges borne by LDC remitters suggests that they vary according to whether money is transferred in local or foreign currency. RSPs (including MTOs) tend to charge more when the amount is sent in dollars (this is an additional source of profit for the RSP and an additional cost component). Conversely, if the money is sent in local currency at lower fees, the recipient loses a percentage of the remittance in the foreign exchange rates. In LDCs, a growing number of companies offer money transfers in dollars. However, it should be noted that this activity does not necessarily guarantee that received remittances will not include detrimental exchange rate charges, as banks can sell dollars at adverse exchange rates (in an LDC context, this is a subject requiring further research but is currently beyond the scope of this report). Nevertheless, it should be noted that the lower costs of delivering funds in dollars are not a complete saving for the recipient with a different national currency, as he or she will still need to convert the dollars into local currency, an operation which entails a transaction cost.
- 30 According to the World Bank Global Payments Systems Survey of 2010 (2011), a number of RSPs reported that in some countries, the largest MTOs enter into exclusive payment agreements with those banks that have the widest retail networks and that sometimes no other (non-bank) institutions are allowed to pay remittances. In response, regulators in some countries, including Nigeria and Ethiopia, have banned exclusive remittance agreements. They report that a number of new providers have entered the market as a result and that prices have fallen.
- 31 Pacific LDCs might reasonably expect a more than proportionate increase in remittances from a reduction in the related transaction costs, as remittances appear to have a negative cost-elasticity with respect to the fixed fee component of money transfer costs (Ratha and Shaw, 2007; Ratha, Mohapatra and Saheja, 2011; Gibson et al., 2006).
- 32 Point of sale (POS), such as electronic funds transfer at a point of sale (EFTPOS), is a payment system involving electronic funds transfers based on the use of debit and credit at terminals located at points of sale.