

October 2014

Absorbing innovative financial flows: Looking at Asia

by Rehman Sobhan

ABSTRACT

This paper explores the scope for Innovative Development Finance (IDF) to compensate for declining Official Development Assistance (ODA) and/or to enhance the efficiency of ODA. It shows that IDF has not helped much to increase the volume of aid. With regard to efficiency, the role of IDF-related mechanisms remains controversial. In view of the above, it may be more productive to focus on other resources available to Asia. The paper points to two such resources, namely the surpluses accumulated in the form of reserves, Sovereign Wealth Funds (SWFs), etc. and the migrant remittances. Efficient utilization of these two sources can vastly change the development finance landscape in Asia.

JEL Classification: O16, O19

Keywords: Innovative Development Finance; GFATM; GAVI; ODA; Sovereign wealth fund; South-South Cooperation

CONTENTS

I	Conceptual issues and scope of the paper	1
II	Contextualizing Innovative Development Finance (IDF)	2
III	Innovative Development Finance (IDF) in Asia	4
	a. Different definitions and forms of IDF	4
	b. IDF in the Health Sector: GFATM and GAVI	5
	c. Climate Change Funds	9
	d. Overall quantitative insignificance of IDF in Asia	11
IV	Catalyzing Asia's Strengths through IDF	11
	a. Huge reserves of Asian countries	11
	b. Asia as source of FDI	15
	c. Asia as source of ODA	17
	d. Migrant Remittances as IDF	17
V	Conclusion	22
	References	25

UN/DESA Working Papers are preliminary documents circulated in a limited number of copies and posted on the DESA website at <http://www.un.org/en/development/desa/papers/> to stimulate discussion and critical comment. The views and opinions expressed herein are those of the author and do not necessarily reflect those of the United Nations Secretariat. The designations and terminology employed may not conform to United Nations practice and do not imply the expression of any opinion whatsoever on the part of the Organization.

Typesetter: *Nancy Settecasì*

UNITED NATIONS

Department of Economic and Social Affairs

UN Secretariat, 405 East 42nd Street

New York, N.Y. 10017, USA

e-mail: undesa@un.org

<http://www.un.org/en/development/desa/papers/>

I Conceptual issues and scope of the paper

The concept of Innovative Development Finance (IDF) has yet to satisfactorily resolve the issue of innovation. The search for innovation was prompted by two different problems, namely insufficient development finance to meet the Millennium Development Goals (MDGs) and ineffective use of whatever development finance was available.

The global conference in 2002 at Monterrey, Mexico, focused on the need to generate sufficient development finance for MDGs. The conference culminated in the so called *Monterrey Consensus* where DAC countries were urged to provide at least 0.7% of their GDP as Official Development Assistance (ODA). Unfortunately, so far only five of them have fulfilled the Monterrey target. The follow up to Monterrey at Doha in 2008 reminded defaulting ODA providers of the Monterrey commitment. The *Doha Declaration on Financing for Development* also put emphasis on IDF, presumably to compensate for the failure by ODA in realizing the *Monterrey Consensus* and to generate additional public resources for development.

Running parallel to the discussion on mobilizing IDF for the MDGs was the discussion on enhancing aid effectiveness. Global conferences to discuss this issue were held in Rome (2003) and Paris (2005), followed by meetings in Accra (2008) and more recently (in 2011) at Busan in the Republic of Korea (ROK), which was designated as the *4th High Level Forum on Aid Effectiveness*.

IDF was thus projected to overcome the twin problems of aid insufficiency and effectiveness simultaneously. However, there is as yet no clear agreement on what should be classified as IDF. Contrary to the original idea, it is far from clear whether existing IDF forms constitute an additional source of development finance or merely seeks to repackage and reprioritize traditional forms of aid.

Meanwhile, other sources of development finance, often flowing through the private sector, are

becoming important. One of these is South-South flows. Several countries of the South, such as the People's Republic of China (PRC) and Saudi Arabia have been providing development finance for many years. However, in recent years, flows from China and several other countries of the South have become much more important. Another source of external finance that has acquired much greater importance in recent years is remittances.

In addition, private philanthropy has gained in importance, and many count it as another source of IDF. Private foundations such as the Ford and Rockefeller Foundation have been funding developing countries for many years. However, the emergence of new private donors such as the Bill and Melinda Gates Foundation, now operating at a much larger scale than any other Foundation, has increased the role of private philanthropy dramatically.

It may be argued that the innovativeness of an IDF lies largely in its ability to improve aid effectiveness. However, the search for effectiveness may have proceeded at the expense of the volume of assistance. As we shall see, in many cases, the new emphasis on effectiveness may not have been particularly successful and may even have served to reduce aid disbursements because of the added conditionalities associated with the IDF-dependent flows.

Most of the well-recognized IDF have flowed into new global funds, such as the *Global Fund to Fight Aids, Tuberculosis and Malaria* (GFATM) and the *Global Alliance for Vaccines and Immunization* (GAVI), both directed to the health sector. These and other IDF-related funds have aspired to innovation through blending public and private funding, front loading some of the delivery of funds pledged over a longer period (this is the case with, e.g. International Finance Facility for Immunization (IFFIM)), and relocating the actual management of the funds. Thus the management of the IDF-dependent programs has often been shifted from public agencies to vertically structured, autonomously managed funding entities. Whether such an arrangement constitutes a

form of IDF or is a form of ‘innovative’ governance merits a separate discussion.

For the purposes of this paper, we will focus on IDF, as it is defined in the discussions by the World Bank, OECD, and the United Nations (2012) and examine its contribution to development in Asia. In doing so, we will place IDF within the broader context of other major financial flows, both domestic and external, and public and private. We will explore how far IDF can be used to leverage these other resource flows and to ensure their more effective utilization. Finally, we will assess the global as well as regional implications of the newly identified sources of IDF.

II Contextualizing Innovative Development Finance (IDF)

External finance situation of developing countries has undergone significant structural changes in recent decades. High levels of dependence on ODA are today largely limited to Sub-Saharan Africa (SSA), where it accounts for 10% of GDP (2009). Share of SSA in total ODA has increased from 21% in 1960-69 to 40% in 2000-09. Obviously, there are significant variations within SSA, with some of the larger countries such as South Africa (0.46%) and Nigeria (1.1%) having much lower levels of ODA dependence. In contrast to that of SSA, the share of Asia in global ODA declined from 47% in 1960-69 to 39% in 2000-2009. As a result, on average, ODA accounted for only at 1.4% of the Asian developing countries’ GDP in 2009, with however significant differences in this ratio across countries (Table 1).

The decline in ODA’s importance in Asia has gone hand-in-hand with increase in the importance of FDI and migrant workers’ remittances. FDI flows have emerged as the major source of external finance for such countries as India, Iran, Vietnam, People’s Republic of China (PRC), Hong Kong (Special Administrative Region, China), Republic of Korea (ROK), Malaysia and Singapore. In many of these economies, FDI is now the principal source of

external resource inflow. In South Asia, only India has emerged as a significant recipient of FDI.

In contrast to that in East Asia, remittances have emerged as the largest source of external resource for most South Asian countries, except Afghanistan, Maldives and Bhutan. Even for India, which receives considerable FDI, the principal external resource is migrant remittances, which amounted to 3.6% of GDP in 2009 and accounted for 57% of external inflows. Among East Asian countries, only Philippines (90% of all external inflows) matches the degree of South Asia’s reliance on remittances, but a few other countries such as Vietnam (37%), Indonesia (54%) and interestingly, PRC (33%), also receives a significant inflow of remittances.

Table 2 presents information on absolute volumes of remittances flowing into Asian countries. It can be seen that remittance flows are quite stable, in contrast to FDI and ODA, which have generally proved to be more volatile. Remittances have significantly eased foreign exchange constraints and improved the balance of payments of these countries. Remittances have also played an important role in improving household incomes and thereby contributed to reducing poverty in these countries. However, the full development potential of the remittances is yet to be realized.

Decreased importance of ODA in Asia was also accompanied by increase of the share of savings in the GDP. Table 3 shows that with the exception of Pakistan (13%), rates of domestic savings in many Asian countries exceed 20%, and in many cases come close to or cross 30%. Even in countries with high volumes of FDI, domestic savings generally proved to be the more important source of development financing. High levels of domestic savings, matched in some cases with appreciable inflows of FDI and occasionally ODA, as in the case of Nepal, have contributed to high gross domestic investment (GDI), exceeding 20% of GDP in all countries of the region, except Pakistan (17%), Cambodia (17%) and Philippines (16%). Levels of savings and investment

Table 1
Structure of External Resource Flows to Developing Countries in Asia, 2009

External resource flows as % of GDP*				
Region	FDI (net) (% of total)	ODA (% of total)	Remittances (% of total)	Total (%)
East Asia Pacific	1.9 (51.4)	0.4 (10.8)	1.4 (37.8)	3.7 (100)
Latin America and the Caribbean	2.1 (52.5)	0.4 (10.0)	1.5 (37.5)	4.0 (100)
South Asia	2.1 (26.3)	1.4 (17.5)	4.5 (56.2)	8.0 (100)
Sub-Saharan Africa	3.7 (23.4)	9.9 (62.7)	2.2 (13.9)	15.8 (100)
South Asia				
Afghanistan	1.3 (2.8)	45.7 (97.2)	0.0 (0.0)	47.0 (100)
Bangladesh	0.8 (5.8)	1.3 (9.3)	11.8 (84.9)	13.9 (100)
Bhutan	2.9 (23.2)	9.6 (76.8)	0.0 (0.0)	12.5 (100)
India	2.5 (39.7)	0.2 (3.2)	3.6 (57.1)	6.3 (100)
Iran	0.9 (75.0)	0.0 (0.0)	0.3 (25.0)	1.2 (100)
Nepal	0.3 (1.0)	6.7 (21.7)	23.8 (77.3)	30.8 (100)
Pakistan	1.5 (17.4)	1.7 (19.8)	5.4 (62.8)	8.6 (100)
Sri Lanka	1.0 (9.3)	1.7 (15.9)	8.0 (74.8)	10.7 (100)
South-East and East Asia				
Cambodia	5.4 (32.7)	7.7 (46.7)	3.4 (20.6)	16.5 (100)
China	1.6 (66.7)	0.0 (0.0)	1.0 (33.3)	2.6 (100)
Hong Kong (SAR)	24.9 (99.2)	0.0 (0.0)	0.2 (0.8)	25.1 (100)
Indonesia	0.9 (27.5)	0.2 (8.4)	1.3 (54.1)	2.4 (100)
Republic of Korea	0.2 (40.0)	0.0 (0.0)	0.3 (60.0)	0.5 (100)
Lao (People's Democratic Republic)	5.4 (40.9)	7.2 (54.5)	0.6 (4.6)	13.2 (100)
Malaysia	0.7 (50.0)	0.1 (7.1)	0.6 (42.9)	1.4 (100)
Maldives	7.6 (73.8)	2.4 (23.3)	0.3 (2.9)	10.3 (100)
Mongolia	14.8 (51.0)	9.4 (32.4)	4.8 (16.6)	29.0 (100)
Philippines	1.2 (8.7)	0.2 (1.5)	12.3 (89.8)	13.7 (100)
Singapore	9.2 (100)	0.0 (0.0)	0.0 (0.0)	9.2 (100)
Thailand	1.9 (76.0)	0.0 (0.0)	0.6 (24.0)	2.5 (100)
Timor-Leste	0.0 (0.0)	9.5 (100)	0.0 (0.0)	9.5 (100)
Viet Nam	8.5 (41.9)	4.4 (21.6)	7.4 (36.5)	20.3 (100)

Source: Human Development Report (2011)

* Figures in parentheses indicate the share of each source in total external resource flows into the country.

of Asian countries are appreciably higher, again with some exceptions, than those of SSA and even Latin America.

High levels of gross national savings (GNS) are not necessarily always captured by the state and

channeled into development. Table 3 shows that countries such as Bangladesh can raise only 11% of its GDP as public revenue compared to a GNS of 29%. Other Asian countries have recorded higher levels of public revenue collection, though here the

Table 2
Remittance Inflows to Asia, 2000-2011

Countries	Migrant remittance inflows (US\$ million)				Remittances as a share of GDP, 2010 (%)
	2000	2009	2010	2011 ^e	
Bangladesh	1,968	10,521	10,852	11,989	9.6
Cambodia	121	338	369	407	3.0
China	4,822	48,852	53,038	57,282	0.8
India	12,883	49,468	54,035	57,817	3.0
Republic of Korea	4,858	8,913	8,708	9,257	0.9
Lao (People's Democratic Republic)	1	38	41	44	0.6
Malaysia	342	1,131	1,301	1,457	0.5
Maldives	2	4	4	4	0.2
Myanmar	104	116	133	137	0.3
Nepal	111	2,986	3,468	3,951	20.0
Pakistan	1,075	8,717	9,690	12,190	4.8
Philippines	6,961	19,765	21,423	23,026	10.7
Sri Lanka	1,166	3,363	4,155	4,542	6.9
Thailand	1,697	1,637	1,764	2,177	0.5
Viet Nam	1,340	6,020	8,260	8,600	5.1
Total	37,451	161,869	177,241	192,880	

Source: World Bank staff estimates based on the International Monetary Fund's Balance of Payments Statistics Yearbook 2011.

^e Estimates.

record of East/SE Asia appears rather better than of South Asia.

It is in the context of the above portrayed scene of resource flows, both external and domestic, of Asian countries that we need to consider IDF.

III Innovative Development Finance (IDF) in Asia

a. Different definitions and forms of IDF

As noted earlier, there is no agreement about the definition and estimates of IDF. According to the World Bank, the total volume of IDF generated so far is around \$57 billion. It identifies two major sources of IDF to be (i) *Emerging Donors* (\$10.7 billion), belonging principally to the South and (ii) *Local Currency Bonds* (\$40 billion), together accounting for 89% of all IDF. Significantly, both these resources originate

in developing countries. The *Local Currency Bonds* are, by definition, utilizable in the country where they are issued, so that the role of aid can, at best, be catalytic to this process. While data on country level mobilization of local bond financing could not be accessed, it may be safe to assume that most of it was generated in a few stronger Asian economies.

OECD, on the other hand, estimates that \$36 billion of resources have been explicitly raised as IDF, of which, \$28 billion (77.8%) has been raised through *Carbon Emission Trading* under the Kyoto Protocol. Here again it is uncertain as to how much of the resources from Carbon Trading have been transformed into IDF. It is estimated that around 2% of such resources have been channeled into IDF. Germany, for one, has invested its carbon funds in IDF supporting projects for Climate Change.

According to the United Nations (2012, p. v), about \$5.8 billion in health financing and \$2.6 billion

Table 3
Savings and Investment in Asia, 2010

Countries	Savings (% of GDP)	Govt Revenue (% of GDP)	Govt Expenditure (% of GDP)	Gross domestic investment (% of GDP)
South Asia				
Afghanistan	28.3	20.5	21.9	25.1
Bangladesh	29.1	10.5	14.5	25.0
Bhutan	80.1	40.4	38.5	---
India	34.1	17.9	27.3	37.0
Iran	37.2	25.8	27.7	---
Nepal	35.9	16.7	19.7	38.2
Pakistan	13.2	14.7	19.8	16.6
Sri Lanka	24.7	14.5	24.9	27.8
South-East and East Asia				
Cambodia	10.8	15.6	18.9	17.2
China	54.2	20.0	23.1	50.7
Hong Kong (SAR)	29.9	19.0	17.5	23.8
Indonesia	33.5	16.5	18.2	32.5
Republic of Korea	29.8	24.0	23.9	---
Lao (People's Democratic Republic)	---	17.7	24.5	---
Maldives	-3.5	27.3	50.1	---
Malaysia	30.9	27.0	32.9	21.3
Philippines	20.4	14.6	18.5	15.6
Singapore	45.4	18.7	19.5	23.8
Thailand	29.5	20.8	24.0	---
Timor-Leste	---	347.9	108.6	---
Viet Nam	31.5	24.4	33.4	---

Source: IMF World Economic Outlook database (2011)

--- Not stated.

in financing for climate and other environmental protection programs have been “managed” through IDF mechanisms since 2002. In the context of the large volumes of external resource flows mentioned above, these are tiny amounts indeed.

The exact definition and scope of IDF are therefore controversial. However, since the more widely recognized IDF flows have been directed to funds and programs focused mainly on health sector and climate change mitigation and adaptation, we concentrate in the following on the role of IDF in these two areas in the Asian economies.

b. IDF in the Health Sector: GFATM and GAVI

According to data available in their respective websites, GFATM generated \$19.5 billion (up to 31 May 2011) and the GAVI generated \$5.4 billion (up to 15 April 2011). However, it is important to note that, as per OECD estimates, only 2% of the GFATM and 37% of the GAVI fund may be classified as innovative, and the rest owes to ODA, in one form or the other, and few other sources. Thus, the role and importance of GFATM and GAVI are not the same as those of IDF.

Table 4
Distribution of the GFATM in Asia, as at 31 May 2011

Region	Total disbursements (in US\$)	Share of government (%)	Share of civil society and private sector (%)	Share of multilateral organizations (%)
Afghanistan	56,197,790	52.3	47.7	0.0
Bangladesh	189,746,201	44.8	55.2	0.0
Bhutan	7,939,951	100.0	0.0	0.0
Cambodia	278,219,722	100.0	0.0	0.0
China	626,171,096	100.0	0.0	0.0
India	801,648,737	88.8	9.8	1.4
Indonesia	384,640,912	90.9	9.1	0.0
Lao (People's Democratic Republic)	86,189,479	100.0	0.0	0.0
Malaysia	1,333,367	0.0	100.0	0.0
Myanmar	55,298,890	0.0	33.8	66.2
Nepal	70,773,620	44.4	36.4	19.2
Pakistan	90,188,800	76.3	23.7	0.0
Philippines	166,991,020	7.2	92.8	0.0
Sri Lanka	40,965,653	61.7	38.3	0.0
Thailand	290,602,309	85.8	14.2	0.0
Timor-Leste	30,072,614	100.0	0.0	0.0
Viet Nam	130,892,904	100.0	0.0	0.0

Source: Author's calculation for the country-wise disbursement as recorded in the Global Fund website at <http://portfolio.theglobalfund.org/en/DataDownloads/CustomizeReportDownload> (Accessed on 12/12/2012).

Of the GFATM money disbursed, East Asia received 14%, while South Asia received 8%. Table 4 presents the distribution of the GFATM disbursements across various Asian countries. As can be seen, India (\$802 million) and PRC (\$626 million) were the largest recipients. Other large recipients of this Fund include Indonesia (\$385 million), Thailand (\$291 million), Cambodia (\$278 million), Bangladesh (\$190 million), Philippines (\$167 million) and Vietnam (\$131 million).

A significant feature of the GFATM was its attempt to draw upon both the government and civil society to both bid for funds and utilize them. The fund was thus managed through an autonomous entity in each country made up of members from the government, civil society and multilateral institutions working in the recipient country. In practice, this admixture of public and non-governmental ownership over the

fund was not always possible and largely depended on the role of the state and the strength of civil society in the respective countries. Table 4 shows that in Cambodia, PRC, Lao PDR, Vietnam, Timor-Leste and Bhutan, 100% of the fund was used by the government. In India (89%), Indonesia (91%), Thailand (86%), Pakistan (76%) and Sri Lanka (62%), the state was the dominant partner.

However, in Philippines the dominant role in utilization of GFATM was played by civil society and private sector (93%). Interestingly, in Myanmar, where the state is the dominant player, 66% of the \$55 million fund was utilized by the multilateral agencies and 34% by NGOs. This possibly owes to the fact that many of the development agencies, both bilateral and multilateral, were embargoed from funding the Myanmar government directly. Under the situation, the military government appears to

Table 5
Global Alliance for Vaccines and Immunization (GAVI) disbursements (US\$ million) in the Asia Pacific, 2008-2011

Country	2008	2009	2010	2011	Total (2008-2011)
Global disbursements, of which:	594.71	335.32	584.41	401.90	1,916.34
Afghanistan	18.87	17.53	22.99	5.38	64.77
Bangladesh	27.72	26.79	52.00	24.07	130.58
Cambodia	0.93	4.75	3.56	4.91	14.15
India	7.19	1.46	---	---	8.65
Indonesia	9.06	1.85	---	---	10.91
Lao (People's Democratic Republic)	0.68	0.59	3.38	0.44	5.09
Myanmar	3.16	0.60	0.09	5.37	9.22
Nepal	10.86	2.15	13.39	5.83	32.23
Pakistan	71.10	31.78	95.37	7.57	205.82
Sri Lanka	2.72	3.27	6.32	1.09	13.40
Viet Nam	16.02	2.45	19.43	13.05	50.95

Source: <http://www.gavialliance.org/results/disbursements/> (Accessed on 12/12/2012).

--- Not stated.

have conceded to GFATM funds entering Myanmar through non-government agencies, though the latter may not be as independent of the government as in other countries.

Table 5 presents information on disbursements made under GAVI. Between 2008 and 2011, globally \$2.3 billion was committed under this fund and \$1.9 billion was disbursed, of which 28.5% (\$546 million) was disbursed to East and South Asia. Within Asia, the three largest recipients of this fund — Afghanistan (\$65 million), Bangladesh (\$129 million) and Pakistan (\$205 million) — are all from South Asia. This may be contrasted with the GFATM, where the largest disbursements were to East/SE Asia (except India in South Asia).

The disbursement of these two funds, which are viewed as prized examples of the use of IDF, was of some benefit to the recipient countries. However, how useful and relevant they may have been in each country needs to be examined in relation to the total expenditures for health care, the role of the governments in health expenditure and the role of ODA in funding of the government's health programs.

Table 6 provides information comparing GFATM and GAVI disbursements with other sources of healthcare financing in Asian countries.

Two issues surface from this Table. First, in a number of countries, private expenditure exceeds public expenditure in healthcare. This partly reflects the inadequacy of the public health services and the corresponding emergence of the private sector to fill the gap left by public provisioning. This has, in some measure, influenced the design of the GFATM which seeks to draw in civil society and the private sector in delivering particular services within its ATM program. If we take into account total expenditure on health (public + private), the role of external assistance or ODA becomes much less significant. Except for Afghanistan (18%) and Nepal (14%), ODA accounts for less than 10% of health expenditure. If, however, we relate external assistance only to public health expenditure, the dependence on aid rises appreciably for countries such as Afghanistan (86%), Cambodia (43%), Nepal (40%), Lao PDR (79%) and even Bangladesh where it accounts for 25% of public expenditure. On the other hand, for

Table 6
Profile of Health System Financing in Asia, 2009

Countries	Total Expenditure (US\$ million)	Per capita expenditure (US\$)	ODA Fund (US\$ million)	GAVI+GFATM (US\$ million)	ODA Fund as % of total health expenditure	Public expenditure as % of total health expenditure	ODA Fund as % of public health expenditure	GAVI and GFATM as % of total health expenditure	GAVI and GFATM as % of public health expenditure ^c
Afghanistan	1,400	51	252	44.7	18.0	21.0	86.0	3.2	15.2
Bangladesh	3,000	19	240	51.1	8.0	33.0	24.0	1.7	5.1
Bhutan	68	98	5	1.8	8.0	82.0	10.0	2.6	3.1
Cambodia	639	43	58	51.2	9.0	21.0	43.0	8.0	38.1
China	227,000	169	104 ^a	122.7	> 0.0 ^a	50.0	>0.0 ^a	0.1	0.2
India	54,000	44	540	143.7	1.0	30.0	3.0	0.3	1.0
Indonesia	13,000	55	260	161.0	2.0	52.0	4.0	1.2	2.3
Lao (People's Democratic Republic)	227	36	34 ^b	19.0	15.0 ^b	19.0	79.0 ^b	8.4	44.2
Malaysia	9,300	337	0	0	0.0	45.0	0.0	0.0	0.0
Maldives	102	331	1	0	1.0	65.0	2.0	0.0	0.0
Myanmar	624	12	62	0	10.0	10.0	100.0	0.0	0.0
Nepal	743	25	104	2.2	14.0	35.0	40.0	0.3	0.8
Pakistan	4,100	23	7	50.4	4.0	33.0	12.0	1.2	3.6
Philippines	6,100	66	244	22.7	4.0	35.0	11.0	0.4	1.1
Sri Lanka	1,700	84	34	24.9	2.0	45.0	4.0	1.5	3.3
Thailand	1,100	168	11	47.0	1.0	76.0	1.0	4.3	5.6
Timor-Leste	83	73	29 ^b	13.6	35.0 ^b	71.0	49.0 ^b	16.4	23.1
Viet Nam	7,000	80	140	24.9	2.0	39.0	5.0	0.4	1.0

Notes: ^a Author's calculation from the funds disbursed under GFATM (annual average of 2006-11); ^b Data for 2007 from World Health Statistics 2010; ^c These figures should be carefully interpreted given that not all IDF fund is channelled through the government.

Source: Author's compilation from the Health System Financing Country Profile available at the World Health Organization (WHO) website - <http://apps.who.int/nha/database/StandardReportList.aspx> (Accessed on 15/01/2012).

most other countries, including the bigger countries, such as PRC, India, Pakistan, Indonesia, Philippines, Thailand and Vietnam, aid constitutes an insignificant part of public expenditure on health.

The above suggests that the contribution of programs such as GFATM and GAVI to the overall scheme of health care may be less important. For example, Table 6 shows that even among the biggest of the recipients, such as PRC (\$123 million in 2009) and India (\$144 million in 2009), flows from GFATM and GAVI amounted to less than 2% of total public expenditure in health care. In most other cases, expenditure under these two funds accounted for less than 10% of the aid budget and less than 3% of the public health budget. It is therefore difficult to distinguish the impact of GFATM and GAVI on health outcomes of a country from that of expenditure made from other sources, both domestic and external. It is likely that in some of the smaller economies, financing from these funds did make some impact on the health outcomes or at least released public health funds for use in other sectors. However, remembering the fact that only 2% of GFATM and 37% of GAVI are derived from IDF, it becomes even more difficult to identify appreciable separate effect of IDF on the healthcare outcomes of Asian countries.

If we are to look for any value addition from these health funds, it therefore has to be found in possibly more effective use of aid, resulting from the vertical and autonomous management of the fund where such arrangements are permitted by the recipient governments. In actual practice, it remains questionable how far a standalone arrangement, where the government surrenders its right to select projects, disburse and manage the funds, would be sustainable as a regular *modus operandi* for managing and using external assistance. Some governments may have accommodated themselves to such a process, but this may not be seen as the trend of the future regarding use of external resources for particular health goals. We observe that countries such as PRC, Vietnam, Lao PDR, and India, where states are strong, have chosen to disburse the funds either exclusively or

mostly through public agencies. How far the new funding dispensation governing GFATM has had a substantive impact on the management of these diseases again remains unclear. More intensive study is required to explore the effectiveness of these two funds in achieving their goals.

c. Climate Change Funds

Apart from the healthcare, the other area in which IDF-related funds have been active is climate change mitigation and adaptation. Here again, beyond the realization of the \$28 billion generated by trading in carbon emissions, most of which is yet to be allocated, little of these funds can be classified as IDF. Of these funds, we estimated that only \$1.5 billion has actually been disbursed to developing countries, of which 58% went to PRC and another 22% to India.

Table 7 lists a plethora of funds that have emerged concerning climate change. We observe significant gaps between pledges, deposited funds and actual disbursements. Some major funds, such as from Japan or the LDC Fund (which was pledged at Copenhagen), are yet to take off. The Adaptation Fund which was identified by the OECD as the largest potential source of IDF was expected to generate \$28 billion. The Adaptation Fund is guided by the Kyoto Protocol and was established to help affected nations to cope with adverse effects of climate change. The Fund was expected to be financed by a share (2 percent) of the proceeds from the *Clean Development Mechanism* (CDM) project activities as well as through voluntary pledges by donor governments. So far, around \$254 million has been pledged to the Adaptation Fund, including small contributions from individual donor countries such as Germany, Spain and Sweden. Only 13.7% of the fund has actually been received for projects in Asia, in contrast to 30.7% for Africa, 21.6% for South America and 26.5% for Central and North America. Of the \$25.6 million of the Adaptation Fund actually disbursed, only \$4.5 million has been delivered to Asia, with Pakistan being the largest recipient, receiving \$1.7 million.

Table 7
Climate Change Funds (US\$ million)

Fund	Pledged	Deposited	Approved	Disbursed
Adaptation Fund	254.95	254.90	84.46	25.61
Amazon Fund (Fundo Amazônia)	1,027.93	53.20	127.05	32.73
Clean Technology Fund	4,433.00	2,992.47	1,936.50	384.00
Congo Basin Forest Fund	165.00	165.00	20.34	15.71
Forest Carbon Partnership Facility	436.90	386.90	22.46	11.35
Forest Investment Program	599.00	348.34	60.79	14.00
GEF Trust Fund - Climate Change focal area (GEF 4)	1,032.92	1,032.92	1,035.93	915.70
GEF Trust Fund - Climate Change focal area (GEF 5)	1,141.00	1,048.10	79.01	1.00
Global Climate Change Alliance	226.12	224.62	196.34	130.99
Global Energy Efficiency and Renewable Energy Fund	169.50	65.66	64.07	---
Indonesia Climate Change Trust Fund	18.47	10.92	5.48	---
International Climate Fund	4,640.00	40.00		
International Climate Initiative	680.40	680.40	557.60	557.60
International Forest Carbon Initiative	216.27	67.06	47.60	47.60
Japan's Fast Start Finance - private sources	4,000.00	---	---	---
Japan's Fast Start Finance - public sources	11,000.00	---	---	---
Least Developed Countries Fund	379.86	278.62	159.11	107.71
MDG Achievement Fund – Environment and Climate Change thematic window	89.50	89.50	89.52	83.30
Norway's International Climate and Forest Initiative	517.00	---	90.80	70.10
Pilot Program for Climate Resilience	982.00	708.54	143.46	55.00
Scaling-Up Renewable Energy Program for Low Income Countries	352.00	236.35	31.64	6.00
Special Climate Change Fund	206.39	145.21	118.18	86.10
UN-REDD Program	150.84	98.25	137.13	117.90
Grand Total:	32,719.05	8,926.96	5,007.47	2,662.40

Source: Climate Funds Website <http://www.climatefundsupdate.org/> (Accessed on 21/01/2012).

--- Not stated.

Drawing upon the somewhat uneven data bases covering the deployment of the various climate change funds identified in Table 7, we work out a rough distribution of these funds within the Asia region (Table 8). It shows that the funds have been distributed rather unevenly. The three largest Asian countries, PRC (\$187 million), India (\$144 million) and Indonesia (\$87 million) account for 16% of these funds. Bangladesh, regarded as one of the countries most vulnerable to climate change, and having a large population of about 160 million, received only \$18 million, which amounted to 0.7% of the total. Even for its largest recipients, flows from climate related IDF funds remains insignificant relative to ODA and other external resource flows. Relative to the overall financial flows into the region, dedicated climate funds were negligible in almost every Asian country.

d. Overall quantitative insignificance of IDF in Asia

Thus flows to Asia from IDF-related funds have been quantitatively insignificant. Table 9 reveals this insignificance more clearly. It can be seen that flows from IDF-related funds amount to less than 0.1% of GDP in every listed Asian country and less than 3% of public expenditure. Indeed, except for small countries such as Bhutan, Cambodia, Lao PDR and Timor-Leste and war ravaged Afghanistan, flows from IDF-related funds account for less than 1% of public expenditure across Asia. If we aggregate for all Asian countries, the receipts from climate funds together with those from GFATM and the GAVI, added up in 2009 to \$1 billion, well below the volume (\$3.5 billion) of remittances received by the small country Nepal in that year. This quantitative insignificance of existing IDF-related flows and questionable impact of their management practices point to the necessity for looking elsewhere for new and more robust sources of development finance. This is the issue we address in the next section.

IV Catalyzing Asia's Strengths through IDF

Asia has a great potential for mobilizing new types of IDF. The development financing situation in Asia can be altered dramatically by making use of this potential.

a. Huge reserves of Asian countries

Asia is now the repository of the largest volume of investible resources accumulated in the history of the world. Table 10 shows that Asia's current international reserves (excluding Japan) amount to \$5.5 trillion. Unfortunately, most of these reserves are currently not readily available for development purposes.

International reserve accumulation is largely viewed as an insurance against rainy days when a country may need them to meet international obligations. These reserves are therefore mostly invested in short term financial instruments, such as US Treasury Bills (TB) which yield very low returns. The current holdings of TBs amount to US\$ 4.6 trillion of which PRC alone holds \$1.1 trillion. The current yield on TBs is 2.05% (for a five-year bond).

Whilst US TBs pass the test of convertibility, they have in recent years neither that stable in value, nor, in particular cases, that readily encashable. In recent years, the value of US dollar has fluctuated and depreciated greatly against major currencies such as the Euro, the Japanese Yen and most recently the Chinese Yuan (or RMB). The dollar-to-RMB ratio has moved down from about 12 in 2005 to about 6 in 2013. For a country such as PRC which holds \$3.2 trillion as international reserves, of which 70% is held in dollar denominated assets, depreciation of the US dollar against the Yuan reduces the capital value of its reserves. Appreciation of RMB, as demanded by the USA, may help the USA to reduce its trade deficit with China. However, the real benefit for the US may lie in reduction of the value of US

Table 8
Climate Change Funds in South Asia and East Asia, 2011

Countries	Total Number of projects	Number of projects (received funding)	Amount Approved (US\$ million)	Amount Disbursed (US\$ Million)	Sources of Funds
South Asia					
Afghanistan	3	2	10.01	4.24	Least Developed Countries Fund, MDG Achievement Fund - Environment and Climate Change
Bangladesh	5	4	19.78	18.06	Global Climate Change Alliance, Least Developed Countries Fund, GEF Trust Fund, Pilot Program for Climate Resilience
India	31	30	143.69	143.56	GEF Trust Fund, International Climate Initiative
Nepal	9	4	34.08	14.92	Global Climate Change Alliance, Least Developed Countries Fund, GEF Trust Fund, Pilot Program for Climate Resilience, Scaling-Up Renewable Energy Program for Low Income Countries, Forest Carbon Partnership Facility
Pakistan	6	4	8.48	15.13	GEF Trust Fund, Adaptation Fund, Special Climate Change Fund
Sri Lanka	4	2	10.06	5.70	GEF Trust Fund
East Asia					
Cambodia	9	6	10.97	33.46	Global Climate Change Alliance, Least Developed Countries Fund, Pilot Program for Climate Resilience, GEF Trust Fund, UN-REDD Program
China	38	35	237.57	187.31	International Climate Initiative, GEF Trust Fund, MDG Achievement Fund - Environment and Climate Change
Indonesia	24	15	230.94	86.56	International Forest Carbon Initiative, International Climate Initiative, GEF Trust Fund, Indonesia Climate Change Trust Fund, Norway's International Climate and Forest Initiative, Clean Technology Fund, Forest Investment Program, Forest Carbon Partnership Facility, Special Climate Change Fund, UN-REDD Program
Lao (People's Democratic Republic)	8	4	12.32	6.64	Least Developed Countries Fund, Forest Investment Program, Forest Carbon Partnership Facility, GEF Trust Fund
Malaysia	2	2	9.20	9.20	GEF Trust Fund
Thailand	12	8	96.31	20.07	GEF Trust Fund, International Climate Initiative, Special Climate Change Fund, Clean Technology Fund
Philippines	10	8	63.23	32.23	International Climate Initiative, GEF Trust Fund, MDG Achievement Fund - Environment and Climate Change, Special Climate Change Fund, UN-REDD Program, Clean Technology Fund, Special Climate Change Fund
Viet Nam	14	10	68.78	33.38	International Climate Initiative, GEF Trust Fund, Special Climate Change Fund, Clean Technology Fund, UN-REDD Program

Source: Author's compilation from the Climate Funds Update website (<http://www.climatefundsupdate.org/projects>) Accessed on 06/01/2012.

Table 9
Innovative Development Finance (IDF) in ODA, GDP and Total Public Expenditure, 2009

Countries	Total GFATM+GAVI* (US\$ million)	Total GEF* (US\$ million)	Total IDF (US\$ million)	IDF related funds as % of ODA	IDF related funds as % of GDP	IDF related funds as % of total public expenditure
Afghanistan	44.7	0.0	44.7	0.7	0.3	1.6
Bangladesh	51.1	1.1	52.2	3.5	0.0	0.3
Bhutan	1.8	2.5	4.3	4.3	0.3	1.0
Cambodia	51.2	1.1	52.3	8.1	0.2	2.5
China	122.7	61.3	184.0	6.5	0.0	0.0
India	143.7	55.3	199.0	4.7	0.0	0.0
Indonesia	161.0	8.4	169.4	5.1	0.0	0.1
Lao (People's Democratic Republic)	19.0	3.2	22.2	7.8	0.3	1.6
Malaysia	0.0	5.4	5.4	5.0	0.0	0.0
Nepal	2.2	1.0	3.2	0.3	0.0	0.1
Pakistan	50.4	8.3	58.7	1.0	0.0	0.1
Philippines	22.7	15.0	37.7	2.5	0.0	0.1
Sri Lanka	24.9	0.9	25.8	2.7	0.0	0.2
Thailand	47.0	0.7	47.7	4.7	0.0	0.0
Timor-Leste	13.6	0.0	13.6	7.3	2.2	2.2
Viet Nam	24.9	5.9	30.8	0.8	0.0	0.1
Total in Asia	831.3	180.3	1,011.6			

* From the OECD-CRS Database <http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW> (Accessed on 19/01/2012).

** Calculation from the IMF's World Economic Outlook database.

Source: Author's calculation from the OECD-CRS database and the World Economic Outlook database.

debt to PRC, as represented by the PRC holdings of US TBs.

In addition, there is the problem of encashing, particularly by the large holders of US TBs. Were PRC to liquidate even 20% of its US TBs in a year, it would create a run on the dollar and thus devalue PRC's dollar denominated assets. A devalued dollar may jeopardize PRC's exports to the US. Also, withdrawal from dollar may be perceived by the USA as a threat to its national interests, leading to retaliatory actions. Thus countries, such as PRC, Japan or the energy surplus West Asian countries, holding large amount of US TBs, may face a hostage kind of situation, constraining their ability to encash their TB assets readily. In short, large surpluses of Asian countries held in the form of short term assets of the

USA and other developed countries are in practice neither secure nor represent good value for money.

It could therefore be argued that one of the most innovative sources of IDF would be to relocate a small part (say 2%) of the reserves held in US TBs by such surplus economies as PRC, Hong Kong (SAR China), Taiwan (China), Saudi Arabia, Kuwait, UAE, Qatar, India and Japan and channel it into FDI within the Asia region. Such a transfer of Asian funds from the low yield TBs into higher yield investments would provide a huge boost to development efforts in Asia.

The operative issue would be to persuade prospective reserve holders that the relocation of their investments into Asia would also be secure, fungible

Table 10

Asia's Gross International Reserves and holdings of US Treasury Bills (US\$ billion)

	International Reserves					US Treasury Bills (TBs)	
	2006	2007	2008	2009	2010	Reserves held in US TBs	TBs as % of Reserves
Central Asia							
Armenia	1.1	1.7	1.4	2.0	1.9	---	---
Azerbaijan	2.5	4.3	6.5	5.4	6.4	---	---
Georgia	0.9	1.4	1.5	2.1	2.3	---	---
Kazakhstan	19.1	17.6	19.9	23.1	28.3	---	---
Kyrgyzstan	0.8	1.2	1.2	1.6	1.7	---	---
Tajikistan	0.1	0.09	0.2	0.3	0.6	---	---
Turkmenistan	8.1	13.2	---	---	---	---	---
Uzbekistan	4.7	7.5	9.5	12.2	13.5	---	---
Total Central Asia	37.3	46.9	40.2	46.7	54.7	---	---
East Asia							
China	1,068.5	1,530.2	1,949.3	2,416.0	2,900.0	1,152.0	39.7
Hong Kong (SAR)	133.2	152.7	182.5	255.8	268.7	132.0	49.1
Republic of Korea	239	262.2	201.2	270.0	291.6	39.0	13.4
Mongolia	0.7	1.0	0.6	1.3	2.2	---	---
Taipei, China	266.1	270.3	291.7	348.2	382.0	153.0	40.0
Total East Asia	1,707.5	2,216.5	2,625.4	3,291.3	3,844.5	1,476.0	---
South Asia							
Afghanistan	2.0	2.8	3.6	4.2	5.0	---	---
Bangladesh	3.5	5.1	6.1	7.5	10.8	---	---
Bhutan	0.5	0.6	0.6	0.7	0.9	---	---
India	191.9	299.2	252.0	278.2	301.8	40.0	13.2
Maldives	0.2	0.3	0.2	0.3	0.4	---	---
Nepal	1.8	2.0	2.5	2.9	2.8	---	---
Pakistan	10.8	13.3	8.6	9.1	13.0	---	---
Sri Lanka	2.8	3.5	1.8	5.1	6.6	---	---
Total South Asia	213.6	326.9	275.4	307.9	341.2	40.0	---
South-East Asia							
Brunei Darussalam	0.5	0.7	0.8	1.4	---	---	---
Cambodia	1.1	1.6	2.2	2.4	2.7	---	---
Indonesia	42.6	56.9	51.6	66.1	96.2	---	---
Lao (People's Democratic Republic)	0.3	0.5	0.6	0.6	0.7	---	---
Malaysia	82.2	101.5	91.6	96.7	106.6	12.0	11.3
Myanmar	2.5	3.6	4.0	5.2	5.5	---	---
Philippines	23.0	33.8	37.6	44.2	62.4	19.0	30.4
Singapore	136.3	163.0	174.2	187.8	225.8	57.0	25.2
Thailand	67.0	87.5	111.0	138.4	167.5	50.0	29.9

(cont'd)

(cont'd)							
	International Reserves					US Treasury Bills (TBs)	
	2006	2007	2008	2009	2010	Reserves held in US TBs	TBs as % of Reserves
Viet Nam	11.5	21.0	23.0	14.1	12.4	---	---
Total South-East Asia	367.0	470.0	496.7	557.1	679.7	138.0	---
West Asia							
Iraq	20.1	31.5	50.1	44.3	50.6	---	---
Kuwait	14.2	18.8	19.3	23.0	24.8	---	---
Oman	5.0	9.5	11.6	12.2	13.0	---	---
Qatar	5.4	9.7	10.0	18.8	31.2	---	---
Saudi Arabia	229.0	309.3	451.3	421.0	459.3	---	---
United Arab Emirates	27.6	77.2	31.7	36.1	42.8	---	---
Yemen	7.5	7.8	8.2	7.0	6.0	---	---
Total West Asia	308.8	463.8	582.2	562.4	627.7	215.0	34.2
Total Asia	2,634.2	3,524.1	4,019.9	4,765.4	5,547.8		
Japan	895.3	973.3	1,030.8	1,050.1	1,096.1	861.0	78.5
Total global reserves	5,788.4	7,380.0	8,058.0	9,392.0	10,768.4		
Asia's share in global reserves (%)	46.0	48.0	50.0	51.0	52.0	---	---
Japan's share in global reserves (%)	15.0	13.0	13.0	11.0	10.0	---	---

Source: ADB (2011); World Development Indicators (WDI) for estimates of West Asia and global reserves.

--- Not stated.

and financially rewarding. In all these areas, an international effort needs to be made to underwrite or guarantee such investments in low income Asian countries, which have so far received little FDI and other external capital flows. While the suggested volumes for transfer of funds remain relatively small, the move to change the maturity composition of a country's external holdings, however attractive the alternative possibilities, requires a major policy decision to redeploy these reserves. Sovereign wealth funds can play a useful role in this regard.

b. Sovereign Wealth Funds (SWFs) as a Source of IDF for Asia

A number of Asian countries preside over sizeable *Sovereign Wealth Funds* (SWF). These are portfolios designed to generate a secure stream of revenues for a future day when the countries in question may not be able to generate such high volumes of current

export earning as they enjoy now. The emergence of the SWF was itself motivated by the search for longer maturity and somewhat more risky investments which could generate higher rates of return than offered by US TBs. Thus, the idea of moving some reserves into longer term IDF had already been anticipated by these Asian countries when they established their SWFs.

Globally, the earliest SWFs, possibly established by Norway, derived from the export bonanza generated by the discovery of oil and gas in the North Sea. Later, SWFs emerged in West Asia following the build up of capital surpluses acquired through the sharp escalation in global energy prices in the 1970s and 1980s. Table 11 lists some of the SWFs originating in the Asian regions. The energy based SWFs of West Asian countries were eventually matched by SWFs created by such Asian countries as PRC, Hong Kong, ROK, and Singapore, who derived the funds

Table 11
Share of Asia in Sovereign Wealth Funds (SWFs), 2011

Region/Countries	Fund Name	Assets in US\$ billion	Inception	Origin
Central Asia				
Kazakhstan	Kazakhstan National Fund	38.6	2000	Oil
Azerbaijan	State Oil Fund	30.2	1999	Oil
Total in Central Asia (% share in global SWFs)		68.8 (1.4)		
Eastern Asia				
China	SAFE Investment Company	567.9**	1997	Non-Commodity
	China Investment Corporation	409.6	2007	Non-Commodity
	National Social Security Fund	134.5	2000	Non-Commodity
	China-Africa Development Fund	5.0	2007	Non-Commodity
China Sub-total		1,117 (23.4)		
China – Hong Kong	Hong Kong Monetary Authority Investment Portfolio	293.3	1993	Non-Commodity
Mongolia	Fiscal Stability Fund	n/a	2011	Mining
South Korea	Korea Investment Corporation	37.0	2005	Non-Commodity
Total in East Asia (% share in global SWFs)		1,447.30 (30.3)		
South Asia				
Iran	Oil Stabilisation Fund	23.0	1999	Oil
Total in South Asia (% share in global SWFs)		23.0 (0.5)		
South-East Asia				
Indonesia	Government Investment Unit	0.3	2006	Non-Commodity
Malaysia	Khazanah Nasional	36.8	1993	Non-Commodity
Singapore	Government of Singapore Investment Corporation	247.5	1981	Non-Commodity
	Temasek Holdings	157.2	1974	Non-Commodity
Singapore Sub-total		404.7 (8.5)		
Timor-Leste	Timor-Leste Petroleum Fund	6.3	2005	Oil & Gas
Vietnam	State Capital Investment Corporation	0.5	2006	Non-Commodity
Total in South-East Asia (% share in global SWFs)		448.6 (9.4)		
West Asia				
Azerbaijan	State Oil Fund	30.2	1999	Oil
Bahrain	Mumtalakat Holding Company	9.1	2006	Non-Commodity
Kuwait	Kuwait Investment Authority	296.0	1953	Oil
Oman	State General Reserve Fund	8.2	1980	Oil & Gas
	Oman Investment Fund	n/a	2006	Oil
Qatar	Qatar Investment Authority	85.0	2005	Oil
Saudi Arabia	SAMA Foreign Holdings	472.5	n/a	Oil
	Public Investment Fund	5.3	2008	Oil
Saudi Arabia Sub-total		477.8 (10.0)		

(cont'd)

(cont'd)				
Region/Countries	Fund Name	Asset in US\$ billion	Inception	Origin
United Arab Emirates	Abu Dhabi Investment Authority	627.0	1976	Oil
	Investment Corporation of Dubai	70.0	2006	Oil
	International Petroleum Investment Company	58.0	1984	Oil
	Mubadala Development Company	27.1	2002	Oil
	RAK Investment Authority	1.2	2005	Oil
	Emirates Investment Authority	n/a	2007	Oil
	Abu Dhabi Investment Council	n/a	2007	Oil
United Arab Emirates Sub-total		783.3 (16.4)		
Total in West Asia (% share in global SWFs)		1,689.6 (35.4)		
Total in Asia (% share in global SWFs)		3,677.3 (77.0)		
Global SWF Total		4,771.9		

Source: Author's calculation from the Sovereign Wealth Fund Institute (SFWI).

from earnings from a more sustainable, diversified export base.

Earlier studies on destination of SWF investments originating in the West Asian region indicated that in the early years of the oil boom in the 1970s and 1980s, these funds were largely invested in North America and Europe. Today the direction of these funds is somewhat more diversified with a growing share of investments being directed to the more dynamic countries of East/South East Asia and even into India and Pakistan. Not enough is known about the investment strategies of the SWFs of PRC, Hong Kong or Singapore, though here again available evidence suggests that some of these investments have been made within Asia, including within the home country of the SWFs.

The deployment of SWFs, though usually managed by professionals committed to maximizing investment returns, is in the final analysis driven by government policy. Thus the placement of these funds is not exclusively driven by market considerations and can be influenced by both public policy and the strategic interests of the concerned governments. Thus, a government may decide that, as a matter of policy, it would like to invest a part of the fund in particular

countries, as long as these investments are not prejudicial to the returns being derived from the asset. For such reasons, it is not to be ruled out that SWFs may be willing to sacrifice a few percentage points from the rate of return in exchange for both longer term economic and political gains to be derived from investments made in particularly deserving countries. To invest in a super highway opening up a region rich in natural resources in Lao PDR, or even Angola, may not immediately be more profitable than investing in real estate in London or Manhattan. But it may well be a more sensible investment in the long run. Such longer term decisions may not be taken by the manager of a private mutual fund but can be taken by a state directed SWF. Some part of the Asian surplus is also getting channeled into FDI outside of SWFs.

c. Asia as source of FDI

Earlier we noted how Asian countries have been drawing large amounts of FDI from outside. However, Asia is now graduating into an outward source of FDI and accounted for an average of \$260 billion of overseas investment between 2005 and 2009. Here again PRC was the leader (\$121 billion), but India (\$44 billion) and the rest of Asia (\$92 billion) were

Table 12
Foreign Direct Investment (FDI) (US\$ million)

	2006	2007	2008	2009	2010
Central Asia					
Armenia	450	701	925	725	750
Azerbaijan	-584	-4,749	15	2,899	2,272
Georgia	1,186	1,675	1,523	659	553
Kazakhstan	6,663	7,966	13,118	10,653	2,155
Kyrgyzstan	182	208	377	190	---
Tajikistan	66	160	190	100	160
Turkmenistan	731	804	820	1355	---
Uzbekistan	174	700	711	838	944
Total Central Asia	8,868	7,465	17,679	17,419	6,834
East Asia					
China	72,715	83,521	108,312	94,065	105,735
Hong Kong (SAR)	45,058	54,343	59,622	52,394	68,903
Republic of Korea	3,586	1,784	3,311	2,249	-150
Mongolia	290	382	845	570	1,635
Taipei, China	7,424	7,769	5,432	2,805	2,481
Total East Asia	129,073	147,799	177,522	152,083	178,604
South Asia					
Afghanistan	238	243	300	201	220
Bangladesh	743	793	748	961	636
Bhutan	6	73	30	15	11
India	7,693	15,893	19,816	35,600	27,600
Maldives	64	91	135	112	164
Nepal	-6	5	5	24	164
Pakistan	3,521	5,140	5,410	3,720	2,151
Sri Lanka	451	548	691	384	500
Total South Asia	12,710	22,786	27,135	41,017	31,446
South-East Asia					
Brunei Darussalam	70	260	237	---	---
Cambodia	483	867	815	539	801
Indonesia	4,914	6,929	9,318	4,878	12,736
Lao (People's Democratic Republic)	650	790	930	769	394
Malaysia	6,060	8,594	7,242	1,430	8,584
Myanmar	428	715	976	963	958
Philippines	2,921	2,916	1,544	1,963	1,713
Singapore	29,056	37,033	8,589	15,279	38,638
Thailand	9,460	11,330	8,539	4,976	6,668
Viet Nam	2,315	6,516	9,279	6,900	---
Total South-East Asia	56,357	75,950	47,469	37,697	70,492

(cont'd)

(cont'd)					
	2006	2007	2008	2009	2010
West Asia					
Bahrain	2,915	1,756	1,794	257	156
Iraq	383	972	1,856	1,452	1,426
Kuwait	121	112	-6	1,114	81
Oman	1,596	3,332	2,952	1,509	2,333
Qatar	3,500	4,700	3,779	8,125	5,534
Saudi Arabia	18,317	24,334	39,455	36,458	21,560
United Arab Emirates	12,806	14,187	13,724	4,003	3,948
Yemen	1,121	917	1,555	129	-329
Total West Asia	40,759	50,310	65,109	53,047	34,709
Total Asia	247,767	304,310	334,914	301,263	322,085
Japan	-6,784	22,180	24,552	11,834	-1,359
Total Global FDI	1,594,552	2,352,055	1,905,620	1,345,818	1,331,495
Asia's share in global FDI (%)	16	13	18	22	24
Japan's share in global FDI (%)		1	1	1	

Source: ADB (2011); World Development Indicators (WDI) for estimates of West Asia and global reserves.

not far behind. In this period, \$71 billion of FDI flows into Asia originated from within Asia where PRC alone invested \$59 billion in 2010. If we look at just 7 countries, PRC, Hong Kong, China-Taipei, India, ROK, Malaysia and Thailand, 40% of their outward investment went to Asia and 32% of their inward investment originated in Asia. (Table 12)

These figures of FDI flows within Asia do not distinguish between private and public flows. We cannot, therefore, indicate the extent to which these investments originate from SWF investments in the Asia region. Here again estimates of FDI flows into Asia from the West Asia region indicate that a growing volume of resources were being invested in Asia. We cannot identify what part of this investment originated from West Asia's SWF for which further study will be required.

d. Asia as source of ODA

A part of the Asian surplus is finding its way to ODA too. Thus, resource flows within Asia are not limited

to FDI but also include a rising volume of ODA originating from the larger economies within the region. PRC, for example, has been providing grants and soft loans to a variety of developing countries around the world. Its aid has quadrupled from \$0.5 billion in 1999 to \$1.9 billion in 2009. About 50% of its aid has gone to Africa and a third to Asia. India has also become more visible as an ODA provider which amounted to about \$700 million in 2009/10. India's aid mostly goes to its South Asian neighbors, though its ODA to Africa has recently increased. PRC and India also extend commercial loans to developing countries in the form of suppliers' credit and hard loans.

e. Migrant Remittances as IDF

Another major resource generated within Asia, which could be another alternative source of finance, are the remittances sent back to their countries of origin by migrants. These migrants may be permanent residents, as is the case of those located in North America and Europe, or temporary migrants,

as is the case of most of the migrants working in West, South-East and East Asia. We also need to take account of the large numbers of undocumented migrants from Asia, distributed all over the world but also within Asia and particularly in South Asia, whose remittances constitute a sizeable source of external resource inflows.

The unrecorded remittance flows used to be much higher when the official exchange rates of the recipient countries' currencies were much higher than the corresponding curb rates. However, over the last three decades, in most countries of Asia, difference between official exchange rate and the curb rate has drastically narrowed. Furthermore, formal banking channels, now increasingly helped by advances in information technology (IT), are in a position to match the *hawala* (unofficial currency exchange) houses in the delivery time of their remittances. As a result, there has been a sharp upturn in the recorded volume of remittances between 2000 and 2011 (See Table 3) in every single country in Asia. Much of this increase has, indeed, been driven by the sharp rise in labor flows from the sending countries, but some part of this also reflects the shift from informal into formal channels of remittance flows, which are thereby recorded in BOP statistics.

For the purposes of our discussion, it would be useful to take both formal and informal inflows into account. However, since estimates of informal remittance flows are controversial, we use only the official numbers in illustrating the quantitative importance of remittances. Table 3 shows remittances to East, SE and South Asia increasing from \$37 billion in 2000 to \$193 billion in 2011. The world's two largest recipients of remittance, PRC (\$57.3 billion in 2011) and India (\$57.8 billion) are also the region's largest economies. Among the smaller economies, Philippines (\$23 billion) in East Asia, Pakistan (\$12.2 billion) and Bangladesh (\$12.0 billion) in South Asia are major recipients of remittances. For Nepal, official remittances, adding up to \$4 billion in 2011, accounted for 20% of its external resource inflows.

This sizeable flow of remittances into Asia remains underused as a development resource. While formal remittances serve to strengthen a country's balance of payments and reserve position, these resources are not recorded in the accounting of public expenditure. The ultimate disposition of these resources remains in the hands of millions of remittance receiving households across Asia who are the ultimate beneficiaries of these resource flows. The bulk of the remittances serve to enhance household consumption in low income families, liquidation of debt obligations, and investment in home improvement. Investment in land is much favored by migrants across Asia. Such land purchases in particular countries serve as a form of asset transfer rather than capital creation by the remittance recipients themselves.

However, we should not dismiss consumption-oriented resource inflows as entirely disconnected from development. Migrant remittances, used for various forms of current consumption, have boosted domestic effective demand thereby stimulating local economic activity, which plays a developmental role. Enhanced purchases of foodstuffs, clothing and even home construction, have boosted activities in both farm- and non-farm agriculture, as well as the domestic construction industry which has strong linkage effects in the economy.

It has been argued in virtually every Asian country that more effort should be made to channel remittance into more conventional and commercially beneficial forms of investment. In all large remittance recipient countries, there has been some channeling of funds into family based small and medium enterprises (SMEs) or trading activities. But very little of these funds have been captured by the capital market or the national development budget. Much of this deficiency is due to lack of imagination of governments in accessing these remittances. However, it also reflects a significant failure of the financial institutions in designing appropriate financial instruments that could attract and channel remittances into capital investments. The omission is particularly noteworthy as a much larger volume and share of remittances

now flow into recipient countries through the formal banking channel.

This is not to say that some efforts have not been made, at least by the governments. In Bangladesh, for example, the government has floated some investment instruments to capture remittances. It has also mandated reservation of 10% of *Initial Public Offerings* (IPOs) in the capital market for remittances by non-resident Bangladeshis. This has generated some response, mostly from better off Bangladeshi migrants, usually permanently settled professionals, who are more comfortable in interfacing with financial institutions, both public and private. But very few, if any, financial products of any relevance or accessibility, have been designed to attract the remittance of temporary migrants, who come mostly from the working class. These migrants remain unrecognized as prospective investors and on their own are unlikely to explore investment opportunities outside their own local or family domain.

One of the more conspicuous efforts to capture some part of the remittances entering India was made through the flotation of *Diaspora Bonds* (DBs). The work by Ketker and Ratha (2010) explores the experience of the Government of India (GOI) in floating DBs. Their study indicates that India was inspired by the earlier, more sustained experience of the government of Israel to reach out to a large and affluent Jewish Diaspora with a strong emotional stake in the security and development of the state of Israel. These bonds were initially floated by the government of Israel in 1951 and managed by a separate entity, the *Development Corporation of Israel* (DCI). Bonds of varying design and amounts have been floated by the DCI, raising over \$26 billion up to 2004. The resources raised from these bonds were invested in Israel, mostly in infrastructure projects related to water resources, energy, transportation and telecommunications.

In contrast to that of Israel, the efforts of Government of India to tap Diaspora finance have been more episodic, and it used the existing, government owned State Bank of India (SBI) to manage the

bond issues. The first of these bonds, titled *India Development Bonds* (IDB) was issued in 1991 as a response to a severe balance of payments crisis faced by India when India's external reserves had been almost exhausted. The IDB raised \$1.6 billion. Subsequent bond issues carrying such patriotism-inspiring titles as *Resurgent India Bonds* (RIB) were a response to the sanctions imposed on India due to its nuclear tests in 1998 and raised \$4.2 billion. Another bond, termed the *India Millennium Deposit*, floated in 2000, raised \$5.5 billion. While Israeli bonds invoked patriotism to secure some discounts below market rates from its investors, India's bond rates tended to be market determined and offered rates that were comparable to those of US corporate bonds. Also, in contrast to Israel, which created a large establishment under the DCI to market its bonds to members of the Jewish community in the US, the SBI outsourced the marketing of their DBs to institutions such as Citibank and HSBC, who had no special stake, beyond their commission fees, in marketing these bonds.

Ketkar and Ratha (2010) argue that the Israeli and Indian experience with DBs provides a useful insight into opportunities open to other countries with large Diaspora populations. Accordingly, they present a list of countries which could develop similar financial instruments to mobilize funding from their Diaspora. This list includes five Asian countries, namely the Philippines, India, PRC, Vietnam and Pakistan. They identify these countries' highly skilled emigrant stock, located in OECD countries, as the prospective market for such bonds. Such a criterion obviously leaves out countries such as Bangladesh, Nepal and Sri Lanka, whose majority of migrants are less skilled and working mostly in West Asia. However, this does not mean that appropriate investment instruments cannot be designed to draw the savings of less-skilled, temporary migrants working in non-OECD countries.

In fact, less skilled and/or temporary migrants may have stronger propensity to send savings to their countries of origin. Permanent and educated migrants have decided to make their fortunes, rear and educate their families, invest in homes and

secure their sustainability after retirement, in their countries of settlement. As a result, this class of well healed migrants have never been a significant source of remittances, even though much of the energy of governments in South Asia have been invested in providing incentives and designing financial products specifically targeted to this class. By contrast, less educated and/or temporary migrants are the most reliable and the largest source of remittance to their home countries, particularly in the South Asia region. Even those seeking permanent settlement abroad retain obligations to less well-off family members at home. They thus live in conditions of great austerity in their countries of migration in order to send home as much of their earnings as they can. It is therefore necessary to focus on better harnessing the savings that the less educated and/or temporary migrants are already sending in the form of remittances to their countries of origin. In the following, we make a few suggestions that many Asian countries can try out after adapting them to their specific national conditions:

1. Design special purpose *Migrant Mutual Funds* (MMF), exclusively targeted to a large number of migrant workers who may be invited to subscribe to the fund through small denomination share units. Exit from the fund by a prospective investor would be limited to the sale of the asset within the MMF so that the fund would always retain its collective personality rather than expose itself to capture by larger private funds. The MMF may then subscribe to a dedicated bond flotation on offer to migrants by their home government. Since this will be a government sponsored bond, its return will be guaranteed and hopefully secure. The point of using a mutual fund for the purpose is that the migrant funds will be held as a collective resource which can be easily mobilized, invested and professionally managed, something that less educated migrants may find challenging to do so on their own.
2. MMFs, as described above and designed to market bonds to migrants, can also be used for mobilizing a part of migrant remittances for collective investment in corporate IPOs or even in divestiture of assets of state owned enterprises. For example, Bangladesh's policy of reserving 10% of IPOs for individual, presumably wealthy Diaspora members can be extended to allow a part of it or an additional 10% of IPOs to be reserved for proposed MMFs.
3. Government designed MMFs can also be supplemented by similar funds set up by private financial institutions. Large micro-finance or civil society based institutions such as Grameen Bank, BRAC and ASA in Bangladesh, or SEED in Sri Lanka, or the Kushali Bank in Pakistan that have strong links with the rural areas, may also be appropriate entities to enter the remittance market. These organizations could be permitted to set up branches in migrant-rich countries such as Saudi Arabia, UAE or Kuwait, where they could initially establish their credibility and connection with migrants by providing efficient service in transmitting remittances to the intended beneficiaries in their home countries. For example, Grameen Bank and BRAC have electronically connected branch offices in virtually every village in Bangladesh. Accordingly they will do a better job than conventional commercial banks in transmitting remittances even to remote villages. From the ordinary business of transmitting remittances, these organizations can then move on to designing financial products for their migrant clients, again perhaps using the MMF idea above.
4. The government or a Micro Finance Institution (MFI)-centered mutual fund could also be used to channel remittances into major infrastructure projects along the lines of the Israel DCI bonds. For example, the prospective Padma Bridge project in Bangladesh, which was proposed to be financed through \$2.9 billion in loans from the World Bank and Asian Development Bank, could, in part, be off-loaded to a Diaspora-centered mutual fund. Such a fund could be broadened by inviting local Bangladeshi investors of limited means to subscribe. Alternatively,

a separate fund targeted to local investors could also be designed. These infrastructure development funds collected by the mutual funds could be paid back from the permanent revenue stream generated by the infrastructure when completed.

5. There is much scope for enhancing the income earning capacity and investment opportunities of migrants through direct collective action by the migrants themselves. Thus, migrants could organize themselves into professionally managed labor exporting companies. These companies could negotiate with prospective employers in host countries to deliver services. They could then train its worker-owners accordingly, finance and organize their migration, manage their living conditions, working relations and welfare in the host countries. These companies could raise initial funds from local capital markets against their prospective earnings or even establish specially designed funds, leveraged by ODA. These worker-owned companies could remit their savings and eventually also assume responsibility for providing investment guidance, training and assistance in the management of enterprises set up by prospective individual migrant investors. These companies could also perform the same role for migrants as envisaged for the MMF discussed above and could indeed constitute their own special purpose mutual fund.
6. A series of self-owned labor-exporting companies, each with say 100,000 or more members, could eventually evolve into significant corporate enterprises and investors in their countries of origin. In this way, millions of migrant workers, instead of living precariously as exploited, insecure, debt-ridden individuals, could emerge as a significant source of IDF and a collective force in the economy and society. Such a force could play a major role in establishing a more efficient and just Asia. The exploration of the feasibility of the ideas regarding mobilization of migrants and remittances should be taken up by the international community as an important task.

V Conclusion

In recent years, the role of ODA as a factor in development finance has declined in Asia. There is no Asian country, except Afghanistan, where the ODA/GDP ratio has not declined over the last 25 years. This decline in ODA has been accompanied by increase in FDI (mostly in East and South East Asian countries) and remittances (particularly in South Asia).

This paper explores the scope for IDF to compensate for declining ODA, or add to the fund from public sources for development. It shows that IDF has not helped much to increase the volume of aid. First, the volume of IDF has been very limited. Second, much of what has been named as IDF is actually a repackaged form of ODA.

In view of the declining influence of ODA in Asia and insignificant volumes of IDF, it would be more productive to focus on the areas where a large and growing volume of resources are available to Asia. The paper has pointed to two such resources, namely the surpluses accumulated in the form of reserves, SWFs, etc. and the migrant remittances. Thus redirected Asian capital surplus and migrant remittances harnessed for development purposes can be the two most important new sources of IDF.

With regard to capital surpluses, this paper shows the huge quantitative dimensions of these resources and notes the necessity for investment of these resources for development in Asia. At present, these surpluses are mostly invested in European and North American capital markets, where they face considerable risk and earn low returns. The operative issue is how a larger share of these surpluses can be channeled into Asian development. Exploring this issue should be an important task for both the United Nations and development finance institutions such as the World Bank and ADB, on the one hand, and the governments and research institutions of the Asian countries, on the other. What part of these Asian surpluses should come into Asian economies as FDI, as commercial loan or as ODA, or as an admixture of all three products, can be part of this exploration.

In advocating redirected Asian capital surplus as a new source of development finance, we should not be carried away by our romantic imagination about the virtues of South-South cooperation. Asian governments, whether from West or East Asia, will need much inducement to move their investments away from real estate in London or even low yield TBs in the US. Nor should we discount the strategic considerations which guide their investment decisions. Thus, we can at best explore the scope for moving a small volume of such North-centered resources into Asia, perhaps 1% of Asian countries' international reserves, which come to \$66 billion and 2% of their investments as SWF, a sum of \$74 billion. Together they add up to \$140 billion, which is far larger than flows coming from any current or prospective IDF products. The amount is much larger than the total volume of ODA reaching Asia. The challenge will be to study carefully the economic implications of such a move, with a focus on the investment compulsions of individual Asian countries with large investible surpluses.

An important part of this investigation should therefore be exploration of the possibility of leveraging ODA in redirecting part of the Asian surpluses away from western capital markets and towards Asian development projects. For example, it may be studied whether ODA can be used to provide matching funds for such investments or to minimize risk through provision of necessary guarantees of return on such investments. Such a leveraging role of ODA can be extended to non-Asian FDI too. Examples of using ODA to leverage FDI are already there. Vietnam, perhaps, remains the best example of how ODA can be used to leverage FDI. Its experience should be carefully studied as a lesson for other countries, particularly in South Asia.

The countries where ODA can indeed play a more important role in both leveraging FDI and ensuring more effective developmental use of migrant remittances are the ones in South Asia (except India, which already enjoys significant FDI flow). The potential leveraging role of ODA applies to Philippines, Kampuchea, Myanmar, and Lao PDR in SE Asia too. These countries have considerable economic

potential which makes them appropriate targets for FDI. For example, each of these countries suffers from significant infrastructure deficits, which serve as an important disincentive to FDI. The challenge lies in finding ways in which ODA could be leveraged to draw domestic savings and FDI, as well as migrant remittances, for carrying out investments that would fill those infrastructure deficits. Studies should therefore be undertaken to explore the scope for transforming remittances, particularly from low income households into innovative development resources. Knowledge gathered from exploration into issues concerning redirecting Asian surplus and harnessing Asian remittances can provide a realistic basis for opening discussions with the capital surplus and capital deficient countries of Asia in order to check how receptive they are to the idea of relocating investments. ODA may play a role in facilitating these studies and in formulating an agenda for Asia.

While efforts to tap these new sources of development finance are being pursued, every effort should be made to augment flows of ODA into Asia. There appears to be no good reason why low-income countries of Asia, particularly those with as yet limited access to FDI, should not be rewarded for their promising development performance through enhanced access to ODA, which can also serve to leverage FDI. Most of these countries can use ODA to improve substantially their physical and social infrastructure. Replenishment of ODA into Asia may begin with the application of the HIPC process to at least the LDCs of Asia.

There is little doubt that many Asian countries can do much to enhance their governance capabilities in order to improve their aid utilization performance and their eligibility for both FDI and the IDF funds. Notwithstanding their comparably strong development performance on a global scale, Asian countries still host the largest number of the poor. Such a region should not be marginalized in the distribution of ODA. Enhanced ODA, together with success in tapping the two new sources of development finance proposed in this paper, can bring about a significant change in development financing in Asia.

References

Books, papers and reports

- Adugna, A et al (2011) *Finance for Development: Trends and Opportunities in a Changing Landscape*, CFP, Working Paper No. 8, CFP Washington DC.
- ADB. (2011). *Asian Development Outlook 2011: South-South Economic Links*. Manila: Asian Development Bank (ADB).
- Addison, T and Mavrotas, G. (2008). *Development Finance in the Global Economy. The Road Ahead*. Hampshire: Palgrave Macmillan.
- Atkinson, B.A. (ed.). (2005). *New Sources of Development Finance*. Oxford: Oxford University Press (OUP).
- BRAC. (2011). *GFATM and GAVI in Bangladesh*. (Collected by Author).
- Girishankar, N. (2009). "Innovative Development Finance: From Financing Sources to Financial Solutions," *Policy Research Working Paper 5111*. Washington, D.C.: World Bank.
- Kar, D. and Frietas, S. (2011). *Illicit Financial Flows from Developing Countries Over the Decade Ending 2009*. Washington, D.C.: Global Financial Integrity.
- Ketkar, S. and Ratha, D. (2007). "Development Finance via Diaspora Bonds: Track Record and Potential." Paper presented at the Migrant and Development Conference at the World Bank, Washington, D.C. May 23.
- Ketkar, S. and Ratha, D. (2010). "Diaspora Bonds: Tapping the Diaspora during Difficult Times," *Journal of International Commerce*, 1(2): 251-263.
- Ketkar, S. and Ratha, D. (eds.). (2009). *Innovative Financing for Development*. Washington, D.C.: World Bank.
- MOF (2011). *Flow of External Resources into Bangladesh*. Dhaka: Ministry of Finance (MOF).
- Nakhooda, S., Caravani, A., Wenzel, A. and Shalatek, L. (2011). "The Evolving Global Climate Finance Architecture," *Brief 2*. London: Overseas Development Institute (ODI).
- Sobhan, R. (2010). *Challenging the Injustice of Poverty: Agendas for Inclusive Development in South Asia*. New Delhi: SAGE.
- Terrazas, A. (2010). *Diaspora Investment in Developing and Emerging Country Capital Markets: Patterns and Prospects*. Washington, D.C.: Migration Policy Institute
- UN. (2011). *Millennium Development Goal 8: The Global Partnership for Development: Time to Deliver*. New York: United Nations.
- UNDP (2011a). *Human Development Report 2011: Sustainability and Equality: A Better Future for All*. New York: United Nations Development Programme (UNDP).
- UNDP (2011b). *Discussion Paper Illicit Financial Flows from the Least Developed Countries: 1990-2008*. New York: United Nations Development Programme (UNDP).
- UNESCAP (2010). *Economic and Social Survey of Asia and the Pacific 2010: Year-end Update. Maintaining Growth Amid Global Uncertainty*. Bangkok: United Nations Economic and Social Commission for Asia and the Pacific.
- UNGA. (2011). *Innovative Mechanisms of Financing for Development*. New York: United Nations General Assembly (UNGA).
- WHO (2010). *World Health Statistics 2010*. Geneva: World Health Organization (WHO).
- World Bank. (2011). *World Development Report 2011: Conflict, Security and Development*. Washington, D.C.: World Bank.
- World Bank. (2010). *2010 Trust Fund Annual Report*. Washington, D.C.: World Bank Group.

Websites

- Busan Declaration. <http://www.busanhl4.org> (Accessed on 11/01/2012)
- Climate Funds Update. <http://www.climatefundsupdate.org/> (Accessed on 17/01/2012)
- Global Alliance for Vaccines and Immunisation (GAVI). <http://www.gavialliance.org/> (Accessed on 16/01/2012)
- Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). <http://www.theglobalfund.org/en/> (Accessed on 16/01/2012)
- Health System Financing Country Profile available at the World Health Organization (WHO) website - <http://apps.who.int/nha/database/StandardReport-List.aspx> (Accessed on 15/01/2012)
- IMF World Economic Outlook Database <http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx> (Accessed on 19/01/2012)

- OECD-CRS database. <http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW> (Accessed on 26/01/2012)
- Sovereign Wealth Fund Institute. <http://www.swfinstitute.org/> (Accessed on 21/01/2012)
- Special Report on South-South Cooperation. http://www.realityofaid.org/userfiles/roareports/roareport_08b0595377.pdf (Accessed on 26/01/2012)
- The Guardian. *US debt: How big is it and who owns it?* Available online <http://www.guardian.co.uk/news/datablog/2011/jul/15/us-debt-how-big-who-owns> (Accessed on 21/01/2012)
- United Nations (2012), *World Economic and Social Survey 2012: In Search of New Development Finance*, New York
- World Bank Development Indicators. <http://data.worldbank.org/data-catalog/world-development-indicators> (Accessed on 14/01/2012)