



# **Department for International Development United Kingdom**

Macro Economic Impact of Migration and Remittances on Middle Income **Countries** 

**Economist Resource Centre** 

**Report** ©

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### **Abbreviations and Acronyms**

BBVA	Banco Bilbao Vizcaya Argentaria				
CEEC	Central and Eastern European Countries				
DFID	Department for International Development				
ERCOF	Economic Resource Centre for Overseas Filipinos				
EU	European Union				
GDP	Gross Domestic Product				
MENA	Middle Eastern and North African				
MIC	Middle Income Countries				
NELM	New Economics of Labour Migration				
OECD	Organisation for Economic Cooperation and Development				

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## **Executive Summary**

### **Executive Summary**

1. The objective of this report is to discuss the diverse and multifarious impact of remittances on the economy of the source country<sup>1/</sup>, with particular attention to the countries of interest to DFID. Family and economic ties that link the migrant with the home country determine: the motive to remit; the size and regularity of remittances; and even the use that remittances are put to. Migrants remit either to support their families left behind or to invest their savings - their motivation differs in each case. The cost and safety of sending money and the form that this money reaches the recipient, i.e. foreign exchange or local currency, have a considerable bearing on the size and the way remittances impact on the economy. Finally, the value of the foreign exchange rate, the interest rate and the relative profitability of investment also affect the flows.

2. Remittances are transmitted through both official and informal channels. Global official figures estimate remittances at US\$ 100 billion annually, 60 per cent of which goes to developing countries. In addition, an estimated US\$10 billion annually are transmitted through informal channels thereby making remittances the largest international financial flow, following foreign direct investment and trade earnings, and far exceeding official development assistance. In certain regions, such as Central America and Caribbean, the size of remittances exceeds that of foreign direct investment.

3. Despite their high absolute and relative size, remittances are not always a stable source of finance given that they depend on changing flows of migrants affected in turn by abruptly changing economic conditions or political turmoil. Nevertheless, compared to foreign aid, remittances are considered as a superior agent in their growth generating capacity.

4. Migrants are generally motivated to remit by self-interest or familial altruism, whereas aid is motivated by the self-interest of the government or the altruism of its citizens, in either case with the ultimate objective is to increase individual welfare. Consequently, the actors inducing remittances are individual households and those driving aid are governments - their perspectives, the routes followed and the implications on the economy differ. Foreign aid is a conditional government-to-government transfer of funds, whereas remittances are person-to-person transfers that are spent unconditionally by recipients and work their way through the market economy. Although aid is intended for investment to promote growth, the way it is often used or abused by governments can make it counterproductive.

5. There are a variety of unofficial channels for the transmission of remittances, with differing relative importance among regions. They range from individual persons to various bodies and agencies and are often considered more effective and dependable than official channels. These kinds of intermediaries are well known in

The 'source country' and 'home country' are used interchangeably throughout and refer to the country from which emigrants originate and to which remittances are sent.

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the Arab and Latin American countries, transferring considerable amounts of remittances mostly at a high cost. One important implication of this informal transmission is that remittances, more often than not, end up at the home country in local currency, which has significant negative effects on the economy.

6. The lack of remittances in the form of foreign exchange is considered equivalent to "external strangulation", depriving the country of the funds to buy capital goods from abroad while the affluence of remittances is considered similar to the "drug dependency", in the sense that they increase imports, increase the balance of payments deficit and generate demand for additional foreign exchange to cover the gap. Furthermore, high, sustained flows of remittances render governments inert in pursuing structural changes for a more competitive economy. By contrast, for the broader Arab region, remittances have been considered as equivalent to a mechanism of redistributing the oil revenue towards the poor Middle East countries more efficiently than aid from the rich oil producers.

7. The ways that remittances affect the economy can be summarised as follows: in the form of foreign exchange, they make possible imports of machinery and equipment, desperately needed for development; as spending on consumption items, such as education and health, they act as investment in human capital while simultaneously inducing an indirect multiplier effect and releasing other resources to investment; as monetary deposits remittances increase bank liquidity thereby extending more credit for investment purposes.

8. Existing literature investigates the impact of remittances on income distribution, family welfare and poverty and, to a lesser extent, on economic growth and the advancement of the economy at large. Given that for most source countries, emigrants depart mainly from the rural sector, relevant research is oriented primarily towards the impact on farm households as small production units. Early research, in particular, focused on the different direct effects of remittances and assumed a critical view of the fact that remittances were spent on consumption, housing or land thereby 'wasting' a potential source of investment and growth. More modern literature takes a different approach. It considers migration as a household strategy for raising family income and deals with remittances as an indispensable integrated part of the decision making process, it also recognises the indirect multiplier effects of domestic remittance spending.

9. The main *a priori* factors, derived from various theoretical hypotheses and models, that determine the nature and the relative power of remittances to influence the economy are: the factor intensities of production; the traded and non-traded goods synthesis of production; the losses from the emigration of labour; the size of remittances compared to GDP; the distribution of remittances among households; the distribution of pre-migration income; the distribution of remittances between rural households (acting as production units) and non-rural households (acting mostly as consumption units); and finally, the initial asset holdings by rural households and their liquidity. Empirical analysis drawn from various countries confirms the significance of such factors.

10. The empirical findings of econometric analyses demonstrate a diversity of inter-country and inter-temporal effects of remittances on income distribution, poverty, growth and inflation. This differentiation is determined by a number of factors relating to the particular conditions of individual countries, their overall



economic policies and the particular policies on migration and remittances. Although such variation makes it difficult to draw universal conclusions in the case of poverty, among others, the evidence is less ambivalent pointing generally to a poverty reducing effect.

11. The perverse effects of remittances on development and growth are attributable to the inflation that spending of remittances generates whilst inflation itself, signalising political uncertainty and economic instability, in turn negatively affects the flow of remittances as risk averse migrants react to inflation by cutting down or limiting the transfer of their savings home. Either way, the beneficial effect of remittances on development may be curbed.

12. Different countries are affected in different ways by remittances. For instance, in Tunisia and Turkey remittances have a considerable contribution to regional development particularly in regions with a high concentration of migrant households where remittances bring about structural transformations in the economy and society. Yet, for Turkey as a whole the overall impact of remittances on growth is judged moderate, despite their generous contribution to the balance of payments. For MENA countries, there appears to be an asymmetric economic response to changes of remittances with increases in the flow of remittances inducing a relatively lower growth rate than the decline in economic growth caused by an equal decrease in the flow of remittances. Thus, the good done by remittances when they rise is not as great as the harm done when they fall. One particularly striking example of a "negative" impact caused by an extremely high flow of remittances comes from Dominican Republic where remittance recipients make up three-fifth of the population belong to all socio-economic strata, yet this kind of remittance "prosperity" produced a reduced agricultural production and higher prices as a result of recipients' retirement from farm activities.

13. Studies on the economic impact of remittances in CEEC are lacking. Articles discussing the role of international capital and financial flows in the transition of the Central and Eastern European countries, excluding Albania, make no reference to the potential importance of remittances for these economies. Most notably, articles that speak about the EU membership of some of these countries make no reference to the potential remittances and their possible role. This is probably because the current relative size of remittances in these countries is small, compared to the size of other financial flows, and due to the expectation that future emigration from these countries to EU-15 would be limited.

14. Albania is a quite different case. It is a high emigration country with about 15 per cent of its population, and according to some estimates, 30 per cent of its workforce, having emigrated, especially to Greece and Italy. This mass emigration that started in the early 1990s had a great impact on the Albanian economy, contributing 20 per cent to its GDP. This is looked as 'development aid' in exchange for labour as remittances in Albania fill the vacuum left by the lack of all other sources of finance, including savings, export proceeds, external borrowing, foreign investment and development aid.

15. One general conclusion from the literature is that wide fluctuations in the flow of remittances contribute often to wide fluctuations of economic growth and add a strong element of instability to recipient countries. Such economies are weakly sheltered against the damaging impact of falling remittances which is, in effect, a



reflection of the Dutch disease generated by the euphoria and the comfort brought about by sustained periods of large flows of remittances. The bottom line is that there is no indisputable and universal answer regarding the contribution of remittances on development and growth. However, the fact that some economies benefit from remittances, some of the time, refutes the complete denial of some writers that remittances bring any macroeconomic benefit at all to the source country.

16. Turning to policies, governments have attempted to induce a more positive impact from remittances by increasing foreign exchange rates and interest rates, diverting remittances from unofficial to official channels, by lowering transferring costs and removing disincentives, such as bureaucratic regulations and the lack of migrant confidence in the security of their savings at home. A second set of measures aims at convincing migrants or relatives to invest their savings directly in the source country by providing incentives and adopting policies that motivate and assist recipients. Despite their often considerable failure, several of these policies are constant across source countries.

17. Strategies designed for migration and remittances should have national as well as coordinated regional and local dimensions tailored to the particular conditions of localities, strategies that: fill local needs; mobilising the potential development advantages stemming from family ties; and capitalise on knowledge of migrants of their own home communities. Traditional policies for motivating migrants and recipients to invest could become more effective as part and parcel of a more comprehensive development plan that considers both the direct and indirect effects of remittances. More fundamentally, action is needed to remove any growth impeding obstacles, as an inefficient remittance-growth relationship may be attributable to the attitudes of recipients, the management of the relevant funds or the nature of general economic policies applied. In short, appropriate policies should be designed for maximising the favourable and minimising the negative multiplier effects of remittances on income inequality, welfare, poverty and growth.

18. The function of remittances as a vehicle to increase imports of capital and consumer goods must be particularly attended to and managed. The effort, in this respect, should aim not so much at reducing imports by restraining the leakages of remittances to foreign countries, but to shifting imports from consumption to investment thereby promoting economic growth.

19. Accounting for the fact that many migrants undertake business ventures in the host country, the investment incentives offered to them at home must be competitive with what they can get at the host country for their savings and investment. Decision makers have to promote the idea that migrant business abroad is also an opportunity for family business at home through the cooperation of the two sides.

20. Non-economic factors, including historical experiences, culture, religion and traditions, should be seriously considered in designing strategies for remittances and keeping the motivation to remit alive. Migration brings about changes in the class structure of communities and the behavior of people, affecting the work ethic and working habits, with further implications in the labour market and the economy at large.



IV







## Introduction

1. This report aims to highlight and discuss the diverse and multifarious impact of remittances on the economy of the source country. It presents all major factors that contribute to this impact, the factors that induce remitting behaviour and suggests policy implications aimed at increasing the economic impact of remittances. It demonstrates: how family and economic ties that link the migrant with the home country determine the motive to remit; the size and regularity of remittances and even the use that remittances are put to; and how the cost and safety of sending money, and the form that this money reaches the recipient, i.e. foreign exchange or local currency, determine the size and the means through which remittances impact upon the economy.

2. Macroeconomic variables, such as the value of foreign exchange rate, the interest rate or the inflation rate affect the flow of remittances in different ways depending on the purpose of remitting - family support or investment. Remitting behaviour is also determined by the cultural and economic conditions of the home country. For instance, remittances from Indian migrants in the US keep flowing for a generation or so, whereas remittances of Koreans in Japan don't stop for two generations.

3. Governments policies on migration and remittances, in particular the measures taken to attract and influence the use of remittances, may also retard or enhance the propensity to remit and the productivity of remittances. Last but not least, given that migrants are usually risk averse, they are sensitive to the safety of their savings and their remitted income and are therefore affected by the political situation – they are encouraged by political stability and discouraged by political uncertainty and social unrest in the home country.

4. The OECD argues that remittances are the most important channel through which migration impacts upon the home country economy. As it states, "the most important positive contribution of guest worker programme to the economic welfare of emigration countries operates through remittances, i.e. the supply of additional foreign exchange."<sup>2/</sup> Remittances contribute to growth and structural change in their double capacity as foreign exchange, buying imports of investment goods, and as domestic income, increasing demand and savings. Their impact on the economy may therefore be primarily reflected in the balance of payments, in savings and investment, in GDP and employment, with both short- and long-term complex implications. It has been argued that 'a country may be constrained from achieving a faster rate of development either by a shortage of saving, or by a shortage of foreign exchange"<sup>3/</sup> – remittances address both these issues. However, savings alone are not enough, because "when the trade gap is binding increased savings cannot increase the growth rate".

OECD (1985:50) Bliss (1989)

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3/

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5. The following brief examples highlight the differential impact of remittances worldwide. In Turkey and Zambia remittances were used for the purchase of agricultural machinery, irrigation and fertilisers.<sup>4/</sup> In Pakistan, 86 per cent of trade is financed from remittances.<sup>5/</sup> Similar positive effects of remittances have also been estimated for other countries, such as South Korea, Bangladesh and Sri Lanka<sup>6/</sup>. In Maghreb, particularly in Morocco, remittances have modernised agriculture.<sup>7</sup> But this is not the case for Egypt where they induced demand for imports accumulated considerable inventories thereby depressing growth.<sup>8/</sup> Negative effects were also felt in Lesotho, where according to the World Bank, the income from remittances "explains... the prevailing stagnation of agricultural production and sharp decline of area under cultivation".<sup>9/</sup>

6. The report starts with a presentation of facts and figures on the size and the relative significance of migration and remittances globally and regionally. It describes the official and unofficial channels through which remittances reach their destination, the cost of transmitting them and the implications for the economy. Thereafter follows a discussion of theoretical approaches and the modeling of remittance effects. Empirical findings and empirical evidence constitute the next section of the report with particular emphasis on MIC's followed by a discussion of policies applied for the attraction of remittances and for channeling them to productive uses. The report concludes with some thoughts on policy implications and strategies of action.

#### **Facts and Figures**

7. By the year 2002, 175 million people, representing 3 per cent of the world population, lived in a country other than the country they were born. Of them, 56 million lived in Europe, 50 million in Asia and 41 million in Northern America. Currently, the US hosts about 10 million illegal immigrants of whom 55-60 per cent are Mexicans and two-thirds of the rest are Hispanic. The more developed regions house 60 per cent of world migrants and the less developed regions the rest.<sup>10/</sup>

8. Due to their demographic deterioration, European countries are not, and will not be, able to sustain a surviving economy and a social security system without the work of immigrants. The figures are devastating: United Nations statistics show that Europe has twice the number of elderly people as the rest of the world and that if the current birth rate continues until 2020, it is predicted that by the year 2100, Europe's population will decline by 88 million people assuming migration freezes. Vast immigration, on the other hand, entails considerable changes in the composition of population in terms of ethnicity and religion. For instance, according to some predictions, by 2020, all the Holland's main cities will have a majority of Islamic population.<sup>11/</sup> These figures by themselves suggest the current remittances flows will be sustained into the future as a migration continues.

<sup>6/</sup> Taylor (1999)



<sup>&</sup>lt;sup>4/</sup> Russell (1992)

<sup>&</sup>lt;sup>5/</sup> Robinson (1986)

<sup>&</sup>lt;sup>7/</sup> Garson(1994)

<sup>&</sup>lt;sup>8/</sup> Lesch (1990), Handoussa (1991), Shafik (1995)

<sup>&</sup>lt;sup>9/</sup> World Bank (1984:1)

<sup>&</sup>lt;sup>10/</sup> UN, International Migration (2002) See also Appendix 1

<sup>&</sup>lt;sup>11/</sup> Dallas News (17 December 2003)

#### The Size and Importance of Remittances

9. Remittances flow to the migrant source country by official and informal channels. Global official estimate remittances at US\$ 100 billion annually, 60 per cent of which goes to developing countries. In addition, recent IMF estimates based on analysis of 15 developing countries, give a further US\$10 billion annually transmitted through informal channels.<sup>12/</sup> In the early 1980s, the corresponding figure of unofficial transmission was US\$35 billion, but it was reduced as the black market exchange rate premiums disappeared in several countries.<sup>13/</sup>

10. Remittances are the largest financial flow following foreign direct investment and trade earnings and exceed by far official development assistance. In certain regions, such as Central America and Caribbean, the size of remittances exceeds foreign direct investment (Table 1). In addition, as private funds, they are spent by households and not, as financial aid, by governments. They are therefore clear from all the negative aspects of the government distribution of finance in developing countries.

Country/Region	1996 (\$billions)			2001 (\$billions)		
	Remittances	FDI	ODI	Remittances	FDI	ODI
Mexico	4.2	9.2	0.3	8.9	24.7	<0.1
Central America	1.8	1.1	1.8	3.6	2.0	2.1
Caribbean	2.4	0.7	0.7	4.5	2.7	0.5
South America	1.7	9.3	0.8	4.0	8.2	1.0

#### Table 1.1: Remittances and Other Financial Flows to Latin America

11. Middle income countries (MICs)<sup>14/</sup> currently receive US\$30 billion (1999) in remittances, up from US\$18 billion ten years earlier. In certain MIC's, remittances are extremely high both in absolute terms and comparative to their economies. In Latin American and Caribbean countries, such as Dominican Republic, Haiti, El Salvador, Jamaica and Nicaragua remittances exceed 10 per cent of their GDP.<sup>15</sup> Because of the importance of these remittances for the country, the El Salvadorian government encourages its citizens to stay longer in the US, so that the flow of remittances is not weakened. In Ecuador, 75 per cent of households receive remittances from migrants that by over two-thirds left the country in the past five

<sup>&</sup>lt;sup>12/</sup> El-Qorchi and Wilson (2002)

Adams Jnr (2003) For estimates of unrecorded remittances see Puri and Ritzema (2000)

<sup>&</sup>lt;sup>14/</sup> MICs are referred to throughout as those eligible for IBRD lending, including IBRD/IDA blend countries. Seventy-seven countries make up this group, of which nine are low- income countries as defined in the World Development Indicators. They range from Nigeria with a 1999 per capita GNP of \$310 to South Korea with a per capita GNP of \$8,490. MICs have 70 percent of the world's population, 20 per cent of the world GDP and 20 per cent of world exports. For about 30 years they register higher GDP growth rates than both high- and low-income countries. But, on the other hand, poverty is very high with 75 per cent of the world's poor living in MICs. More than half of the total population of the MICs lives on less than US\$2 per day.

<sup>&</sup>lt;sup>15/</sup> O'Neill (2003) Appendix 2 highlights current remittance flows to Latin America

years amounting to 1.5 billion dollars. The situation in Middle Eastern countires, such as Jordan and Yemen is similar with remittances increasing over time relative to GDP and outstripping the official development assistance. In fact, over the past decade, official remittances have increased faster than developing countries GDP, particularly in Latin America.<sup>16/</sup> In several Latin American countries, the annual remittances received by recipients exceed the per capita annual GDP in the country.<sup>17/</sup>

12. Among the ten countries receiving most remittances, India and Pakistan are low income countries; Philippines, Turkey, Egypt, Morocco, Thailand and Jordan are lower-middle income; and Mexico and Brazil are upper-middle income countries. Regions that have increased their share in total remittances are Eastern Europe, Central Asia, South and Central America and the Caribbean.<sup>18/</sup> The largest recipient countries as of 2000 are: India (US\$7.0 billion), Mexico (US\$5.8 billion)<sup>19/</sup> and Turkey (US\$4.0 billion).

**13.** Five Asian countries - Bangladesh, India, Indonesia, Pakistan and Sri Lanka receive 23 per cent of world remittances and three MENA countries, i.e. Morocco, Tunisia and Turkey receive 12 per cent. At the European level, three Central and Eastern European countries - Albania, Croatia and Poland receive 18 per cent of remittances originating in the EU.<sup>20/</sup> In these three countries, the size of remittances was respectively: US\$531 million; US\$531 million; and US\$639 million with considerable fluctuations over time.<sup>21/</sup>

14. Over the short term, remittances, from illegal immigrants- turned -legal are generally increasing due to their higher incomes from the employment in the official economy and their better accessibility to the official transmission channels. But as their economic situation stabilises and they become more integrated to their host nation they remit less. In fact, research shows that remittances peak at the time of legalisation and then start to decrease gradually thereafter.<sup>22/</sup>

15. Remittances are not always a stable source of finance, as they depend on unsteady flows of migrants, flows that in some cases are very strongly affected by abruptly changing economic conditions and/or political turmoil. This is particularly apparent for in the case of migrants and remittances in the oil-rich Gulf countries where the economic situation and their demand for foreign labour is contingent upon the changing prices of oil. Windfalls from hiking oil prices in 1973 and 1979 favoured immigration to these countries and raised remittances to the migrant source Middle East countries, but by the same token, oil price drops in 1982 and 1986 reduced worker inflows and dampened remittances. Jordan was particularly affected by the

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<sup>&</sup>lt;sup>16/</sup> See Appendix 8

<sup>1//</sup> See Appendix 3

<sup>&</sup>lt;sup>18/</sup> Gammeltoft (2002)

Other estimates for Mexico claim that of the 8.8 million (2000) Mexican immigrants legal and illegal in the USA, representing 9 per cent of 2001 Mexico's population, the amount of remittances to Mexico sum US\$8.9 billion, up from US\$2.5 in 1990, according to data of the Banco de Mexico. These remittances represented 5.6 per cent (2000) of the total value of Mexican exports. In some Mexican Communities the remittances received are equal to the State Government budget (See Lozano-Ascenio, 2002.). UN gives US\$12 billion remittances for Mexicans.

<sup>&</sup>lt;sup>20/</sup> Glystos and Lianos (2004)

<sup>&</sup>lt;sup>21/</sup> See Appendix 4

<sup>&</sup>lt;sup>22/</sup> O'Neill (2003)

invasion of Iraq to Kuwait in 1991, as a result of which numerous Jordanians left the country. North African countries, with migrants in France, were not exposed to such extreme situations, because the host country economy was much less vulnerable to changing economic conditions, at least not to the extent that they could seriously damage the remitting capacity of the immigrants.

#### **Channels and Cost of Transmitting Remittances**

16. Due to the often high cost of transferring remittances, or because of the lack of convenient banking or other intermediating facilities, migrants explore different official and unofficial routes for sending remittances to their relatives at home. A variety of such channels, with differing relative importance among regions, are currently in operation. It has been observed that for the remitters themselves, unofficial channels, ranging from individual persons to various bodies and agencies, are often more effective and dependable than the official ones.

17. Remittances in the Arab countries have been transmitted, to a considerable extent, though informal channels. They go through networks of currency dealers, receiving hard currency by the migrants and delivering local currency to the families at home. By delaying delivery they make an extra profit from the depreciation of the local currency. The unofficial channelling, particularly when remittances never arrive at home in the form of foreign exchange, has various implications for the economy, including an impact on the foreign exchange rate and the design of economic policy at large.<sup>23/</sup>

18. Similarly, in Latin America remittances originating from the US are sent by informal channels due partly to the inadequate banking facilities in the recipient countries. Among the Latin American and Caribbean countries Cuba, Nicaragua, and Haiti are the most expensive countries to send remittances to as the transfer channels are informal and the whole business lacks any competition.<sup>24/</sup> In Jamaica and the Dominican Republic, the high charges are explained by monopolistic and oligopolistic agencies. By contrast, the cost for sending money to El Salvador, Ecuador and Mexico is relatively low. In the first two cases, because of their dollar economies, senders are not exposed to foreign exchange penalties. Rural areas in these countries are the primary beneficiaries of remittances.

19. The following examples highlight the variety of these intermediaries. Zairians in Belgium use shipping agencies and missionary orders, such as Jesuits, to transfer money and goods, missionaries receive Belgian currency, Belgium and deliver local currency in Zaire. Tunisians in France provide money to travelling compatriots, who due to foreign exchange control in Tunisia are entitled to very limited funds when travelling abroad, in exchange, on their way back, they pay the equivalent in local currency to the migrant relatives.<sup>25/</sup> More than half of the illegal Bulgarian immigrants in Greece sent, remittances through buses from Athens to Bulgarian cities, or through travelers that they could trust.<sup>26/</sup> Finally, in an attempt to save on the



<sup>&</sup>lt;sup>23/</sup> Chouchi (1986)

<sup>&</sup>lt;sup>24/</sup> See Appendix 2

<sup>&</sup>lt;sup>25/</sup>O'Neill (2003)

Markova and Sarris (1997) For an exposition on the variety of channels for sending remittances see Manyal Orozco (2003)

expensive fees of intermediaries, some 20 per cent of Latin American immigrants in the US send goods on line, through big grocery chains instead of money.<sup>27/</sup>

20. Apart from these occasionally peculiar unofficial intermediaries worldwide banks are also in the remittance business. But as strange as it may sound, only recently have European banks realized the opportunity of a profitable business in the remittance market, despite the experience of the US banking system. US banks make an annual profit of about \$2.4 billion from the transfer of \$30 billion remittances to all parts of the world.<sup>28/</sup> The 20 million Mexican immigrants in the country send US\$10 billion remittances annually. In the US the immigrant population "has suddenly become the centre of a battleground for banks fighting to increase market share both in Spain and the U.S."<sup>29/</sup> To take advantage of the US\$300 million a year transmitted by the 1.1 million immigrants in Spain, mostly from Latin America and Morocco, the BBVA (Banco Bilbao Vizcaya Argentaria) planned to open 15 special offices in cities with large immigrant populations in an attempt to compete with other intermediaries through lower fees and the provision of better security in the transfer of remittances.

21. In Bulgaria, Albania, Romania and the former Yugoslavia, from which a great number of people has emigrated to Greece, several Greek banks have opened branches, not only in the more general spirit of improving economic relations with neighbours, but also for the purpose of facilitating the transfer and subsequently the productive investment of remittances in the migrant home countries.<sup>30/</sup>



The Wall Street Journal (October 6 2002)

<sup>&</sup>lt;sup>28/</sup> The New York Times (November 12 2002) <sup>29/</sup> The Wall Object Jackson 25, 2020)

<sup>&</sup>lt;sup>29/</sup> The Wall Street Journal (October 25, 2002)

<sup>&</sup>lt;sup>30/</sup> Glystos and Katseli (2004)





# 2 Theoretical Approaches and Modelling of Remittance Effects

### 2 Theoretical Approaches and Modelling of Remittance Effects

#### Theoretical Issues

22. The impact of remittances is partly linked to the motivation to remit. Very briefly, migrants remit either to support their families left behind or to invest their savings. The motives are different in the two cases. Remitting behaviour also differs according to whether migration is temporary or permanent and changes when originally scheduled temporary migration turns over time into permanent.<sup>31/</sup> Two broad theoretical hypotheses have been proposed in regard to family support. The first and probably the less prevalent has an emotional aspect, suggesting that migrants send money to their relatives out of love and 'altruism'. The second, which is more pragmatic, refers to a longer- term self-interest of the migrant and assumes an 'implicit contract' of mutual benefits between the migrant and his family. In this case, the migrant acts as a financial intermediary extending credit to the family for the farm, the small family business or the education of children, in exchange of an inheritance or other benefits, such as the finance of migration cost and the support of the migrants when things turn sour in the host country.<sup>32/</sup>

23. What determines the disbursement of remittances sent as savings or investment is the relative yield on savings or the relative return on investment in comparison with the host country. Theoretically, this decision is taken in the framework of a portfolio management choice approach and the behaviour of the migrant is strictly business.<sup>33/</sup> This framework also accounts for the entrepreneurial activity of the migrants at home, either during their stay abroad or on their return, for the success or failure of which there is an ongoing debate among migrant countries. The experience is, for various reasons, generally disappointing rather than exiting.

24. Remittances as a counter flow to migration are discussed given their impact on the home country either as part of the whole process of migration, counting costs and benefits, or by themselves, irrespective of migration. In the former case, remittances are considered as a compensating factor for the loss of labour and social welfare from the departure of workers. According to some views, remittances can only partially compensate for the lost human capital and production from the loss of labour, with the consequence that per capita income may indeed fall as a result of emigration.<sup>34/</sup>



<sup>&</sup>lt;sup>31/</sup> This differential remitting behaviour has been economically verified by the Greeks in Germany and Australia (Glystos, 1997)

<sup>&</sup>lt;sup>32/</sup> For detailed elaborations of these theoretical hypotheses and of their empirical verification see Lucas and Stark, 1985, Katseli and Glytsos, 1986, 1989; Stark and Lucas, 1988; Glytsos, 1988, 2001; 2002; Hoddinott, 1994; Poirine, 1997.

See Katseli and Glystos (1986 and 1989); Glystos (1988), and Taylor and Martin (2001)
For detailed elaborations of these theoretical hypotheses and of their empirical verification see Lucas

and Stark, 1985, Katseli and Glytsos, 1986, 1989; Stark and Lucas, 1988; Glytsos, 1988, 2001; 2002; Hoddinott, 1994; Poirine, 1997.

25. From another perspective, some writers find a potential contradiction in migration-for remittances-exchange, in that exporting labour, including on occasion skilled workers, may create shortages that act as a hindrance to investing remittances in certain communities. The proposition to overcome this bottleneck is that some households may be specialising in migration and others in channelling remittances into production, with local financial markets providing the link of the two parties.<sup>35/</sup> The financial aspect of remittances is discussed as a positive factor that is good for the balance of payments and injects new incomes for consumption and investment.

26. Within this framework, the literature, at least the earlier research focused on the differential direct effects of remittances, with a critical view to the fact that remittances are spent on consumption, housing or land and are, in a way, 'wasted' as a potential source of investment and growth. Although the interest in this static aspect has not faded away more recent research takes a broader and more dynamic view drawing attention to the multiplier effects of remittances and suggests that spending them even for consumption they are not entirely 'lost' as a vehicle to productive investment and growth.

27. This new approach is related to the New Economics of Labour Migration (NELM), considers migration as a household strategy for raising family income and deals with remittances as an indispensable integrated part of the decision making process.<sup>36/</sup> It presents arguments in favour of a more comprehensive consideration of the overall impact of remittances, accounting for a variety of indirect multiplier effects of remittance spending. Firstly, it demonstrates that some consumption items, such as education and health that take priority in remittance spending constitute, in effect, a direct investment in human capital; secondly, that spending on any consumption good or on housing has multiplier effects both for domestic production and for imports; thirdly, that spending remittances on consumption releases other resources for investment, devoted previously to consumption; fourthly, that the liquidity of banks increases from the deposits of migrants and their families thereby extending more credit to the business community for investment; and fifthly, that that remittances pay for imports of machinery and other investment goods badly needed for development.

28. On the negative side, the lack of remittances in the form of foreign exchange is equivalent to "external strangulation"<sup>37/</sup>, depriving the country of the means to buy capital goods from abroad while the affluence of remittances induces a form of "drug dependency", in the sense that more imports bought with remittances increases the balance of payments deficit and thence the need for more foreign exchange to cover the gap.<sup>38/</sup> In addition, a constant high flow of remittances that satisfies a certain minimum of financial requirements is inclined to generate the "Dutch disease" syndrome, rendering the government policy inactive towards restructuring the economy for the purpose of producing more internationally competitive goods.

29. The literature refers mostly to the impact of remittances as part of the recipient income, not distinguishing it from other sources of income. However, a

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<sup>&</sup>lt;sup>35/</sup> Taylor and Fletcher

<sup>&</sup>lt;sup>6/</sup> See Katseli and Glytsos (1986, 1989), Glytsos(1988) and Taylor and Martin (2001)

<sup>&</sup>lt;sup>37/</sup> Chenery and Bruno (1962)

<sup>&</sup>lt;sup>38/</sup> Kritz er al (1981)

recent study makes a distinction by attempting to estimate the recipient spending behaviour for different income sources. Using a regression of changes in asset holdings with household data in rural Pakistan, it was found that external remittances increase investment in rural assets more than the rest of the recipient's income.<sup>39/</sup> This is explained by the differential behaviour of different income components on grounds that income from remittances is considered as transitory income and thereby has a higher propensity to invest than income from more permanent sources. Moreover, external remittances have a stronger impact on assets than internal remittances.

30. Concerning the content and the direction of remittance effects, the literature investigates the impact on income distribution, family welfare and poverty and to a lesser extent the impact on the growth and the advancement of the economy at large. Given that for most source countries, emigrants depart mainly from the rural sector, relevant research is oriented primarily towards the impact on farm households, as small production units, and less on the impact on the rest of the economy where recipient households act to a great extent as consumption units. These two groups of recipients are expected to have a different spending behaviour of remittance income; thence the distribution of remitted income between the rural and urban sector has substantial bearing on the overall effects of remittances.

#### Impact on Income Distribution and Welfare

31. A number of theoretical and applied models have been developed to determine the conditional impact of remittances, as highlighted above, or to estimate the quantitative effects in particular countries and particular periods of time. These models demonstrate that: under conditions of Pareto optimality, induced income inequality does not necessarily generate a welfare loss<sup>40/</sup>, or view the treatment of remittances as a correcting factor, as a buffer, for the welfare loss caused by emigration.<sup>41/</sup> In a similar manner, a combined migration-remittances model, including traded and non-traded goods shows that the relative factor intensity of traded goods and the prices of non-traded goods determine the relative strength of the impact of remittances on workers' and capitalists' real incomes.<sup>42/</sup>

32. The joint emigration-remittances models examining welfare effects are further enriched with the introduction of foreign capital, which dichotomises the impact of remittances spent on consumption and investment.<sup>43/</sup> Spending remittances on investment improves welfare, while the impact of remittance spending on consumption depends on relative factor intensities of traded and non-traded goods. Furthermore, the same model also establishes that remittances not only make up for the welfare loss caused by emigration, but that they also generate benefits to non-recipients, by expanding internal trade in internationally non-traded goods.

33. A more comprehensive model with capital and labour, traded and nontraded goods and capital-rich and capital-poor economic classes accounted for finds that

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<sup>&</sup>lt;sup>39/</sup> Adams Junior (1998)

<sup>&</sup>lt;sup>40/</sup> Stark and Yizhaki (1982)

<sup>&</sup>lt;sup>41/</sup> Djajic (1986) and Quibria (1996)

<sup>&</sup>lt;sup>42/</sup> Djajic (1986) and Quibria (1996)

<sup>&</sup>lt;sup>43/</sup> Djajic (1998)

#### Theoretical Approaches and Modelling of Remittance Effects

under certain conditions remittances unambiguously increase welfare.<sup>44/</sup> These conditions are: emigration is 'pure', in the sense that is unaccompanied by capital including human capital; and remittances per migrant are higher than the home wage rate - a condition that seems to be satisfied in most countries. Otherwise, if emigration is "bundled" - it carries capital - the welfare effect of remittances will depend on the induced capital/labour ratio changes. In a similar vein an additional crucial factor that contributes to welfare is the size of remittances is that it more than makes up for the lost premigration income. If this condition does not hold welfare declines.<sup>45/</sup> A similar result is also found by a model<sup>46/</sup>, with a richer content, that distinguishes between temporary and permanent migrants and combines and complements in effect two other models<sup>47</sup> that address separately the two types of migrants.

34. Other hypotheses take a more dynamic perspective with regard to income distribution effects, accounting for the likely influence of remittances on income from other sources, their potential impact on investment risks that may change production plans, jointly with their capacity to finance asset accumulation.<sup>48/</sup> One step further presents a more refined analysis, which argues that the possession of household-farms initial assets reinforces remittance effects, suggesting that to the extent that remittances relieve the constraints on household production, they reduce income inequality, a hypothesis supported with empirical evidence from Mexico.<sup>49/</sup> In other words, remittances favour those households with limited liquidity and limited asset holdings. At the macroeconomic level, therefore, the distribution of household assets is according to this view, a critical determinant of the quality of remittance effects on income distribution.

35. From a different angle, migration history is brought into the picture drawing attention to the importance of the changing diffusion of information at successive stages of migration on the impact of remittances.<sup>50/</sup> Initially, when information is still limited and the employment opportunities in the host country uncertain, the daring migrants come from households with some financial resources. Consequently, the remittances that flow to these households widen income inequality at the village level. But as migration gathers momentum, and workers from lower income classes emigrate, remittances are more spread and income inequality is reduced.

#### Impact on Production and Growth

36. Analytical hypotheses on the impact of remittances on overall and sectoral production and economic growth are rather limited. Two such models have been developed and applied with the objective of measuring the effects on production and growth. The first model<sup>51/</sup> assesses the total and sectoral, disaggregated (direct and indirect), effects of remittances, as well as their impact on employment, capital formation and imports and estimates individual, local and macroeconomic effects of

- <sup>46/</sup> Rivera-Batiz (1996)
- <sup>47/</sup> Kirwin and Holden (1986) and Djajic 1986)
- <sup>48/</sup> Taylor (1992, 1996)
- <sup>49/</sup> Taylor and Wyatt (1996)
- <sup>50/</sup> Stark et al (1986)
- <sup>51/</sup> Glytsos (1993)

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<sup>&</sup>lt;sup>44/</sup> Quibria (1996)

<sup>&</sup>lt;sup>45/</sup> Kirwin and Holden (1986)

remittances. It uses a variety of instruments: first, a matrix that transforms the pattern of consumption and non-consumption expenditure of remittances into a pattern of demand for industrial products, and, second, an input-output table. This model is applied to Greek migration data of the early 1970s when emigration from Greece to Western Europe was at its peak.

37. The second model<sup>52/</sup> is a macroeconometric model estimating the growth generating capacity of remittances. It is a simple Keynesian type model, with some dynamic elements, backed by the permanent income hypothesis and consists of three behavioural equations namely, a consumption function, an investment function and an imports function. Remittances are introduced as an exogenous variable through a national income identity. This model is estimated individually for Egypt, Greece, Jordan, Morocco, Portugal, Syria and Tunisia.

<sup>52/</sup> Glytsos (2002)







# 3 Empirical Findings and Evidence

# B Empirical Findings and Evidence

38. Without going into a detailed discussion of the empirical findings from the application of the above models and hypotheses this section of the report highlights the results obtained in order to evaluating the empirical relevance of these approaches as a helping hand for analytical and policy considerations. An additional reason is to demonstrate the volatility of the produced empirical findings from the available analytical tools and data and to underline the topical and temporal nature of the findings.

39. The empirical findings on the effects of remittances on income distribution, poverty, growth and inflation vary among countries and in different periods of time, depending on a number of factors that have to do with the particular conditions of individual countries and their overall economic policies and the particular policies on migration and remittances.<sup>53/</sup> This makes it difficult to draw any universal conclusions. However, in some cases, such as poverty, the evidence is less ambivalent, pointing generally to a poverty reducing effect. For the effects on inflation as well as on growth the evidence points, on occasion, in both directions.

40. The estimate of the impact of remittances on income inequality is usually made by the Gini coefficient or an extended Gini index. This impact depends on a number of endemic or occasional factors that prevail in different countries and different periods of time. Such factors include the place of recipients in the income distribution scale of a locality and the distribution of remittances across recipients. Such analysis observes that in one Mexican village remittances increase and in another reduces income inequality, while for Mexico as a whole income inequality declined.<sup>54/</sup>

41. In Kenya, remittances reduce income inequality<sup>55/</sup> and in Philippines increase it, particularly in the countryside.<sup>56/</sup> In other cases, as in Egypt, although remittances reduced poverty a little at the village level, income inequality widened, because remittances accrued to the relative high income recipients.<sup>57/</sup> Similarly, in Pakistan, income distribution becomes more unequal because upper-income villagers receive the remittances.<sup>58/</sup> In Tonga, where remittances represented 40 per cent of GDP, income inequality was reduced.<sup>59/</sup>

42. To the extent that increasing demand for consumer goods is satisfied by imports, development may be harmed indirectly, through the rising non-productive imported goods that enhance the balance of payment deficit. But apart from this, the flow of migrant funds itself may be reduced through a feedback effect from inflation to remittances. This is because inflation in the home country is often considered as a

53/ See Appendix 5

<sup>&</sup>lt;sup>54/</sup> Stark et al (1986)

<sup>&</sup>lt;sup>55/</sup> Knowles and Anker (1981)

<sup>&</sup>lt;sup>56/</sup> Rodriguez (1998)

<sup>&</sup>lt;sup>57/</sup> Adams Junior (1991)

<sup>&</sup>lt;sup>58/</sup> Giani et al (1981)

<sup>&</sup>lt;sup>59/</sup> Ahlburg (1996)

sign of political uncertainty and economic instability, generating in migrants a feeling of insecurity for their savings, as a result of which the flow of remittances may be reduced. Either way, the beneficial effect of remittances on development may be curbed.

43. Sometimes, although remittances contributed substantially to the balance of payments situation, their overall impact on growth is judged moderate. A case in point is Turkey. According to one view, remittances that covered twenty years – from the 1980s to the 1990s – induced 45 percent of the trade deficit and accounted on the average to only around two percent of GDP, with wide year to year fluctuations. The more successful years were those when the deficit was manageable as a result of increased exports, as in 1988 and 1989. This view concludes that remittances were great for paying for imports but not so great in rising GDP.<sup>60/</sup>

44. Remittances have very often a considerable contribution to regional developments within countries. In regions with high emigration, remittances may bring about general and sectoral structural transformations in the economy and society, as the experience of certain countries, such as Tunisia and Turkey, shows.<sup>61/</sup>

45. In the next sections, the discussion is focused on the three areas of interest to the DFID, presenting the more detailed findings and evidence on the impact of remittances.

#### Central and Eastern Europe

46. Reading articles on the role of international capital and financial flows in the transition of the Central and Eastern European countries, one can't help noticing the lack of any reference to the potential importance of remittances for the economies of these countries.<sup>62/</sup> The reason that remittances are not taken seriously into consideration is probably that for these countries- except Albania where remittances play a dominant role – the relative size of remittances is rather small, compared to other financial flows. For instance, in Poland remittances, in 1995, were equal to 2.1 per cent of goods and services debit, dropping to 1.1 per cent in 2000. The corresponding figures for Croatia were 5.4 and 5.5. In contrast, for Albania this proportion was 46.0 per cent and 35.4 per cent, respectively for the two years.<sup>63/</sup>

47. Not even certain articles that refer to EU membership of some of these countries make any reference to the potential remittances and their possible role on the economies.<sup>64/</sup> This is probably because the expectation is that the flow of people from CEECs to the EU-15 would not be significant. Based on the previous enlargement of the EU when Greece, Portugal and Spain were acceded, and assuming that the labour movements from these countries to the EU are exemplary for the behaviour of the newly acceded CEECs countries, an econometric model



<sup>&</sup>lt;sup>60/</sup> Swanson (1979) Koc and Onan

<sup>&</sup>lt;sup>61/</sup> IEREM-ICEM (1993)

<sup>&</sup>lt;sup>62/</sup> Fisher and Sahay (2000)

Glytsos and Lianos (2004)

<sup>&</sup>lt;sup>64/</sup> Feldam and Watson (2000)

shows that "migration on its own causes almost insignificant static effects to both, CEEC and the EU".  $^{65/}$ 

48. An econometric model with a productivity, an investment and a consumption function estimates the effects of migration and remittances using data from 11 Central and Eastern European countries (Bulgaria, Croatia, Czech Republic, FYR Macedonia, Hungary, Poland, Romania, Russia, Slovakia, Slovenia and Ukraine) of the period 1990 to 1999.<sup>66/</sup> The results are robust and significant with a less than one to one impact of remittances on investment and productivity, leading to the conclusion that, contrary to what is often said, at least part of remittances is used for productive activities.

49. Albania is something of an exception given its high levels of emigration - 15 per cent of its population, and according to some estimates 30 per cent of its workforce, having emigrated, especially to Greece and Italy. This mass emigration, commencing in the early 1990s had a great impact on the Albanian economy and the migrant families after the shock of the collapsed communism. For a small country as Albania, the current flow amounting to over US\$500 million carries a heavy weight of critical importance for the economy, contributing 20 per cent to its GDP- half of which is agricultural- and playing an important role in Albania's transition<sup>67/</sup>. Some writers consider these remittances as a 'development aid' in exchange of labour. Remittances cover the vacuum left by the lack of all other sources of finance, including savings, export proceeds, external borrowing, foreign investment and development aid.<sup>68/</sup>

50. According to some earlier estimates, remittances represented (1994) 62.8 per cent of imports, 267 per cent of exports, 82 per cent of the trade deficit and 23 per cent of the total income of Albanian households.<sup>69/</sup> Just a little over half of Albanians living in Thessaloniki send money to relatives at home, almost exclusively (94 per cent) to support their families. Some transfers are in the form of durable consumer goods. The distribution of income in recipient communities has the effect of simultaneously increasing class differentiation, especially in rural areas, while stimulating technological change, promoting production, increasing consumption and improving housing.<sup>70/</sup>

51. Estimates for the former Yugoslavia, based on inter-temporal data of 1973, 1978 and 1983 from the corresponding household surveys, show that remittances widened income inequality, admittedly with temporal and sectoral differences, with the agricultural households experiencing greater inequality.<sup>71/</sup>

52. A survey of 100 Bulgarian illegal immigrants in Greece, of which 75 are females, representing about 1.4 per cent of illegal Bulgarians in the country, found

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<sup>&</sup>lt;sup>65/</sup> Hille and Strubhaar (2001)

<sup>&</sup>lt;sup>66/</sup> Leon Ledesma and Piracha (2001)

<sup>&</sup>lt;sup>67/</sup> Misja (1996)

<sup>&</sup>lt;sup>68/</sup> Central Europe Review (November, 1999)

<sup>&</sup>lt;sup>69/</sup> Lambrianidis and Lyberaki (2001)

<sup>&</sup>lt;sup>70/</sup> Mullan

<sup>&</sup>lt;sup>71/</sup> Milanovic (1987)

that 80 per cent were sending more than half of their earnings to their relatives in Bulgaria for family support.<sup>72/</sup>

#### Middle East and North Africa

53. For the broader Arab region, remittances have been considered as equivalent to a mechanism of redistributing oil revenue towards the poor Middle East countries, more efficiently than aid from the rich oil producers.<sup>73/</sup> This is particularly important as aid has been reduced considerably in recent years, amounting (1998) to 0.8 per cent of GDP, stable for almost 10 years and down from 5.9 per cent in 1973.<sup>74/</sup> Furthermore, the impact of aid is questionable, because a great part goes to defense and the rest is ineffectively managed.<sup>75/</sup>

54. The dynamically blended Keynesian type model<sup>76/</sup>, discussed above, applied individually to Egypt, Jordan, Morocco, Syria and Tunisia, and also to Greece and Portugal, estimated the impact of remittances to consumption, investment, imports and growth. The dynamic nature of the model makes it suitable for estimating short-and long-term effects. The findings reveal broad country specific and intertemporal fluctuations of the impact on all macroeconomic variables concerned and a temporal distribution of remittance effects on these variables.

55. Four different cases may be distinguished with respect to the findings in the way that remittances affect growth. Remittances may "boost growth", "moderate recession", "restrain growth" and "intensify recession."<sup>77/</sup> During the period 1975-84, there was an accumulation of favourable effects. Remittances boost growth in almost all countries concerned, but in very few occasions they have negative spells. Subsequently, for the years 1985-97, the effects are more disperse among countries, with positive and equally frequent negative effects.<sup>78/</sup>

56. The differentiation of the growth generating capacity of remittances for different countries is estimated as a follow up of the previous model, calculating the elasticity of long-term growth rates of output induced by remittances with respect to the growth rate of remittances. This elasticity ranges vary over time within very narrow limits for each country but differ in size among countries. For Egypt and Morocco, this elasticity shows that a 10 per cent increase in remittances increases output by 0.59 per cent to 1.54 per cent, depending on the time period and the country concerned. For Jordan the response is stronger, inducing an output growth between 1.22 per cent and 3.56 per cent.<sup>79/</sup> It appears therefore that the growth generating capacity of remittances is about three times higher in Jordan than in Egypt and Morocco. Over time, the relative impact is rising considerably in Egypt and Morocco and is falling slightly in Jordan.<sup>80/</sup>

- <sup>73/</sup> Egset (2000)
- <sup>74/</sup> El-Ghonemy (1998)
- <sup>75/</sup> Richards and Waterbury (1996)
- <sup>76/</sup> Glytsos (2002a) <sup>77/</sup> See Appendix 6
- <sup>78/</sup> Glytsos (2002a)
- <sup>79/</sup> See Appendix
- <sup>80/</sup> Glytsos (2002a)



<sup>&</sup>lt;sup>72/</sup> Markova and Sarris (1997)

57. The response of output to remittance changes is found to depend highly on the relative volume of remittances compared to GDP, their rate of change and the current phase of the economy. The response is procyclical over the business cycle. Additional factors that seem to play a role in this respect are unidentifiable characteristics of individual countries, related to attitudes, conditions and policies.<sup>81/</sup>

58. One may observe, on the basis of these findings, an asymmetric response of output to the positive or negative changes of remittances. A certain increase in the flow of remittances induces a relatively lower growth rate, while an equal decrease in the flow of remittances entails a relatively higher drop of the growth rate. In other words, 'the good done by remittances when they rise is not as great as the harm done when they fall'.<sup>82/</sup>

59. One general conclusion of this analysis is that "the wide fluctuations in the real value of remittances contribute to wide fluctuations of economic growth and add a strong element of instability in the economies concerned. These economies seem to be weakly sheltered against the damaging impact of falling remittances which is, in effect, a reflection of the Dutch disease that is generated by the euphoria and the comfort brought about by sustained periods of large flows of remittances."<sup>83/</sup>

60. The bottom line is that these findings cannot give an indisputable and universal answer regarding the contribution of remittances to development and growth. However, the fact that the economies of the countries investigated benefit from remittances some of the time refutes denials that remittances have at all any beneficial effect.

61. A critical question is whether remittances raise inflation to an extent that it restrains the benefits accruing to the economy. Some writers contend that inflation may be so strongly boosted by remittances as to neutralise any other benefits coming from them.<sup>84/</sup> Another key question concerns the capability of remittances to raise wages, by allowing the possibility of more leisure as a result of which labour supply is decreased<sup>85/</sup> with a consequent chain impact shifting production to non-traded goods and restraining competitiveness of the exporting sector. Empirical evidence on this is inconclusive and circumstantial. In Turkey, for instance, the demand generated by remittances, was satisfied by a supply response and ended up to be non-inflationary.<sup>86/</sup>

62. The case of Egypt is somewhat different, indeed, the evidence is contradictory. According to some writers, rising prices of land and housing caused by remittances – in some villages up to 73 per cent of remittances turned to housing - boosted inflationary pressures,<sup>87/</sup> but according to others no such effect has been

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<sup>&</sup>lt;sup>81/</sup> Ibid above

This is indicated by the finding that the elasticity of induced negative growth rate of output with respect to falling remittances is much higher (Egypt 0.14; Jordan 0.37; Morocco 0.14)compared to the corresponding elasticity with respect to rising remittances (Egypt 0.05; Jordan 0.25; Morocco 0.06) (Glytsos 2002a)

<sup>&</sup>lt;sup>83/</sup> Glytsos (2002a)

<sup>&</sup>lt;sup>84/</sup> Ibid above

<sup>&</sup>lt;sup>85/</sup> Feliler (1997), Looney (1990)

<sup>&</sup>lt;sup>86/</sup> Funkjouser (1992)

<sup>&</sup>lt;sup>87/</sup> Sirageldin et al (1983); Lesch (1990) Adams Junior (1991)

observed.<sup>88/</sup> In Jordan, remittances were found to have contributed to inflation.<sup>89/</sup> While in Asian countries overall inflation does not seem to have been affected by remittances.<sup>90/</sup>

#### Latin America

63. Studies for Mexico suggest that the earlier research on the impact of remittances, especially when it was based on micro models using household surveys,<sup>91/</sup> gives insufficient results since it cannot capture the multiple indirect effects. As a consequence, it underestimates the various positive aspects of remittances in rural communities,<sup>92/</sup> in which, given the imperfect markets, migrants act as a kind of financial intermediaries, linking determinants and effects of remittances, as I explained earlier in this report.

64. In this spirit, an estimated remittance multiplier for Mexico is 1.78 – one dollar expenditure of remittances generates an additional 0.78 dollars worth of village income.<sup>93/</sup> Incidentally, the input-output approach for Greece, referred to earlier, estimated the same size multiplier (1.7) for the economy as a whole.<sup>94/</sup> Another study for Mexico estimated a US\$2.90 induced GDP growth per remitted dollar.<sup>95/</sup> Mexico is perhaps an exemplary case of the significant role of remittance investment in microenterprises. It was found that 27 per cent of investment in such firms in Mexico as a whole and 40 per cent in areas with heavy emigration are financed by remittances.<sup>96/</sup>

65. Other Latin American countries have their own experience with respect to the impact of remittances. Thus, in Dominican Republic, recipients of remittances belong to all socioeconomic strata, given that three-fifths of the population receive some amount. However, despite their indisputable benefits not only to individuals but also to the economy, remittances led to reduced agricultural production and higher prices as a result of recipients' retirement from farm activities.<sup>97/</sup> In El Salvador, one-third of people receive remittances from the US that "rarely enter the official banking system" thus being lost to long-term development.<sup>98/</sup>

- <sup>88/</sup> Choucri and Lahiri (1983)
- <sup>89/</sup> Keely and Saket (1984)
- <sup>90/</sup> Stahl and Arnold (1986)
- <sup>91/</sup> Taylor and Fletcher
- <sup>92/</sup> Massey and Parrado (1994), Conway and Cohen (1998)
- 93/ Adelman, Taylor and Vogel (1988)
- <sup>94/</sup> Glytsos (1993) <sup>95/</sup> Maximum (1993)
- <sup>95/</sup> Meyers (1998) referring to Durand (1996)
- 96/ Orozco

<sup>98/</sup> Meyers (1998)

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<sup>&</sup>lt;sup>97/</sup> Georges (1990) Pessar and Grasmuch (1991)





# 4 Policies for Attraction and Productive Use of Remittances

# 4

# Policies for Attraction and Productive Use of Remittances

66. Given the importance of remittances as a source of financing development and stimulating domestic demand, governments use diverse means to attract these transfers and raise their value in local currency. One set of measures works by increasing foreign exchange rates and interest rates, diverting remittances from unofficial to official channels and lowering transaction costs of remittances. In addition, the removal of disincentives, such as bureaucratic regulations and the lack of migrant confidence in the security of their savings at home seems to be helpful. A second set of measures aims at convincing migrants or relatives to invest their savings directly, by providing incentives and adopting policies that motivate and assist recipients. Despite their often considerable failure several of these policies are consistent across countries.

67. Many of the policies for attracting migrant savings and remittances appear to have limited success, because migrants are most concerned with the security of their savings and least for the uncertain financial benefits that they may generate in a politically and economically unstable world. Turkey is a case in point as policies such as premium exchange rates and foreign exchange deposits with higher returns were unsuccessful - political stability rather than economic incentives seemed to be the determinant factor in stimulating remittances.<sup>99/</sup> More importantly, remittances have not contributed directly to development in Turkey, used, as in so many other cases, for the immediate needs of recipients.

68. Among the usual measures applied in various countries, such as own exchange imports, special bonds, special deposits etc, relatively more effective seems to have been the increase in the foreign exchange rate and corresponding devaluation of home currency. This was particularly pertinent in the case of countries in the MENA region, where the black market foreign exchange rates offers a significant premium. Under these conditions, devaluation is found to play an important role in rechannelling remittances from the unofficial to the official market.<sup>100/</sup>

69. The measures that have been applied in various forms for attracting migrant savings in the Maghreb countries: are classified in four categories: (i) facilitation of importing goods by migrants, through tax exemptions, tax-free shops for buying in foreign currency, duty free imports of capital goods, private cars, etc; (ii) encouragement of inflows and discouragement of outflows of foreign exchange, for example, on trips to the home country and return, by imposing taxes on foreign

99/ 100/



Staubhaar (1986)

For example, a cross-country econometric analysis, including Algeria, Morocco, Portugal, Tunisia, Turkey and former Yugoslavia, found a 0.3 elasticity of official remittances with respect to the black market exchange rate premium. In other words, a fall in that premium by 10 per cent through the devaluation of the official exchange rate was accompanied by an increase in official remittances by 3 percent (See Elbadawi and Rocha, 1992).

currency and controlling of foreign exchange; (iii) provision of financial incentives, such as convertible domestic currency accounts, higher rates of interest for foreign exchange deposits, exchange and savings bonuses, home-loan savings in foreign currency deposits, funds by banks for entrepreneurial initiatives, and finally, (iv) offering of other incentives, including the creation of foundations for social and educational activities, or reserved housing quotas for migrants.<sup>101/</sup>

70. Since for the areas of interest in this report, some lessons may be taken from the success or failure of policies applied in other regions of the world, let me refer briefly to Asian countries for which it is 'generally accepted' that a strategy for raising remittances and putting them to better use should include: incentives for migrant savings to be retained in the home country; efforts to attract more remittances to official channels; and policies to support investment and self-employment of migrants. In Pakistan, Bangladesh and India, foreign currency denominated bonds were issued with relatively higher than the usual interest rates, accompanied by other privileges. Given the anonymity of these bonds and the high benefits from them, this policy is considered successful in managing to rechannel remittances to the formal banking system.<sup>102/</sup>

71. Strangely, much less effort has been made for the productive utilisation of the accumulated remittances in these countries. To the extent that such policies were adopted, they were concentrating on duty allowances for importing investment goods, counselling and training and the development of entrepreneurship schemes. The conclusion is that such policies were so far not very effective in these countries. Policy makers are advised that more remittances can be attracted and can be better used by reducing the cost of transferring them, diffusing information on investment opportunities, fix satisfactory exchange rates, create banks and partnerships for transferring and managing remittances.

72. Another example worth considering is Philippines where the substantial amount of remittances, equal to 3 to 6 per cent of GDP, is highly spent on consumer goods, housing and imports. Nonetheless, Filipino migrants support extensively small business ventures through their remittances to relatives and their own self-employment on return. These investors are, however, getting disappointed since these business are suffering from a high degree of failure for the lack a business experience and business mentality<sup>i</sup>. It is recognised that such failures may be avoided through effective schemes of reintegrating existing programmes for migrants and returnees both at home and abroad.

73. Existing relevant agencies, such as the Department of Trade, the TESSA, OWE, the Commission on Overseas Filipinos, and even government financial institutions are legally and financially capable of assisting and guiding returnees for creating small businesses, but the lack of appropriate structures and business orientation hinders them from being effective even in informing migrants on the opportunities for business assistance. One suggestion in this respect is that NGOs-government cooperation may be helpful. As the Economic Resource Centre for Overseas Filipinos (ERCOF) maintains, government and other agencies should work

DFID / United Kingdom / Macro Economic Impact of Remittances on MIC/ Report / March 2004



Jean Pierre Garson (1994)
Economic Resource Center for Overseas Filipinos -ERCOF

towards a redistribution of funds, including remittances, from urban areas, where they mostly flow, to the rural areas.

74. ERCOF evokes Mexico and Bangladesh as demonstration models, mentioning in particular the fact that previously landless farm workers managed to increase agricultural production, by investing remittances in farm equipment and fertilisers. Among the options available for making remittances a more effective vehicle of development, the ERCOF gives priority to the creation of a bank, believing that the private sector rather than the government would be a more effective mechanism for managing remittances better and put them to a more productive use for the good of the economy.







# 5 Recommendations for Action

# **6** Recommendations for Action

75. Given the conditions prevailing in several source countries, that is, relatively low incomes, large numbers of young people without work and often an unfavourable political and social situation, emigration cannot be stopped and is not desirable to be stopped; therefore large amounts of remittances will generally continue to flow. Hence, the need to maximise the positive impact of remittances and minimise their adverse effects. In this respect, innovative policies and incentives should be applied both for raising remittances and managing their productive use.

76. In this section, I will talk more on strategies rather than specific policies, which may be good for some countries but not for others, as the empirical evidence has shown. Strategies themselves are advisable to have, apart from a national dimension, regional and local coordinated orientations that suit particular conditions, fill local needs and recognise the potential development advantages that come out of family ties and the knowledge by migrants of their own home communities.

77. Without denying that actions should be taken on all fronts, depending on the countries concerned, priorities should be decided between policies for raising remittances and policies for investing them to domestic production. Countries that are in the process of opening to the world economy and international competition, such as MENA and CEEC countries, which are inclined to experience serious balance of payments problems, may give priority to the foreign exchange aspect of remittances. For attracting more remittances two actions are crucial: reduce the cost of transmission and rechannel flows from unofficial to official routes, so that more remittances end up in the source country in the form of foreign exchange and not in the form of local currencies, as it often happens. Other countries with less emerging problems in their international transactions may consider it more pertinent to motivate recipients to engage in their own business.

In determining priorities, countries should also account for the fact that 78. several of the policies for the direct investment of remittances by beneficiaries have generally not proven successful. It is not easy to transform unskilled workers, or even skilled, into small entrepreneurs neither is so easy to turn risk averse migrants into risk taking investors. But if one chooses to give relatively more emphasis on the direct investment of remittances, it would be perhaps preferable, instead of trying to motivate recipients to invest- which incidentally is not a cost-free endeavour- to put more effort in attracting remittances to financial institutions in the form of savings and manage them properly for financing profitable private projects. Alternatively, government should develop, organise and manage collective enterprises specialising in the direct investment of remittances, to which returnees may be employed and migrant representatives participate in the management. Finally, the opportunity is always there for governments to develop strategies to make the most out of the autonomous multiplier effects of remittances, no matter the route and the form they may arrive and no matter how they are originally spent by the beneficiaries.


79. Discussing policies for the entrepreneurial involvement of migrants at home, it is important to consider that many migrants undertake business ventures in the host country. Accounting for this, it is not only what a home country offers to the migrant, but how the potential benefits of the offer compare to the profitability of retaining savings or investing in the host country. Decision makers have to realize that migrant business abroad is also an opportunity for family business at home, through the cooperation of the two parties. This is something that has to be encouraged and assisted by the home country governments, possibly in cooperation with migrant associations or relevant institutions in the host country.

80. Non-economic factors, such as historical experiences, culture, religion and traditions, should be accounted for in designing policies for remittances. In this respect, it would be useful to assess the impact of sizeable and long lasting remittance flows on the class structure of communities and the behaviour of people, including changing attitudes towards the work ethic and working habits, which has further implications in the labour market and the economy at large. At least for the part of informal remittances that are sent for family support, either out of altruism or because of the expectation of mutual benefits, which may not be affected much by macroeconomic policies, one should keep alive the motivation to remit by working on family relations and frequent family encounters. Development of easily accessible networks and modern technology communication, such as internet, that connects the migrant with the rest of the family and the home country, as well as economical transportation cost would be helpful in this respect.

81. Some of the findings of the research presented in this report have identified effects of remittances that point to particular strategic actions. The applied model in the MENA countries has shown that these economies are unprotected against the damaging effects of falling remittances. This suggests that the potential disruption in the smooth flow of remittances should be taken seriously into consideration as a major pillar in planning a strategy for development.

82. Traditional isolated policies for attracting remittances or pulling them to investment, which, as I noted above, are not generally working, would probably become more effective as part and parcel of a more comprehensive development plan that considers both the direct and indirect effects of remittances. In technical terms, an ultimate policy objective should be to tighten remittances to growth, i.e. raise the elasticity of growth with respect to remittances, particularly in countries that are found to have experienced a low elasticity. To this effect, action should be taken for "clearing" of any growth impeding obstacles the channels through which remittance flows work their way out to the economy. An inefficient remittance-growth relationship, in this respect, may have to do either with the attitudes of recipients, the management of the relevant funds or the nature of general economic policies that may have a bearing on this relationship.

83. Some of the econometric results indicate periods of time that remittances were good for growth and periods of time that remittances were unfavourable to growth. These occurrences can be used experimentally for finding out what were the conditions in terms of the economic situation or economic policies and relate them to the behaviour of remittances, taking thus lessons for policy purposes. In particular, the finding that not only falling but even rising remittances may have dampening effects on growth, guides policy makers to concentrate on such events and



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investigate deeper why this has happened and when it happened. Is it, for instance, because recipients retire from agricultural production or because imports of consumer goods are excessively rising, or for some other reason?

84. The finding that the effects of an increase of remittances on growth are distributed over a number of years has the implication that a current drop of remittances would not necessarily affect current growth analogously, because this growth is also affected by past changes of remittances. So, in the event that remittances are predicted to fall, the distributed nature of their recent increases provides some kind of a build-in safeguard that may "postpone" part of the negative effects on current growth. This will give governments time to react and design policies t keep the level of remittances from falling or for dealing with the forthcoming shortages of remittances, without an excessive immediate deceleration of growth.

85. In this context, we may note the found a demonstrable asymmetric impact of rising and falling remittances, i.e. a weaker boost to growth as against a stronger curb on growth, of a corresponding equal rise or fall of remittances. This suggests a priority of policies for keeping remittances from falling, rather than a priority of policies for pushing remittances to increase. The measures involved could to some extent be different.

86. Attention should be given to the fact that the imports generated by remittances do not only constitute a leakage of resources from the recipient country, but they also assist growth by providing capital goods for domestic production. In addition, they help to export some of the inflationary pressures that the increasing demand out of remittances may create. One should not also ignore the rise in the current standard of living that imported consumer goods secure for recipients. Given all this, governments must carefully design import policies related to remittances, with a priority not so much to reduce imports for restraining the flight of remittances to foreign countries, but to shift imports from consumption goods to investment goods.

87. Although the differential impact among countries may be due to the particular economic and political conditions prevailing in the historical context of each country, nonetheless, some lessons may be drawn for a particular country's policies from the experience of others. For instance, in some countries, remittances affect growth more through the import of capital goods and in others more through rising consumer expenditure. As trivial as it may sound, this experience may be critically evaluated by policy makers against their own country's conditions and get insights for policy decisions.

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## A1 International Migration and Remittances by Region

#### A1 International Migration and Remittances by Region

		Migra	nt stock	Normalian of	Net migr		Workers' remittances		
	Total Population	Number	%	Number of refugees	(average a	innual)	Number	%	
Country or area	(thousands)	(000's)	Population	(000's)	Number (000's)	% Population	(000's)	Population	
	2000	2	000	2000	1995-2	000	2000		
World	6 056 715	174 781	2,9	15 868	0	0,0	62 239	0,2	
Developed regions	1 191 429	104 119	8,7	3 012	2 321	2,0	12 535	0,1	
Less developed	4 865 286	70 662	1,5	12 857	-2 321	-0,5	49 704	0,7	
Least developed	667 613	10 458	1,6	3 066	-306	-0,5			
Africa	793 627	16 277	2,1	3 627	-447	-0,6	8 755	1,6	
Eastern Africa	250 318	4 515	1,8	1 662	278	1,2			
Middle Africa	95 404	1 490	1,6	603	-332	-3,7			
Northern Africa	174 150	1 945	1,1	606	-261	-1,6			
Southern Africa	49 567	1 544	3,1	47	-13	-0,3			
Western Africa	224 189	6 782	3,0	710	-119	-0,6			
Asia	3 672 342	49 781	1,4	9 121	-1 311	-0,4	24 205	0,3	
Eastern Asia	1 481 075	5 769	0,4	299	-257	-0,2			
South-Central Asia	1 480 868	20 407	1,4	4 290	-810	-0,6			
South-East Asia	522 121	4 126	0,8	294	-352	-0,7			

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		Migra	nt stock	Number of	Net migr		Workers' re	emittances	
	Total Population	Number	%	Number of refugees	(average a	innual)	Number	%	
Country or area	(thousands)	(000's)	Population	(000's)	Number (000's)	lumber (000's) % Population		Population	
	2000	2	000	2000	1995-2	000	2000		
Western Asia	188 277	19 480	10,3	4 237	109	0,6			
Europe	727 304	56 100	7,7	2 310	769	1,1	11 854	0,1	
N.Europe	95 076	7 453	7,8	413	134	1,4			
S.Europe	144 935	4 999	3,5	578	229	1,6			
Western Europe	183 121	18 836	10,3	1 277	282	1,6			
Latin America	518 809	5 944	1,1	38	-494	-1,0	17 131	0,8	
Central America	135 129	1 070	0,8	28	-347	-2,7			
S. America	345 738	3 803	1,1	9	-75	-0,2			
N. America	314 113	40 844	13,0	635	1 394	4,6			
Oceania	30 521	5 835	19,1	69	90	3,0	293	0,1	
Melanesia	6 482	85	1,3	6	-6	-1,0			
Micronesia	516	116	22,6	0	-2	-4,0			
Polynesia	606	79	13,0	0	-5	-8,2			

Source: UN, Population Report: International Migration, 2002.







# A2 Remittances to Latin America and the Caribbean



# A2 Remittances to Latin America and the Caribbean

Country	Total remittances (thousands US\$)	IADB Estimate (thousands US\$)	As % of GDP 2000	As % of Exports 2000	Average transfer sent per immigrant	Cost to send average amount (%)
Mexico	9,815	10,502	1.7	6.5	378	5
Brazil	4,000	4,600	0.4	4	376	
Colombia	2,272	2,431	2.1	2.4	256	6
Dominical Republic	1,939	2,206	10	27	199	9
El Salvador	1,935	2,111	17	60	287	4
Guatemala	1,579	1,689	3.1	16	269	6
Ecuador	1,432	1,575	9	20	295	4
Jamaica	1,200	1,288	15	30	263	8
Cuba	1,100	1,265	5	40		17
Peru	1,100	1,138	1.7	10.6	191	
Haiti	810	931	24.5	150	162	10
Honduras	720	\$770	7.5	17	257	6
Nicaragua	660	759	22	80	146	10
Venezuela	220	235	.28	1	228	14
Costa Rica	200		1.3	3	350	
Guyana	100	119	14	14		
Bolivia	90	104	1.25	6.71	276	9
Trinidad and Tobago	50	\$59	.76	1		
Eighteen Countries	29,223	32,044				

Source: Manuel Orozco, Remittances, the Rural Sector, and Policy options in Latin America







### A3 Remittances per Recipient in Latin American Countries

### A3

#### Remittances per Recipient in Latin American Countries

Country	Annual average remittances Received by recipient household	Annual per capita income
Colombia	2,050	2,277
Costa Rica	2,800	4,100
Dominican Republic	1,590	2,080
Ecuador	2,360	1,478
El Salvador	2,300	2,080
Guatemala	2,150	1,750
Haiti	1,300	374
Honduras	2,060	920
Jamaica	2,100	2,171
Mexico	3,020	3,740
Nicaragua	1,170	470

Source: World Bank, World Development Indicators, Washington, DC, 2003 (For GDP per capita) National Money Transmitters Association, 2003 (For remittances)











## A4 Remittances to European Countries

	Poland	Croatia	Albania
1990	-	-	-
1991	-	-	-
1992	-	-	150
1993	-	213	275
1994	558	340	265
1995	696	506	385
1996	723	603	500
1997	797	524	267
1998	938	520	452
1999	698	454	357
2000	639	531	531

Source: Adjusted from Glytsos and Lianos, 2004









### A5 Selected Empirical Findings of the Impact of Remittances in Various Countries

# A5 Selected Empirical Findings of the Impact of Remittances in Various Countries

Country	On income inequality (income distribution)	On poverty	On growth	On inflation	Author
Asian Countries				no evidence	Stahl and Arnold, 1986
Egypt				non- contributing	Choucri and Lahiri, 1983
Egypt	increase	decrease			Adams Jr, 1991
Egypt				contributing	Sirageldin et al,1983 Lesch,1990 Adams Jr,1991
Egypt		decrease			Wahba, 1996
Egypt			contributed (52% of time)*		Glytsos, 2001
Jordan			,	contributing	Kelly and Saket, 1984
Jordan			contributed (70%of time)*		Glytsos, 2001
Kenya	decrease				Knowles and Anker, 1981
Mexico (overall)	decrease				Stark et al, 1986
Mexico (village level)	increase decrease				Stark et al, 1986
Morocco		decrease			Wahba, 1996
Morocco			contributed (57%of time)*		Glytsos, 2001
Pakistan	increase				Gilani,et al, 1981
Pakistan		decrease			Burki, 1984
Philippines	increase				Rodriguez,1998
Portugal			contributed (57%of time)*		Glytsos, 2001
Tonga	decrease				Ahlburg,1996
Turkey Notes:				non- contributing	Martin, 1991

Notes:

\*proportion of the number of "good years" over the 23 years investigated (1975-1997)

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## A6 Effects of Remittances on Growth of Output

### A6 Effects of Remittances on Growth of Outputs

Years		Favourable Effects										Unfavourable Effects								
				ion to grov sitive actua		<u>Case II</u> : Moderation of recession (positive induced – negative actual rates)						<u>Case III</u> : Restraint of growth (negative induced – positive actual rates)					<u>Case IV</u> : Intensification of recession (negative induced – negative actual rates)			
	Egypt	Greece	Jordan	Morocco	Portugal	Egypt	Greece	Jordan	Morocco	Portugal	Egypt	Greece	Jordan	Morocco	Portugal	Egypt	Greece	Jordan	Morocco	Portugal
1975	X	Х	X	X																Х
1976	Х	Х	X											Х	Х					
1977	Х				Х							Х	Х	Х						
1978	X		Х	Х	X							Х								
1979	Χ**			Х	Χ**							Х	Х							
1980	Х		Χ*	Х	X												Х			
1981			Χ*						Х	Х						Х	Х			
1982			X		Х						Х			Х			Х			
1983		Х	Х	X		Х														Х
1984		Х	X							Х	Х			Х						
1985				Х							Х	Х			Х			Χ		
1986			Х	X											Х	Х	Х			
1987	Х				Х		Х						Χ.						Х	
1988		Х			Х			X			Х			X						
1989	Х				Х				Х			Х						Χ.		
1990	X						Х		Χ**						Х			Χ**		
1991		Х				Х		X**						X	Х					
1992	X	Х	Χ*		Х				Х											
1993			Х				Х			Х	Х								Х	
1994			X								Х	Х		X	Х					

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Years									Unfavourable Effects											
	Case I: Contribution to growth Case II: Moderation of recession   (positive induced – positive actual rates) (positive induced – negative actual rates)								Case III: Restraint of growth Case IV: Intensification of recess   (negative induced – positive actual (negative induced – negative actual											
											rates) rates)									
	Egypt	Greece	Jordan	Morocco	Portugal	Egypt	Greece	Jordan	Morocco	Portugal	Egypt	Greece	Jordan	Morocco	Portugal	Egypt	Greece	Jordan	Morocco	Portugal
1995		Х	X							Х				Х						
1996				Х		X				Х	Х			Х						
1997		Х											Х		Х				Х	

\* : induced growth rate 3-5 per cent \*\* : induced growth rate over 5 per cent

Source: Glytsos, 2002.

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### A7 Estimated Elasticity's of Long Term Induced Output with Respect to Remittances

# A7 Estimated Elasticity of Long Term Induced Output with Respect to Remittances

Periods	Egypt	Jordan	Morocco
1971-1980	0.059	0.312 <sup>1/</sup>	0.073
1981-1990	0.112	0.331	0.112
1991-1997	0.140	0.356	0.130
1971-1997	0.100	0.332 <sup>2/</sup>	0.102

Source: Glytsos (2001a)

1/ 2/

1973-1980

1973-1997







## A8 Official Worker Remittances for Selected Countries and Selected Years

# A8 Official Worker Remittances for Selected Countries and Selected Years

Country				Y	ears				Annual per cent change
	1981	1986	1991	1996	1997	1998	1999	2000	1981/83-1998/00
Albania				485	253	422	326	470	
Bangladesh	549	800	860	1306	1448	1495	1643	1732	5.1
Brazil	409	140	1414	1813	1257	900	1088	985	8.2
China,PR		289	232	1624	4198	230	351	492	(-3.9)
Colombia	140	546	906	617	624	451	839	989	12.0
Croatia				585	497	486	415	470	
Dom. Rep.	259	312	368	888	1033	1239	1389	1494	10.1
Guatemala	129	44	155	364	387	427	426	498	10.1
Egypt	3101	3484	4536	3018	3509	3150	2959	2523	(-2.2)
El Salvador	70	193	522	1053	1138	1250	1256	1549	15.8
India	3260	3110	3664	8212	9775	8837	10064	7994	5.4
Indonesia		98	145	773	688	896	1014	1053	27.9
Jamaica	89	75	152	618	609	618	627	698	12.7
Mexico	183	250	2701	4103	4618	5260	5405	5816	22.7
Morocco	1440	1943	2226	2103	1797	1879	1772	1912	2.0
Nigeria	11	7	74	920	1822	1471	1198		30.7
Pakistan	2923	3385	1724	1247	1620	1095	911	951	(-7.5)
Peru	231	208	353	579	603	605	614	635	5.2
Philippines	360	226	368	552	1003	190	93	111	(-130.0)
Sri Lanka	469	453	494	808	875	936	962	1010	4.5
Sudan		157	50	214	394	642	607	564	3.9
Tunisia	507	502	587	715	650	671	696	619	1.5
Turkey	3540	2271	3154	3441	3984	5007	4143	4035	2.4

Source: IMF, Balance of Payments Statistics Yearbook, various issues.









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